



SAN FRANCISQUITO CREEK
JOINT POWERS AUTHORITY

Notice of Special Meeting of the Board of Directors

Thursday, November 16, 2023 - 3:30 P.M.

City of Palo Alto Council Chambers 250 Hamilton Ave, Palo Alto, CA 94301

Members of the Public may speak on any agenda item for up to three minutes

Register in advance for this meeting:

https://us02web.zoom.us/meeting/register/tZYIcOqhrDivGt0GTPriPxdVMn45_oN5hsjW

After registering, you will receive a confirmation email containing information about joining the meeting.

1. CALL TO ORDER AND ROLL CALL
2. APPROVAL OF AGENDA
3. PUBLIC COMMENT: *Individuals may speak on a non-agendized topic for up to three minutes.*
4. SPECIAL PRESENTATION - REACH 2 HYDRAULIC REVIEW: Schaaf & Wheeler, Hydraulic Model Independent Evaluation of HEC-RAS model and evaluation of December 2022 storm and flooding.
5. INFORMATION ITEMS:
 - A. Revised Conflict of Interest Code update
 - B. Executive Director's Report
6. Board Member Announcements, Information Items, and Requests (Information only)
7. ADJOURNMENT

PLEASE NOTE: Board meeting Agenda and supporting documents can be viewed online no later than 3:30 p.m. on Monday, November 13, 2023, at sfcjpa.org -- click on the "Meetings" tab near the top. The Board Meeting package will be emailed to those on our Board Meeting distribution list prior to the Board meeting date. Contact SFCJPA Board Clerk, Miyko Harris-Parker at MHParker@sfcjpa.org if you are not on this list and would like to be added.

750 Menlo Ave. Suite 250. Menlo Park, CA 94025
SFCJPA.ORG

Background:

At the June 8, 2023, Special Board Meeting, Valley Water staff presented their updated hydraulic modeling of San Francisquito Creek using data collected during the December 31, 2022, storm event. Following that presentation, SFCJPA staff recommended hiring an independent hydraulic consultant to complete the following three tasks to help us understand how and why the flows in the Creek did not match previous modeling predictions:

- 1) Review USGS gauge readings and adjustments
- 2) Review the then current HEC-RAS model created by the Corps of Engineers and calibrated by Valley Water
- 3) Model the December 31 storm event using a different modeling software to determine if factors not identified in Valley Water's work could have contributed to the observed conditions during the event.

To assist in the independent analysis, Valley Water conducted new surveys of the creek channel using pole-mounted LiDAR to digitally image the channel geometry.

SFCJPA secured the services of Schaaf & Wheeler, a reputable hydraulics consultant with significant experience in the San Francisquito watershed to conduct the analysis. Initial findings will be presented at the November 16, 2023, Board meeting and are summarized below:

- No errors or discrepancies were found in the methods and process USGS used to adjust and report flow measurement.
- Both the USGS and Valley Water determined that the channel capacity is less than previously thought based on channel conditions that the time of the event.
- With modest adjustments, the Valley Water HEC-RAS model can replicate observed flooding during the New Year's Eve storm.

Next Steps:

We have assembled a team of Public Works and hydraulics experts from the SFCJPA members. The group will meet before the end of the month to discuss the findings of the hydraulic review as they relate to project designs and to concur on next steps.



Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS

New Years Eve 2022-23 Storm
San Francisquito Creek and Environs

Tasks

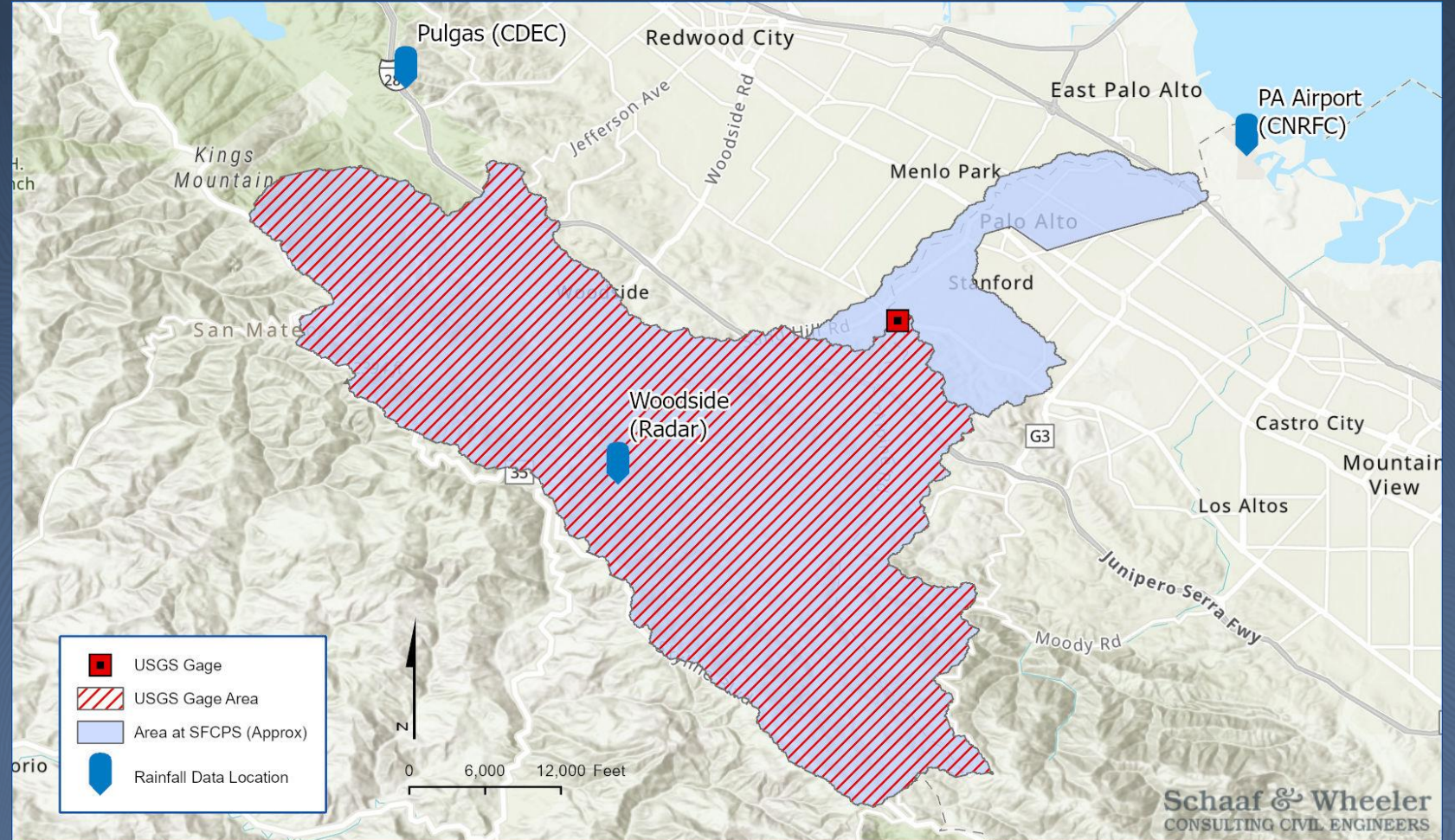
1. Review USGS Discharge Estimate for NYE22
2. Review Valley Water Model for San Francisquito Creek
3. Calibrate an Independent Model to NYE22 Event

A white topographic map of the United States is overlaid on a dark blue background. The map shows contour lines and major water bodies. The text 'USGS Discharge Estimate' is positioned to the left of the map.

