

BOARD OF DIRECTORS MEETING
East Palo Alto City Council Chambers
February 28, 2019 at 3:30 p.m.

AGENDA

1. **ROLL CALL**
2. **APPROVAL OF AGENDA**
3. **APPROVAL OF MEETING MINUTES: January 24, 2019 Regular Board meeting**
4. **PUBLIC COMMENT – *Individuals may speak on any topic for up to three minutes; during any other Agenda item, individuals may speak for up to three minutes on the subject of that item.***
5. **REGULAR BUSINESS – Executive Director’s Report**
 - a. **Board organization: confirm officer positions and membership on committees**
 - b. **February 2019 storms: brief discussion**
 - c. **S.F. Bay-Highway 101 project: discuss project completion**
 - d. **Upstream of Highway 101 project update**
6. **BOARD MEMBER COMMENTS – *Non-agendized requests or announcements; no action may be taken.***
7. **ADJOURNMENT**

Agenda Item 3:

APPROVAL OF BOARD MEETING MINUTES

January 24, 2019 Regular Meeting

Agenda Item 4:

PUBLIC COMMENT

Individuals may speak on any topic for up to three minutes; during any other Agenda item, individuals may speak for up to three minutes on the subject of that item.

Agenda Item 5:

REGULAR BUSINESS – EXECUTIVE DIRECTOR’S REPORT

- a. Board organization: confirm officer positions and membership on committees**

a. Board Organization: confirm officer positions & membership on committees

2018 Board positions

Chair: Kremen

Vice Chair: Abrica

Committees:

Finance: Pine & Keith ←

Personnel: Abrica & Scharff ←

Emergency Preparedness: Abrica & Kremen

Purposes, Roles and Responsibilities: Full Board

ACWA JPIA: Abrica (alternate Miyko Harris-Parker)



Agenda item 5.b.