USGS Discharge Estimate

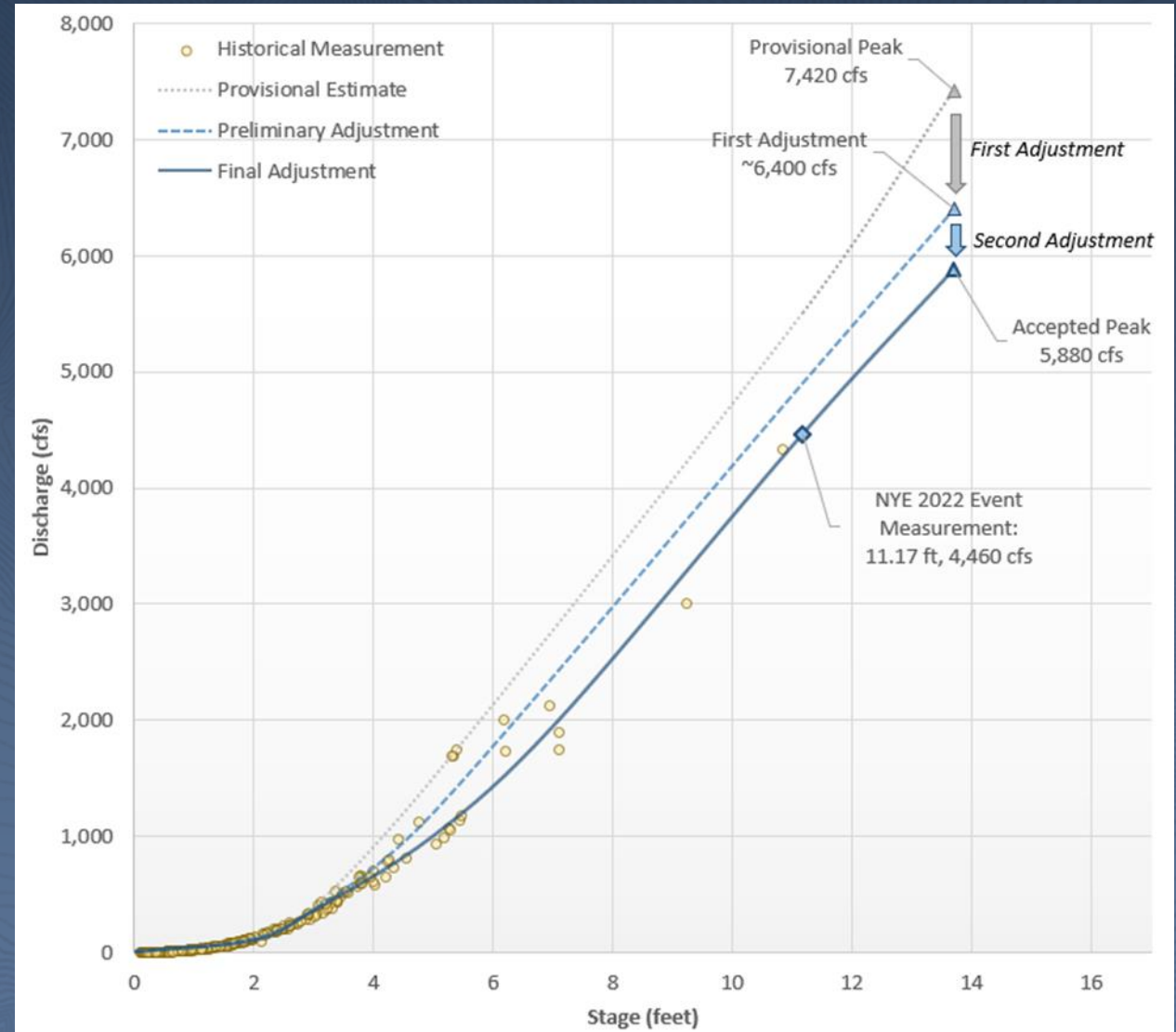
USGS Discharge Estimate

- USGS records creek discharge at Stanford Golf Course
- 37.4 square mile drainage area to USGS Gage location
- Began recording flow in 1931



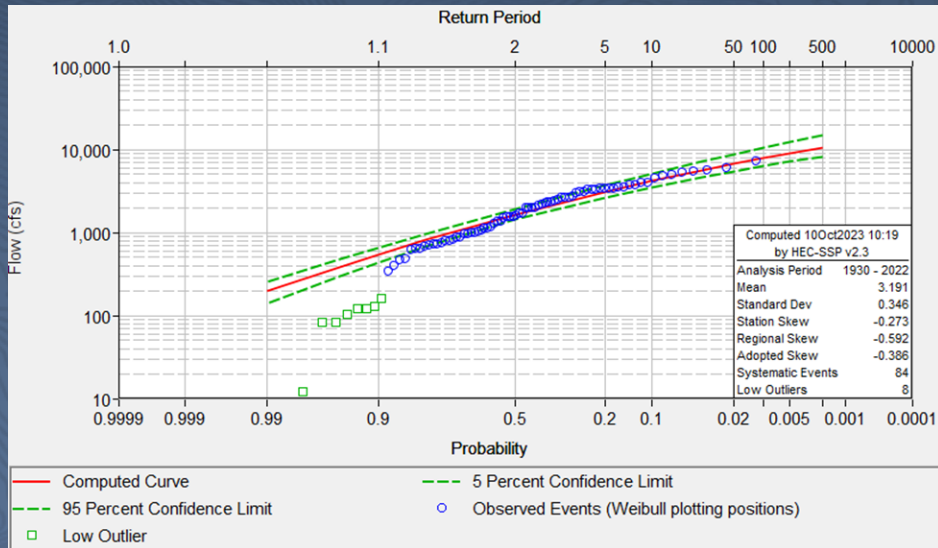
USGS Discharge Estimate

- The ultimately published discharge is less than what was initially reported live.
- USGS field-verified their stage-discharge rating curve during the NYE event. This represents the highest discharge directly measured in history.
- We do not find discrepancies or errors in the methods and process employed by the USGS to adjust their flow measurements.



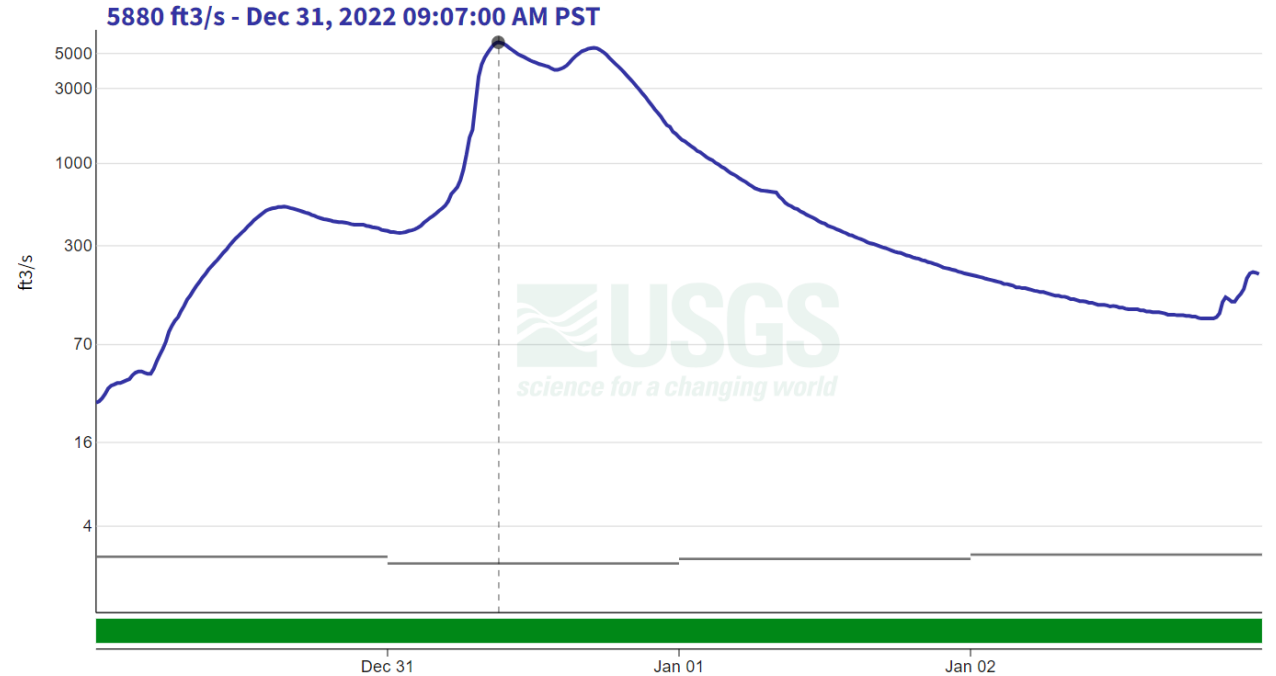
USGS Discharge Estimate

- USGS recorded a peak discharge of 5,880 cfs on 12/31/22
- Represents an annual return period of 30 years



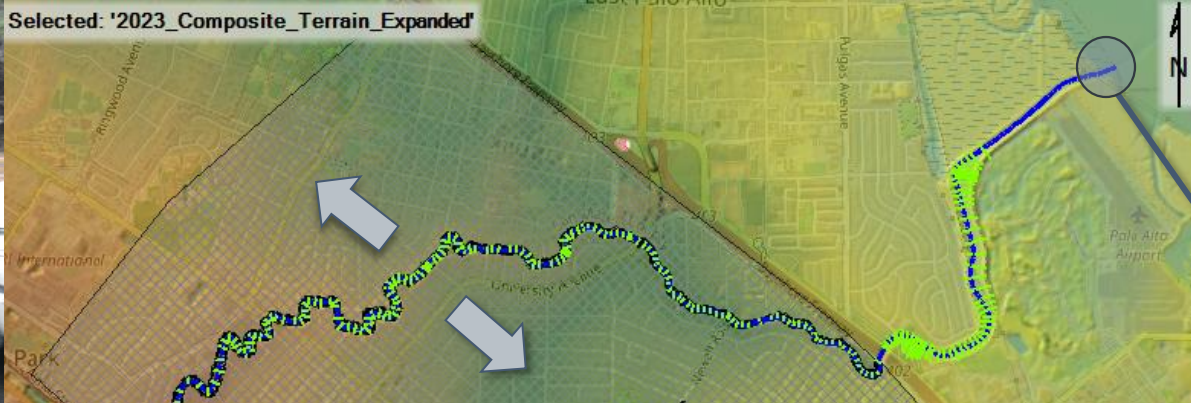
San Francisquito C a Stanford University CA - 11164500