February 2019 storms: brief discussion



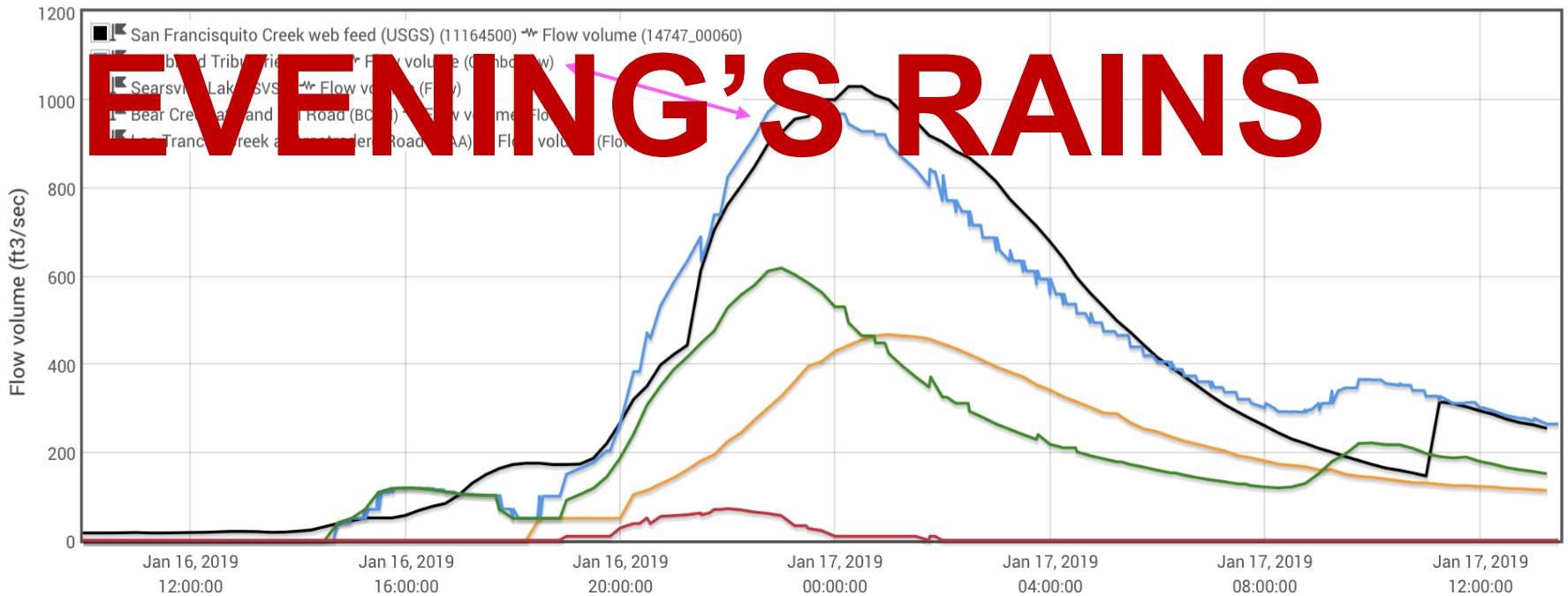
Reload



16 January, 2019 - 17 January, 2019

Markers Legend

+ Add



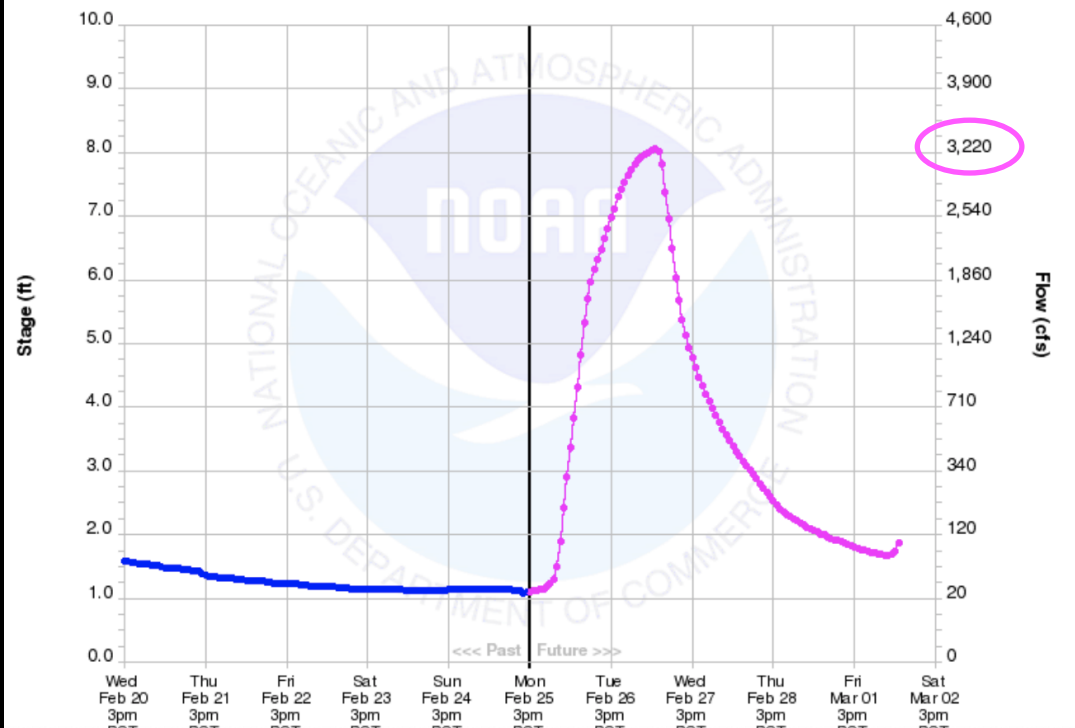
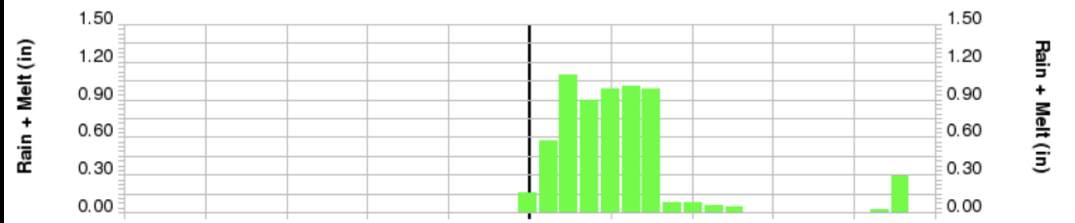
**WILL FINISH THIS
SLIDE AFTER THIS
EVENING'S RAINS**

SAN FRANCISQUITO CREEK - STANFORD UNIVERSITY (SFCC1)

Latitude: 37.42° N Longitude: 122.19° W Elevation: 116 Feet
 Location: Santa Clara County in California River Group: Central Coast