December 30, 2022 - January 2, 2023
Discharge, cubic feet per second

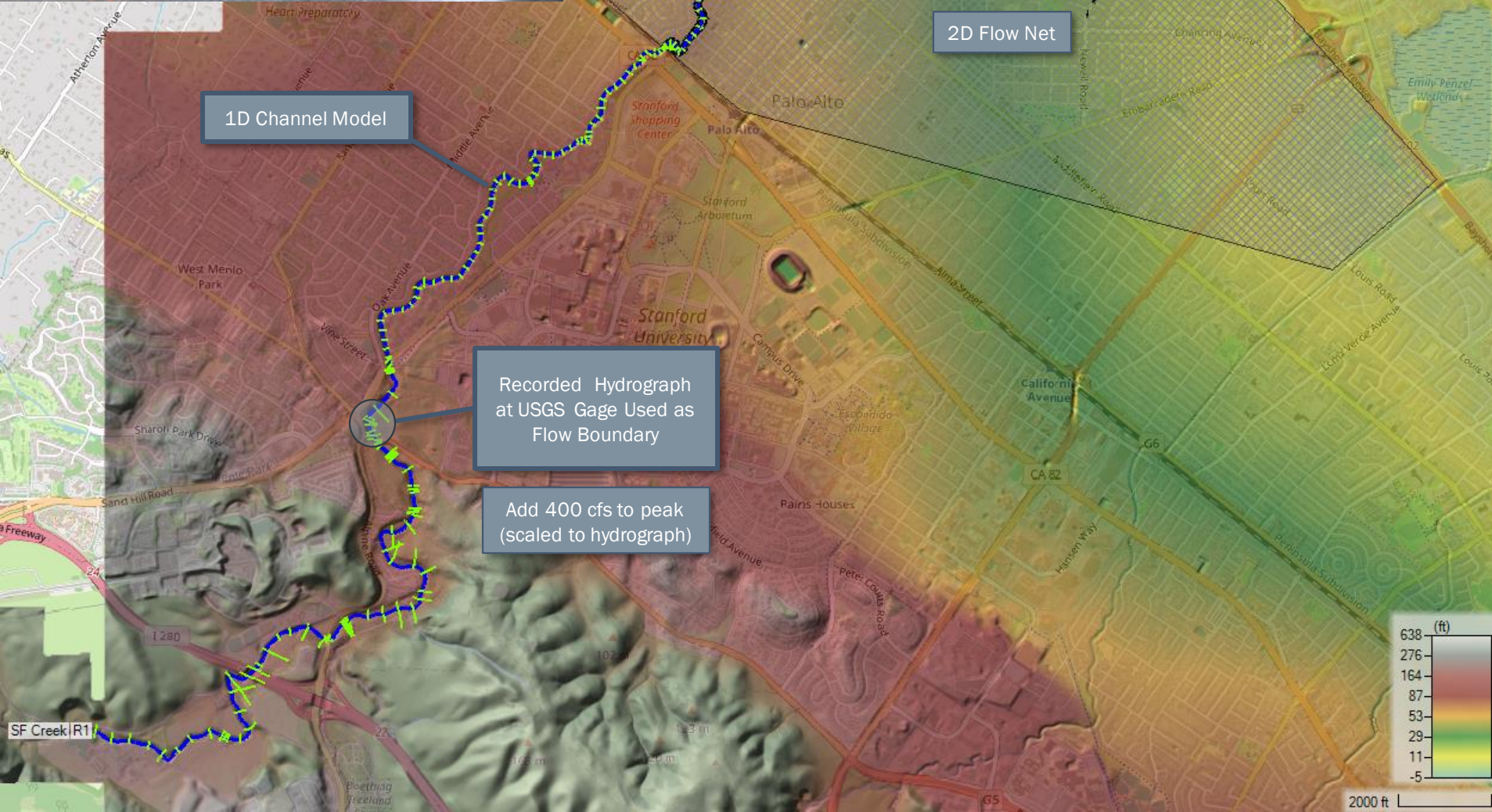


A white line-art topographic map of a valley, showing contour lines and a central watercourse, set against a dark blue background. The map is oriented vertically, with the valley opening towards the top of the page.

Review Valley Water Model for San Francisquito Creek



Tidal Boundary is NOAA Recorded at Redwood City



1D Channel Model

2D Flow Net

Recorded Hydrograph at USGS Gage Used as Flow Boundary

Add 400 cfs to peak (scaled to hydrograph)

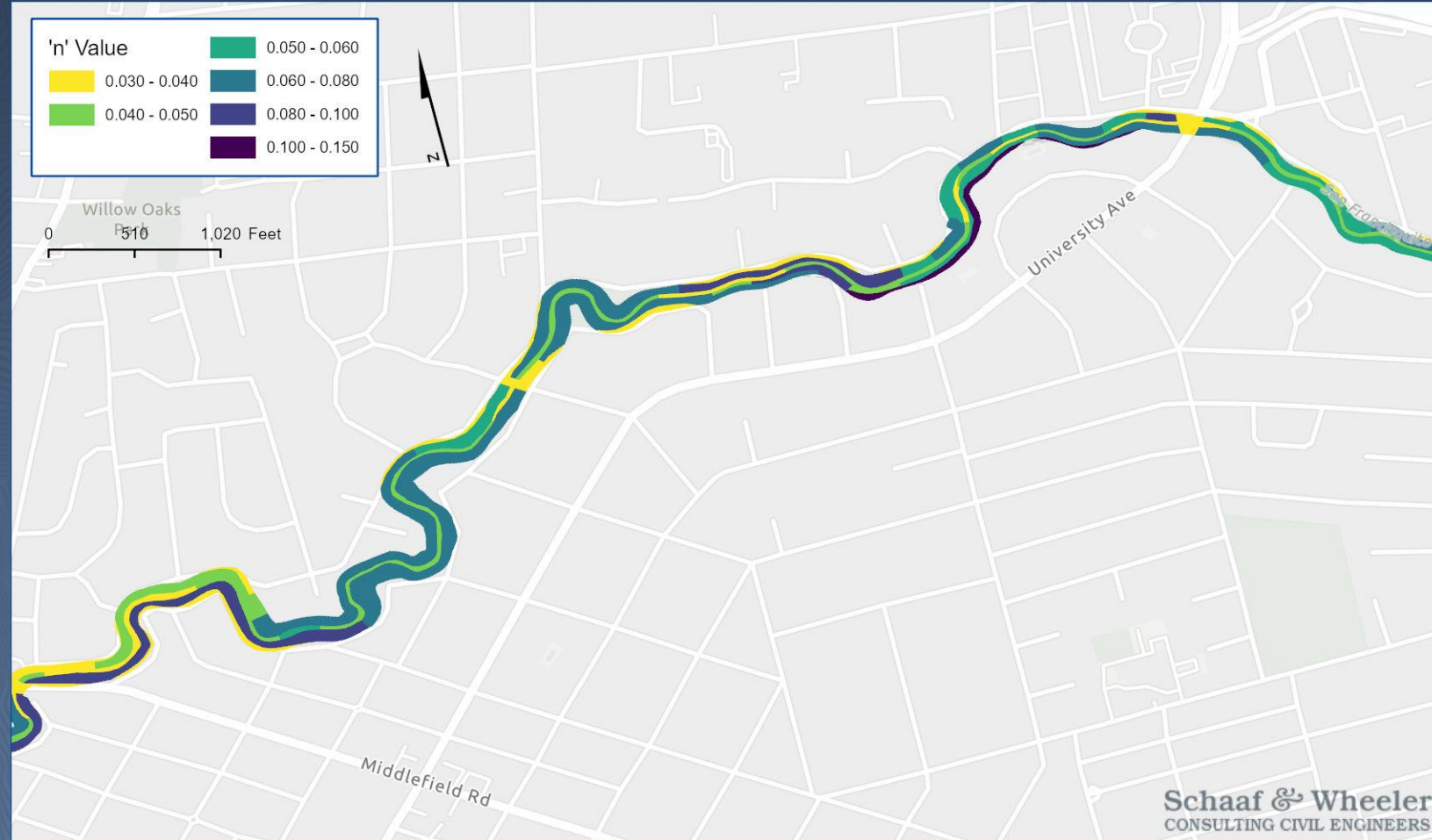
Verified that with slight modifications, the Valley Water HEC-RAS model reflects observed channel conditions and replicates observed spill locations and approximate extents.