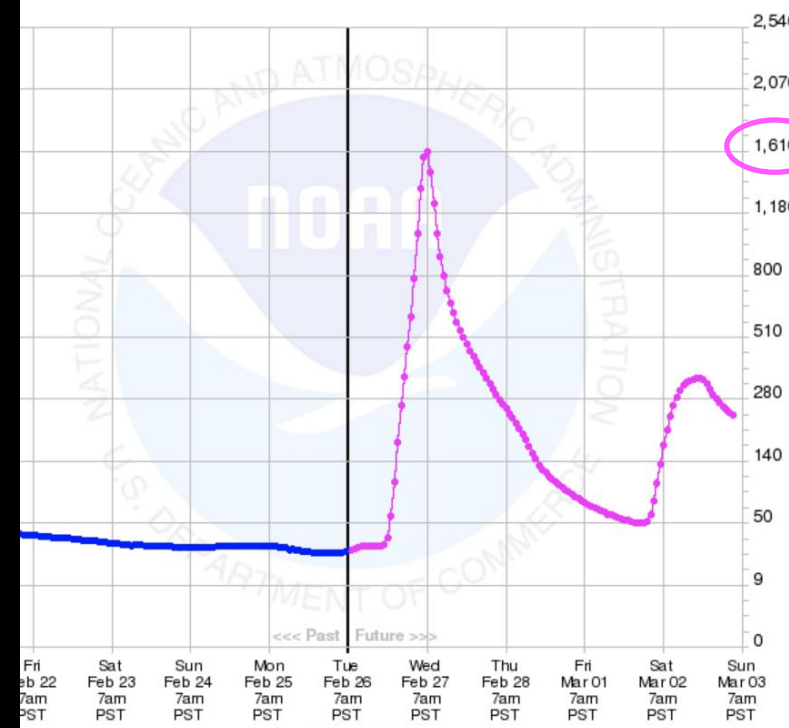
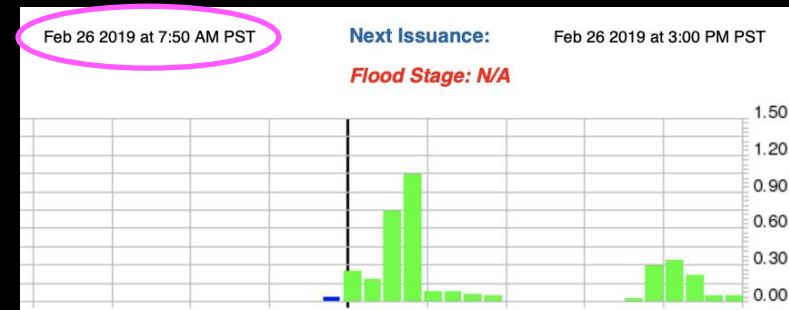
Issuance Time: **Feb 25 2019 at 3:03 PM PST** Next Issuance: Feb 25 2019 at 9:00 PM PST

Monitor Stage: *N/A* Flood Stage: *N/A*



**NWS SF Creek flow forecasts:
 Monday, 3 pm & Tuesday 8 am**

**Estimated max SF Creek flow
 cut in (exactly) half**



sfcjpa.org/floodwarning



SAN FRANCISQUITO CREEK
JOINT POWERS AUTHORITY

Flood Early Warning System



FLOOD MAP

RECEIVE ALERTS

REPORT A PROBLEM

BACKGROUND DATA

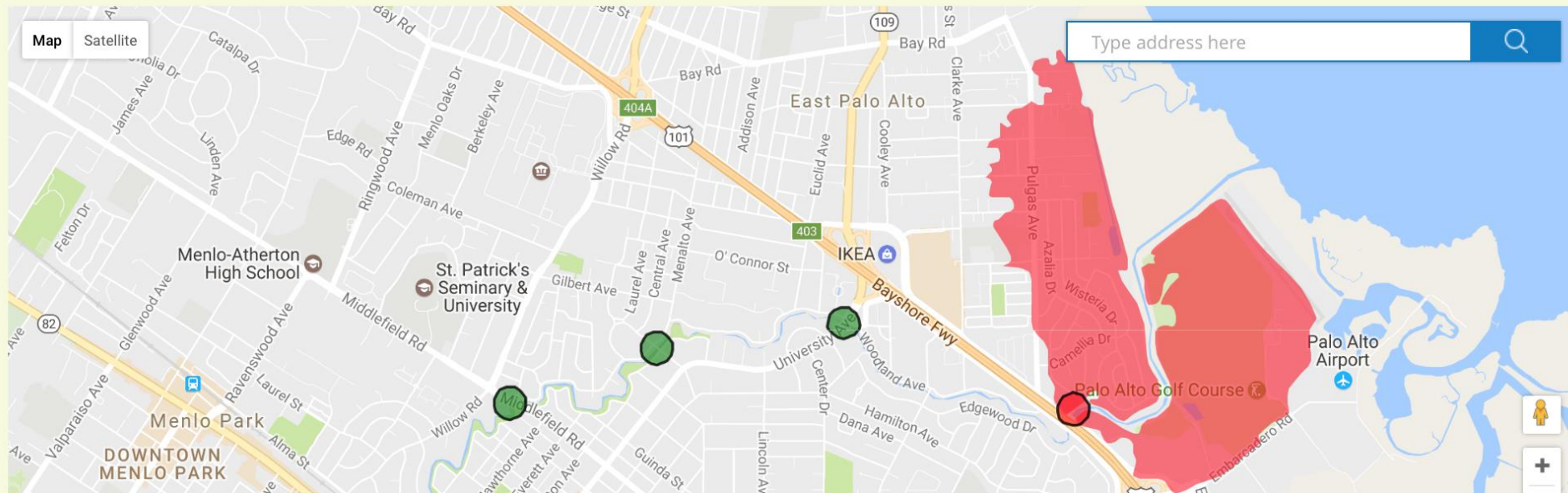
ABOUT

PALO ALTO CREEK MONITOR WEBSITE

February 7, 2017 01:31:06 pm The information on this website updates every 15 minutes — for current conditions, periodically refresh or relaunch this website.