HEC-RAS model has no mechanism for catching overflows in the local storm drain systems or returning flows to the creek at outfalls.

Use Innovyze ICM, an integrated creek, floodplain, and storm drain system model to verify flood depths away from the creek and evaluate return flow to creek.

Evaluation of Valley Water's HEC-RAS Model

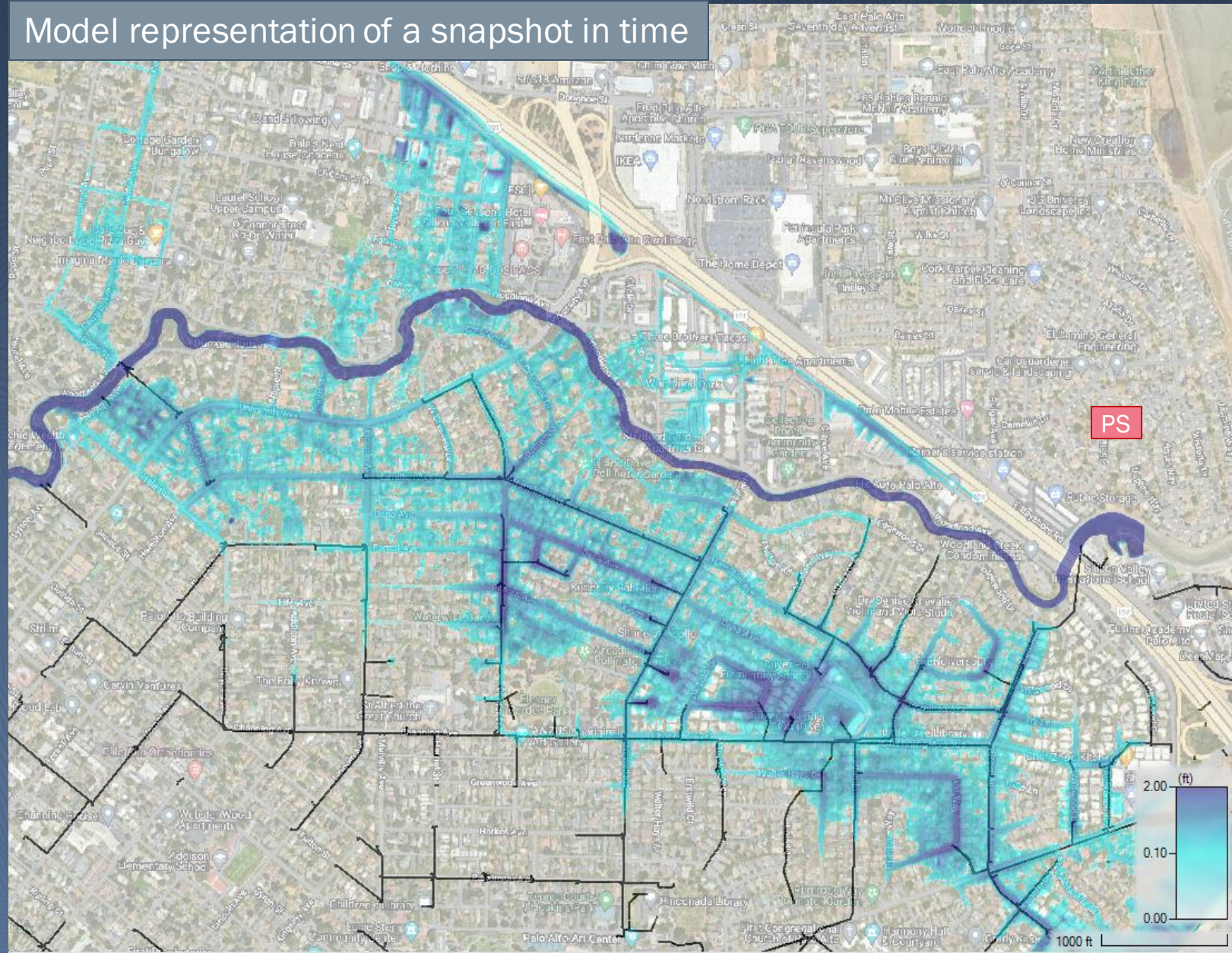
- The NYE22 event resulted in a 'brim full' creek. As such, model performance is very sensitive to slight changes in parameters.
- Overbanking (spill) locations and magnitude are very sensitive to estimates of channel roughness and bank elevations.
- Incorporated recent survey data and provided recommendations for adjustment of roughness and bank elevation modeling to replicate observed spills.



Evaluation of Valley Water's HEC-RAS Model

- We are able to generally replicate the timing, location, and magnitude of the observed spill event with the adjusted HEC-RAS model.
- We concur with Valley Water's conclusion that there was less flow capacity in San Francisquito Creek during the NYE22 event than was previously thought.
- Modeled flooding extents away from creek are, however, greater than observed flooding.

Model representation of a snapshot in time



A white topographic map of the United States is overlaid on a dark blue background. The map shows the outlines of the states and the intricate contour lines of the terrain, particularly in the mountainous regions.

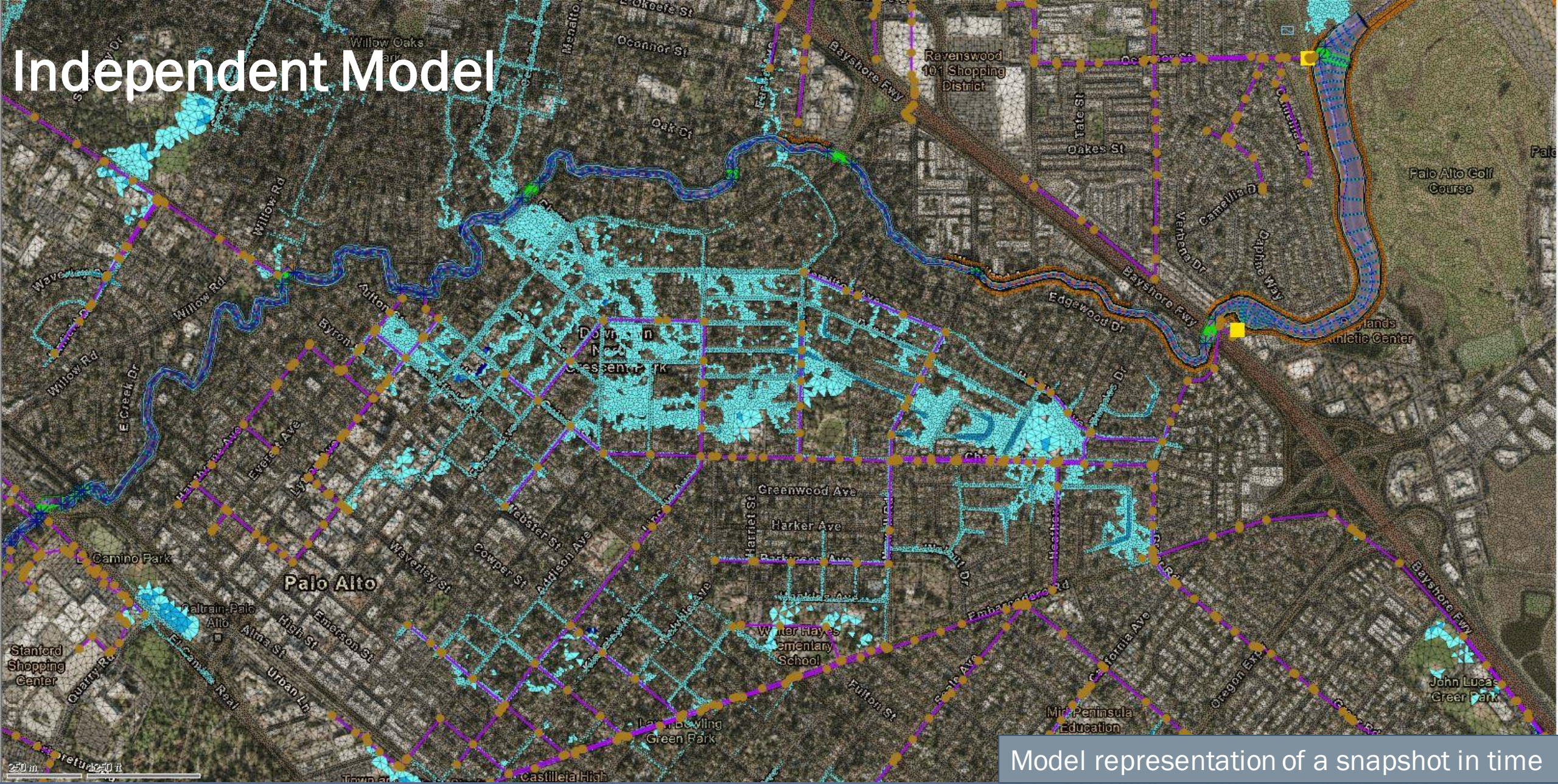
Calibrate an Independent Model to NYE22 Event

Independent Model

- Leverage previously completed Innoyze ICM model for San Francisquito, Matadero, and Adobe Creek watersheds.
- ICM integrates storm drain systems, pump stations, creeks, and two-dimensional floodplains.
- Truncate ICM model at clear no-flow boundaries for efficiency.
- Replace watersheds upstream of the gage with the hydrograph recorded at the gage.



Independent Model



Model representation of a snapshot in time

Independent Model

- In-channel discharge does not significantly change between the gage location and San Francisquito Creek Pump Station during the event. This is an important finding.
- Local rainfall-runoff during peak creek flows is generally overland toward San Francisquito Creek Pump Station and Matadero Pump Station, or to the north away from the creek through Menlo Park.
- ICM model results using the San Francisquito Creek adjustments reasonably predict observed local flooding away from the creek.
- The 400 cfs additional peak flow added at the gage location is necessary for the model to show spilling as experienced, in lieu of further channel roughness modifications. Maintaining the 7 percent discharge added at the gage as a “bulking factor” is a reasonable way to account for the effects of sedimentation and debris on hydraulic gradients during the event, that are not measured after the event or are necessarily “observable” in situ.

Findings

- We do not find discrepancies or errors in the methods and process employed by the USGS to adjust their flow measurements at the San Francisquito Creek streamflow gage.
- Both the USGS and Valley Water discovered that channel capacity is less than previously thought based on in-channel conditions at the time of the event.
- With modest adjustment, the Valley Water HEC-RAS model can replicate observed flooding during the NYE22 storm.

Agenda Item – 5.A. Conflict of Interest (COI) Code Update, Information Item

Background

In April 2023 we brought to your attention the need to update our Conflict of Interest (COI) Code. The Fair Political Practices Commission (FPPC) reviewed and made recommendations. Legal counsel reviewed and concurred with the FPPC's proposed changes.

The FPPC revised our proposed COI code by removing "Board of Directors and Alternates" from the code. Because board positions have the authority to invest public monies, they are already required to file under Government Code Section 87200.

The proposed changes were most recently posted on September 28, 2023. As of the date of this meeting, the 45-day public comment period has concluded, and no public comments have been received on the proposed changes.

Now that the public comment period has ended, we will submit the revised proposed COI code to the FPPC for final approval. The FPPC will then send the approved code to SFCJPA, and it will be effective 30 days after the FPPC Executive Director or his or her designee's approval. Once approved, staff will integrate the updated COI Code into the SFCJPA Board Handbook.

**SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY
CONFLICT OF INTEREST CODE**

The Political Reform Act (Government Code Section 81000 et seq.) requires state and local government agencies to adopt and promulgate conflict of interest codes. The Fair Political Practices Commission has adopted a regulation (2 California Code of Regulations Section 18730) that contains the terms of a standard conflict of interest code, which can be incorporated by reference in an agency's code. After public notice and hearing, the standard code may be amended by the Fair Political Practices Commission to conform to amendments in the Political Reform Act. Therefore, the terms of 2 California Code of Regulations Section 18730 and any amendments to it duly adopted by the Fair Political Practices Commission are hereby incorporated by reference. This regulation and the attached Appendices, designating positions (Appendix A) and establishing disclosure categories (Appendix B), shall constitute the conflict of interest code of the **San Francisquito Creek Joint Powers Authority (Authority)**.

Individuals holding designated positions shall file their statements of economic interests with the **Authority**, which will make the statements available for public inspection and reproduction (Gov. Code Sec. 81008). All statements will be retained by the **Authority**.

**SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY
CONFLICT OF INTEREST CODE**

**APPENDIX A
DESIGNATED POSITIONS**

Designated Position	Assigned Disclosure Category
Executive Director	1, 2, 3, 4
General Counsel	1, 2, 3, 4
Senior Project Manager	1, 2, 4
Finance and Administration Manager & Clerk of the Board	1
Consultants/New Positions	*

Note: The position of General Counsel is filled by an outside consultants, but acts in a staff capacity.

*Consultants/new positions shall be included in the list of designated positions and shall disclose pursuant to the broadest disclosure category in the code subject to the following limitation:

The Executive Director may determine in writing that a particular consultant or new position, although a “designated position,” is hired to perform a range of duties that is limited in scope and thus is not required to comply fully with the disclosure requirements described in this section. Such determination shall include a description of the consultant’s or new position’s duties and, based upon that description, a statement of the extent of disclosure requirements. The Executive Director’s determination is a public record and shall be retained for public inspection in the same manner and location as this conflict-of-interest code (Gov. Code Sec. 81008).