**** FLOOD WARNING: UNTIL ABOUT 2:30 PM ON FEB. 7, SF CREEK MAY FLOOD AT WEST BAYSHORE ROAD, AS INDICATED BY THE RED CIRCLE ON THE MAP BELOW. WE ARE MONITORING OTHER LOCATIONS, BUT DO NOT ANTICIPATE FLOODING AT THOSE LOCATIONS AT THIS TIME. ****

PLEASE NOTE: For specific and timely information regarding emergency response in your community, click on the link under Local Agencies Emergency Websites below. Please do NOT call 9-1-1 unless there is an imminent threat to life or property.



Text alert of Flood Watch (yellow on map)

FLOOD WARNING: Within two hours, Creek is expected to flood at Pope-Chaucer Bridge. Text STOP to unsubscribe.

E-mail alert of Flood Warning (red on map)

From: AWS Notifications no-reply@sns.amazonaws.com
Subject: SFCJPA:Flood Early Warning System Alert for E Bayshore
Date: February 7, 2017 at 10:54 AM
To: len@sfcjpa.org

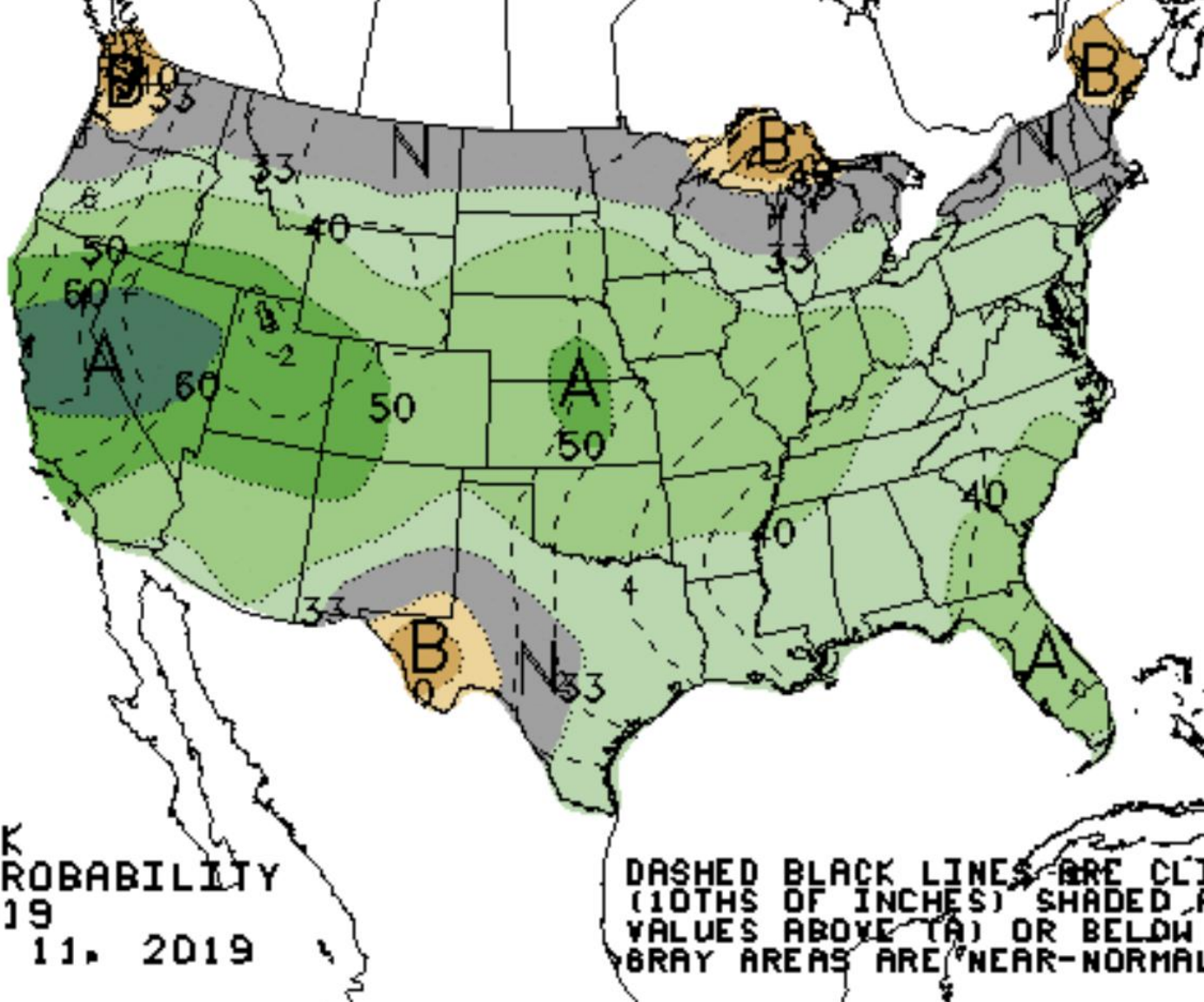


FLOOD WARNING: Within two hours, Creek may flood at W. Bayshore. We are monitoring other locations. Stay alert for your jurisdiction's emergency response information, which is also available at: <http://sfcjpa.org/floodwarning>. Please do NOT call 9-1-1 unless there is an imminent threat to life or property.

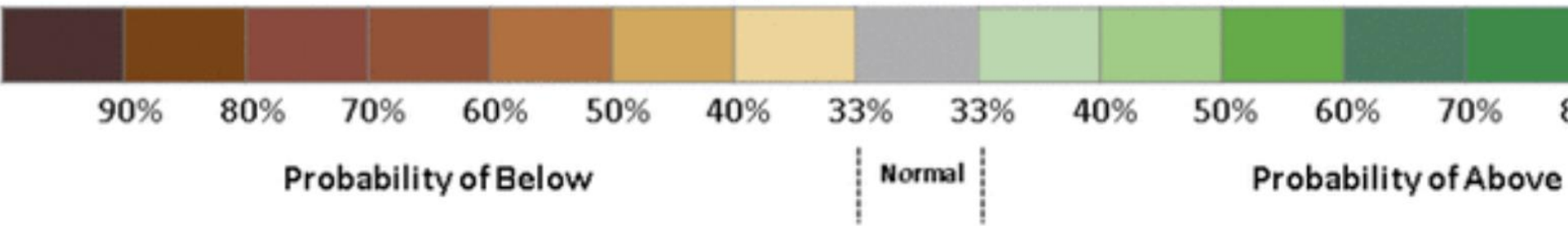
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If you wish to stop receiving notifications from this topic, please click or visit the link below to unsubscribe:
<https://sns.us-east-1.amazonaws.com/unsubscribe.html?SubscriptionArn=arn:aws:sns:us-east-1:525680467638:Email-Alert-Flood-Early-Warning-System:389ae0f0-0f9f-40c2-86fc-5d847614db99&Endpoint=len@sfcjpa.org>

Please do not reply directly to this email. If you have any questions or comments regarding this email, please contact us at <https://aws.amazon.com/support>



8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 25 FEB 2019
VALID MAR 05 - 11, 2019



An aerial photograph showing a wide river flowing through a landscape. The river is light-colored, likely due to sediment. To the left of the river is a large, green, marshy area with intricate patterns of water and land, indicating restoration work. To the right is a darker, more uniform marsh area. In the background, a dense urban area with buildings and roads is visible, along with a multi-lane highway. The overall scene depicts a natural waterway integrated with urban development.

Agenda item 5.c.

S.F. Bay–Hwy. 101 project: discuss project completion

Work on the flood protection features and Faber Marsh restoration is complete.

Bay-Hwy. 101 project remaining activities:

- In April, in-channel marsh planting and maintenance through a new SCVWD contract paid for by the construction and mitigation Six-party Funding Agreement.
- Friendship Bridge and trails are opened; portions may be temporarily closed in March.
- SFCJPA amending our Prop. 84 grant agreements with DWR & ABAG.
- We are developing a new agreement to outline and fund long-term monitoring, maintenance, and reporting of the flood protection and restoration features.
- On April 13th we will briefly highlight the project's trails & environmental features.



Agenda Item 5:

REGULAR BUSINESS – EXECUTIVE DIRECTOR’S REPORT

c. Upstream of Highway 101 project update



Upstream of Highway 101 project Draft EIR update

- **SFCJPA has received and integrated comments on the Admin. Draft EIR from most member agencies and sent this document back to our consultant to create the final version.**
- **Within a month, we hope to release the Draft EIR for public comments, and in April and May conduct a hearing in each city (and can present to city councils and governing boards, if requested).**
- **SCVWD/SFCJPA have submitted two applications for a total of \$8 million, and the City of Palo Alto expects Caltrans to continue funding 89% of the cost to replace the Newell Bridge. With this funding, the shortfall to construct our preferred project is currently estimated at almost \$10 million, out of the \$110 million cost to construct our comprehensive plan of creek projects from S.F. Bay to the Pope-Chaucer Bridge. The SFCJPA is also reviewing opportunities for State bond measure and other funding.**



The Draft EIR's alternatives

1. No action / no project
2. Pope-Chaucer Bridge, railing at Woodland & Univ., widen creek bottlenecks
3. Construct one or more upstream detention basins
4. Construct an underground bypass culvert
5. Pope-Chaucer Bridge, railing at Woodland & Univ., construct floodwalls
6. Construct a culvert through Pope-Chaucer Bridge
7. Construct a channel around Pope-Chaucer Bridge
8. Replace Pope-Chaucer with a bridge for bikes and peds only
9. Remove and do not replace Pope-Chaucer Bridge
10. Increase the removal of debris and non-native vegetation
11. Deepen the channel
12. Construct multiple small-scale water detention facilities
13. Increase incentives for Low Impact Development (LID)
14. Utilize overland floodways
15. Construct a new pump station
16. Construct a new Ladera Dam
17. Pope-Chaucer Bridge and widen four creek bottlenecks (Corps alt.)