The following positions are not covered by the code because the positions manage public investments. Individuals holding such positions must file under Government Code Section 87200 and are listed for informational purposes only. Section 87200 requires disclosure of all investments and business positions in business entities, all income, including gifts, loans and travel payments, and real property.

- Board of Directors and Alternates

**SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY
CONFLICT OF INTEREST CODE**

**APPENDIX B
DISCLOSURE CATEGORIES**

Designated positions must report financial interests in accordance with the assigned disclosure categories.

Category 1: Investments and business positions in business entities, and income, including receipt of loans, gifts, and travel payments, from sources, that provide services (e.g. engineering and environmental consulting firms), supplies, materials, machinery, or equipment of the type utilized by the Authority.

Category 2: Interests in real property located within one-half mile of the San Francisquito Creek, its floodplain, its watershed, and the tidal floodplain of the cities of Menlo Park, East Palo Alto and Palo Alto.

Category 3: Investments and business positions in business entities, and income, including receipt of loans, gifts, and travel payments, from sources, that filed a claim, or have a claim pending, against the Authority during the previous two years.

Category 4: Investments and business positions in business entities, and income, including receipt of loans, gifts, and travel payments, from sources, that provide real estate services (e.g. consulting, appraisal, development, construction).

Executive Director's Report, November 16, 2023

Reach 2 Channel and Bank Survey and Independent Analysis of Hydrologic Models – Schaaf & Wheeler will present the results of their independent review of the San Francisquito Creek Hydraulic Model at the 11/16/23 Board meeting (their presentation is in the Board Package, as well as a one-page summary of results).

We have not yet received a draft technical memo. We anticipate Schaaf & Wheeler will provide this to us soon. Staff will review (and comment or seek clarification if necessary) on the Draft Technical Memo. We will share our consultant's final product with the Board and community after the Schaaf & Wheeler team have had the opportunity to address any questions or comments.

Newell Road Bridge-The City of Palo Alto plans to initiate the construction bid process in approximately two months, and – contrary to reports in local media –the planned schedule for Newell Bridge construction is still expected to be in 2024.

Ongoing Winter Preparedness -

Community Meetings – We will be participating in a community meeting for residents of the East Palo Alto Sand Hill Properties on the evening of November 16.

Sediment Management West Bayshore and Highway 101 – The SFCJPA is proactively removing vegetation that has grown on the sand bar upstream of West Bayshore in December. Removing the vegetation will help facilitate sediment flushing downstream during the rainy season.

We are also removing invasive ivy that is growing on large trees in or near the channel to reduce weight, making them less likely to fall into the channel during storms.

As discussed at our November 2 Special Board Meeting, Caltrans will be monitoring the sediment, but can only act if there is an imminent threat to public safety.

We are convening a 'sediment working group' with CalTrans and others to identify potential solutions. This will be a long-running effort.

Advocacy and Outreach

Last week the Executive Director traveled to Washington DC and met with the Washington DC staff of our Congressional representatives, Senator Padilla's office, FEMA, and the USACE. These conversations were intended to keep key legislative office and agency program staff apprised of the SFCJPA's projects, our progress, our needs for funding, and our plans to seek grant funding wherever applicable. Those meetings resulted in commitments of future letters of support for possible grants, and a greater awareness of the magnitude of the benefits the SFCJPA's projects will provide to their constituents.

Reminders

December's meeting will be on the third Thursday of the month due to holiday schedules.

The next meeting is –

December 21, 2023 – Hosted at the City of Menlo Park's City Council Chambers

Artificial bodies of water, modern



SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY

Special Meeting of the Board of Directors November 16, 2023





Artificial bodies of water, modern

AGENDA

Members of the Public may speak on any agenda item for up to three minutes

1. ROLL CALL
2. APPROVAL OF AGENDA: Changes or additions to the agenda.
3. PUBLIC COMMENT: Individuals may speak on a non-agendized topic for up to three minutes on a topic within the SFCJPA's jurisdiction.

Members of the public speaking in person should submit a speaker card to the Clerk of the Board, indicating which agenda item or items they wish to speak about, in order to be recognized. When the agenda item is called, please stand at the podium and speak clearly.

Members of the public speaking via video conference should raise their hand, indicating their desire to ask a question or comment. They will be recognized by the Clerk of the Board and once unmuted and recognized, please speak clearly.

A topographic map of the San Francisco Peninsula showing watershed boundaries. Labels include 'Artificial bodies of water, modern' in the top left, 'San Francisco Creek watershed' in the center, 'Corte Madera Creek watershed' in the bottom left, 'Los Trancos Creek watershed' in the bottom right, and 'Mountain View' on the right side. A legend in the bottom right corner is titled 'NATURAL LEVELS'.