EIR screening process

First level of screening

How well does an alternative meet the project objectives?

- Protect life, property, and infrastructure from floodwaters exiting creek
- Minimize impacts on the adjacent community.
- Minimize impacts on the environment
- Minimize operational and maintenance requirements

Screening remaining alternatives

- How costly is it
- Do we control the site
- Is it technically feasible

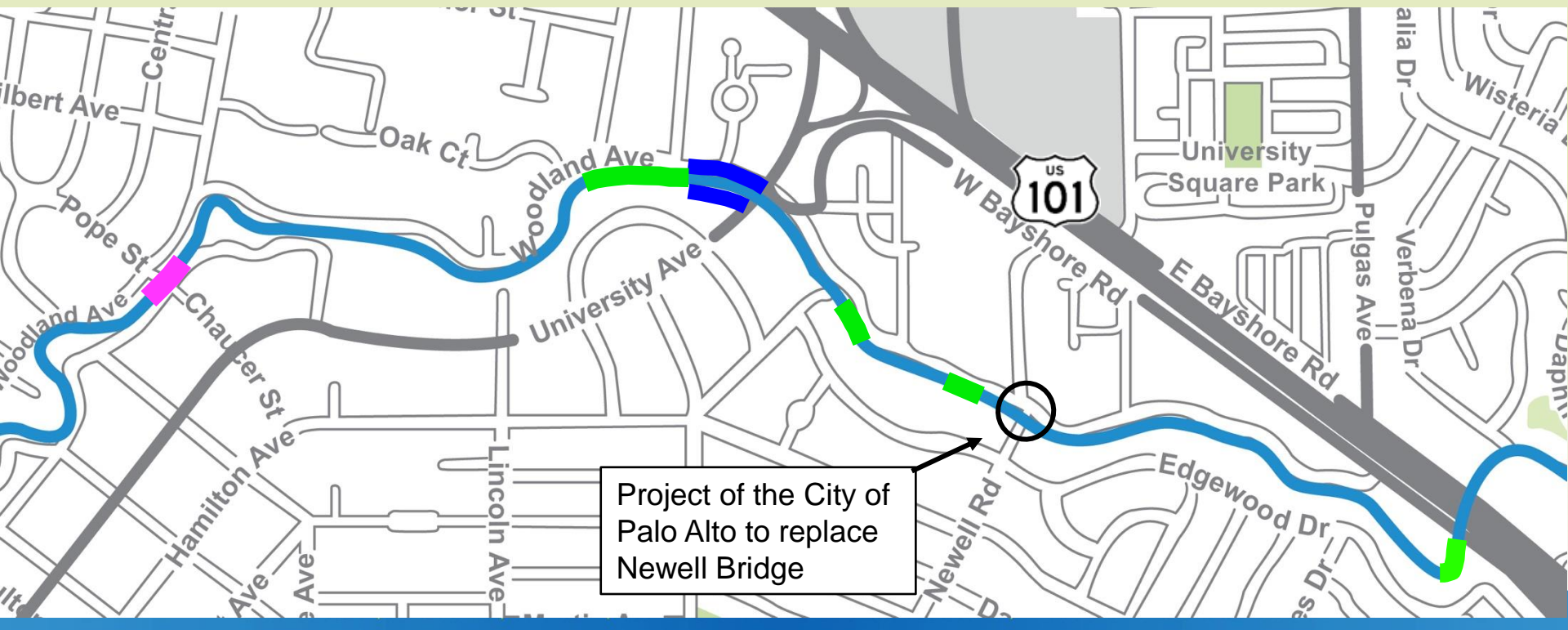
Three alternatives advance to greater analysis

- Replace the Pope-Chaucer Bridge and widen channel downstream
- Replace the Pope-Chaucer Bridge and construct floodwalls downstream
- Construct one or more floodwater detention basins in upper watershed

The preferred alternative upstream of Highway 101: *a meaningful and achievable project*

- **Replace Pope-Chaucer**
- **Replace parapet at Woodland & University and match PA top of bank**
- **Widen creek bottlenecks downstream to accommodate increased flow**