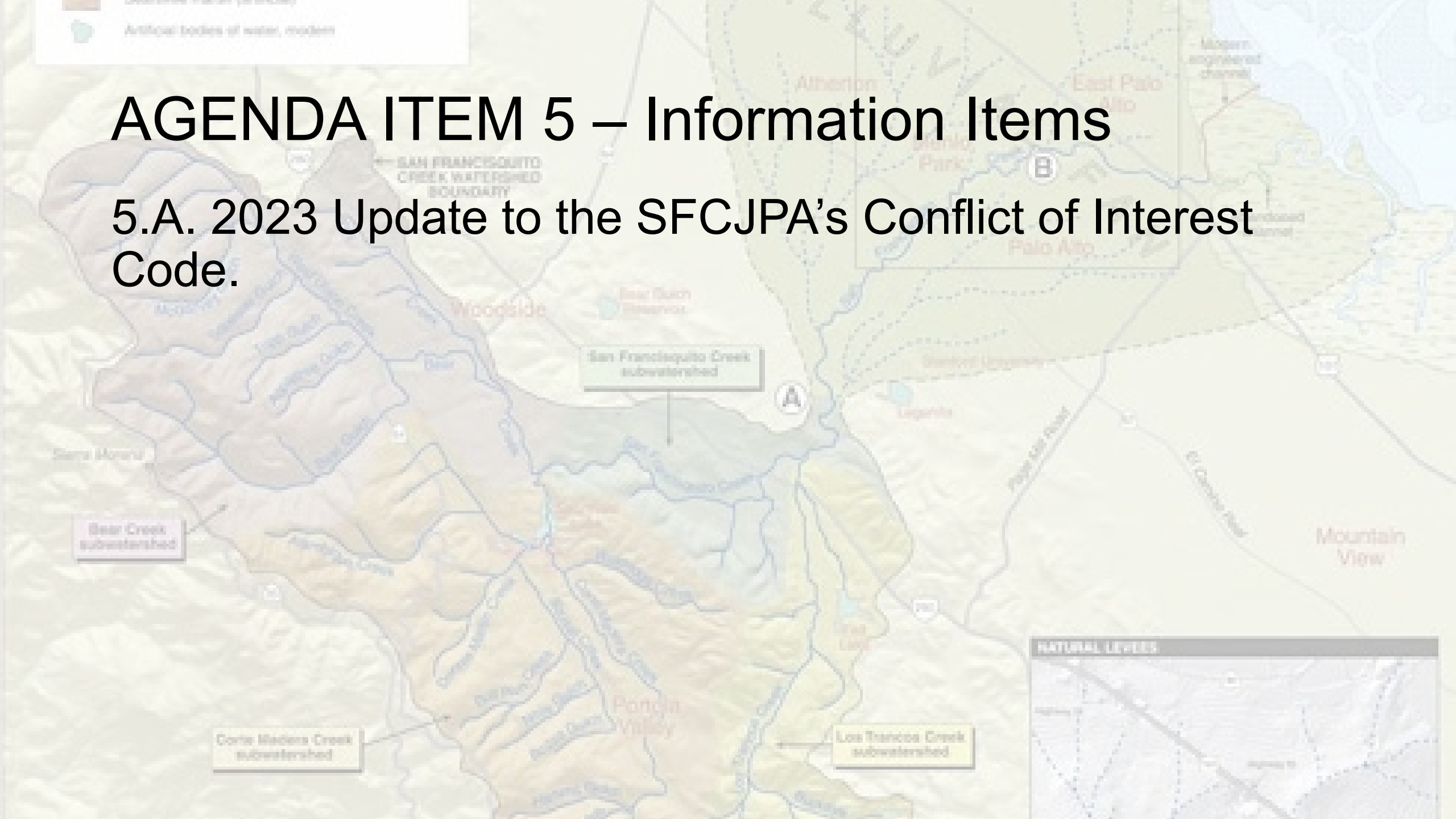
AGENDA ITEM 4 – Special Presentation of the Reach 2 Hydraulic Model Review

Presentation by Chuck Anderson, Justin Maynard, and Cameo Tsui of Schaaf & Wheeler Consulting Engineers

Independent Evaluation of HEC-RAS model and evaluation of December 2022 storm and flooding.

AGENDA ITEM 5 – Information Items

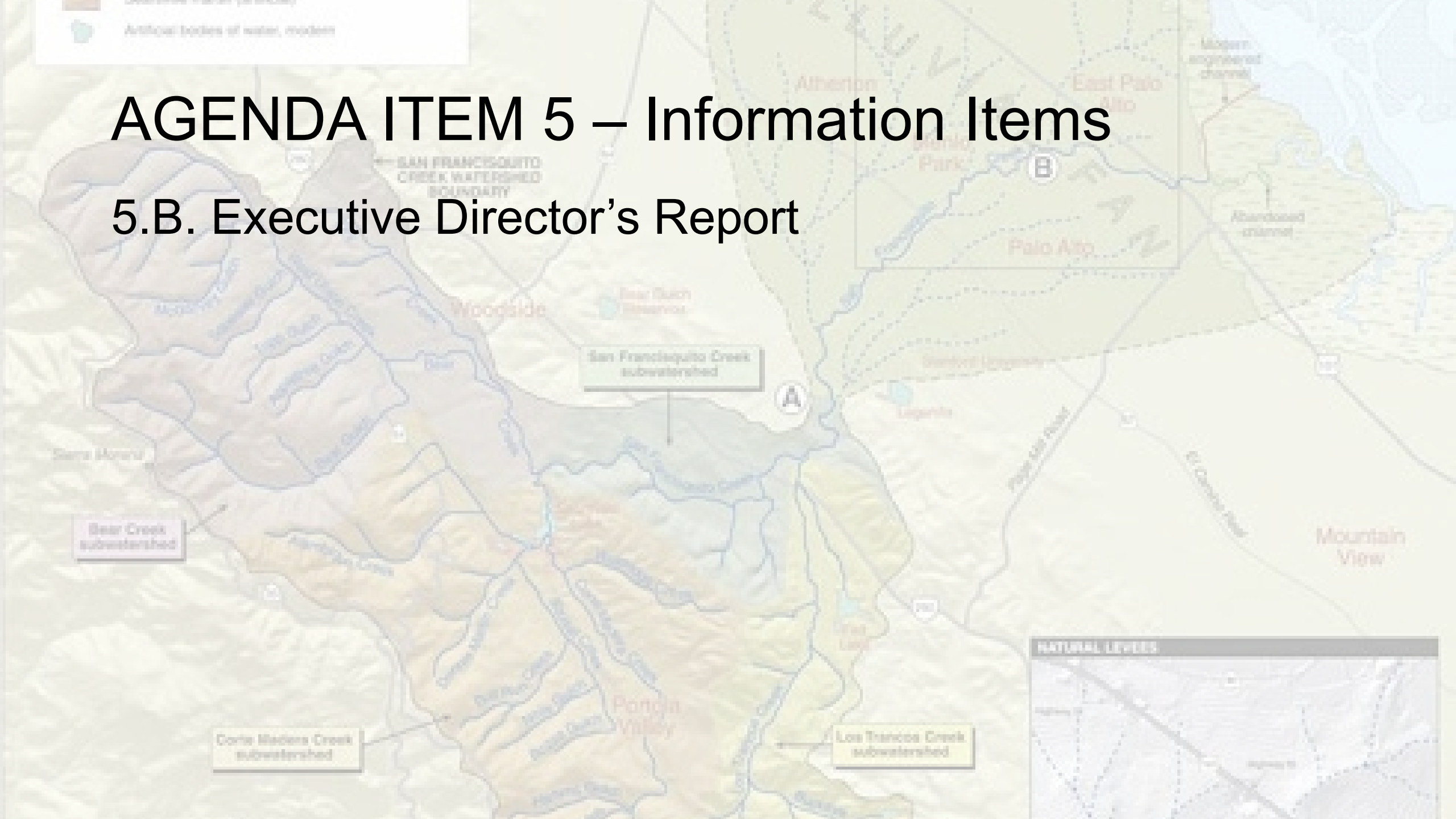
5.A. 2023 Update to the SFCJPA's Conflict of Interest Code.



Artificial bodies of water, modern

AGENDA ITEM 5 – Information Items

5.B. Executive Director's Report



Agenda Item 7

ADJOURNMENT