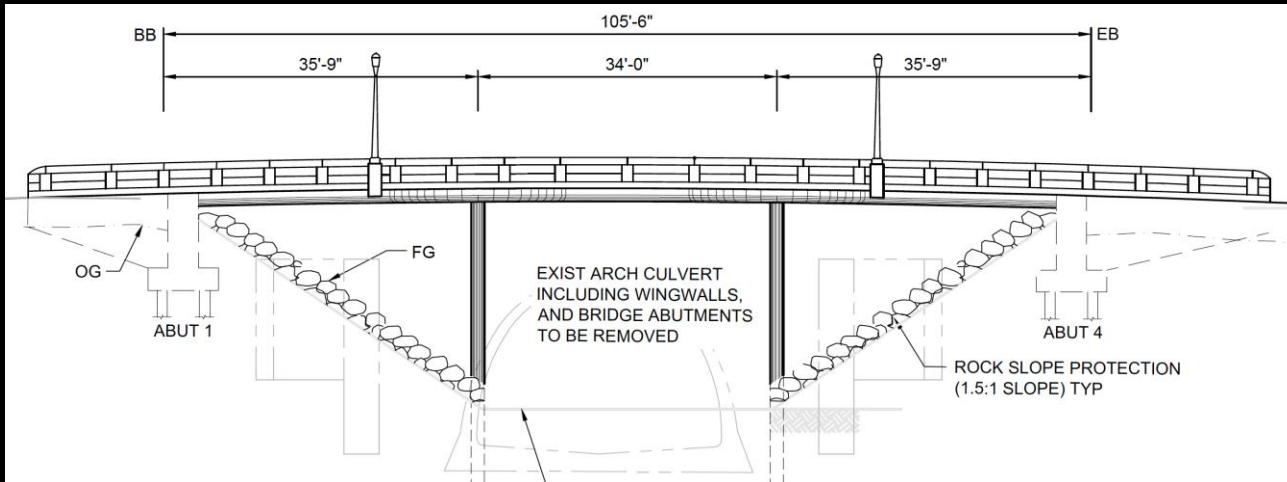
Creek could contain the maximum (1998 flood) flow under Middlefield Road Bridge. Draft EIR planned for release in March 2019 includes alternatives to achieve 100-year protection through upstream detention on Stanford land.



Every alternative upstream of Hwy. 101 includes widening the Palo Alto side of the channel at the frontage road on the upstream side of the highway to align with and take advantage of the Bay-Hwy. 101 project downstream



The preferred alternative (and many others) replaces the Pope-Chaucer Bridge, the location of least capacity following the completion of the Bay-Hwy. 101 project.



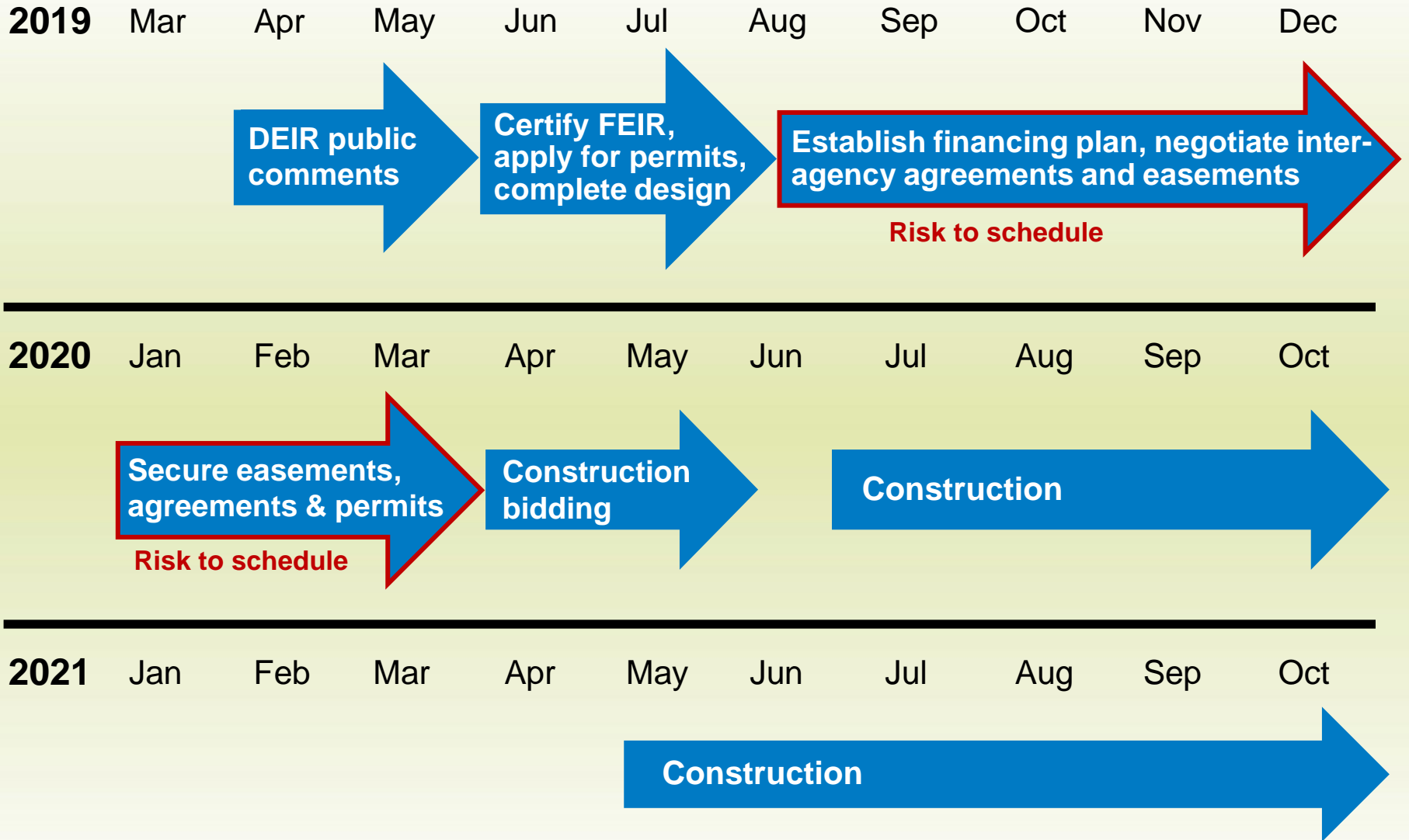
Just replacing the bridge and adding flow capacity causes flooding downstream

**Between W. Bayshore and Euclid Ave,
the preferred alternative also:**

- **increases creek capacity**
- **reduces concrete in the channel**
- **strengthens creek bank behind homes**



Aggressive, but achievable, Upstream of Hwy. 101 project schedule



Agenda Item 6:

BOARD MEMBER COMMENTS

*Non-agendized requests or announcements;
no action may be taken.*



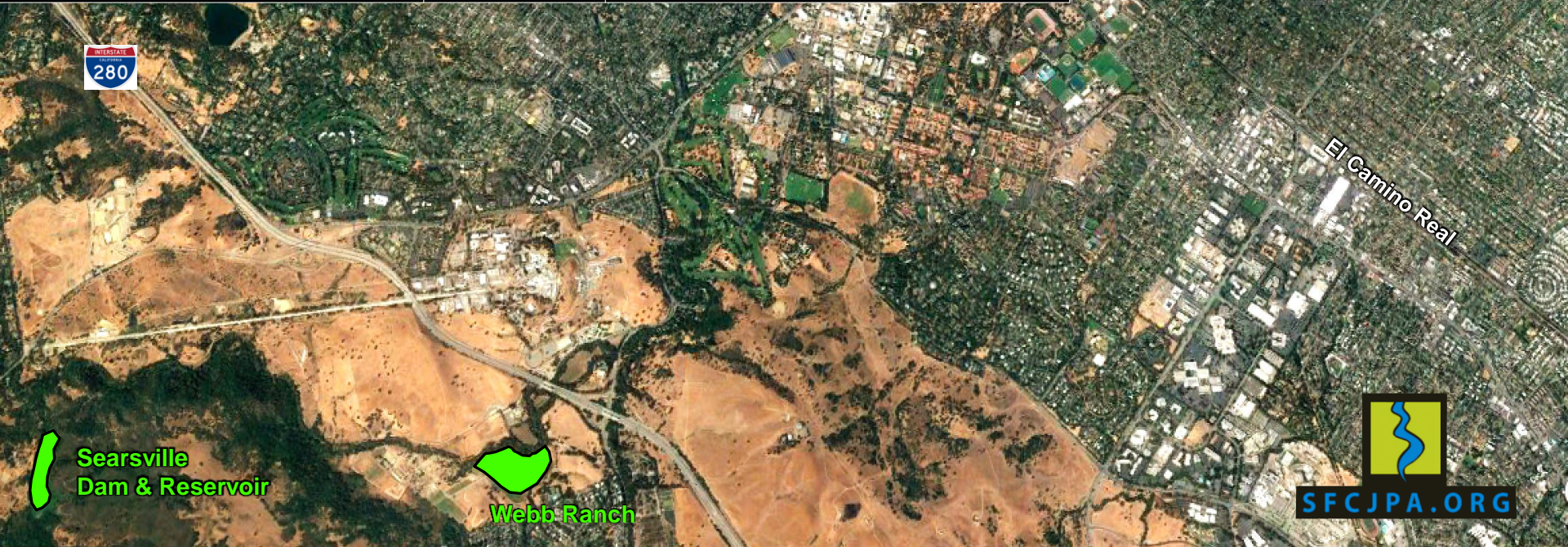
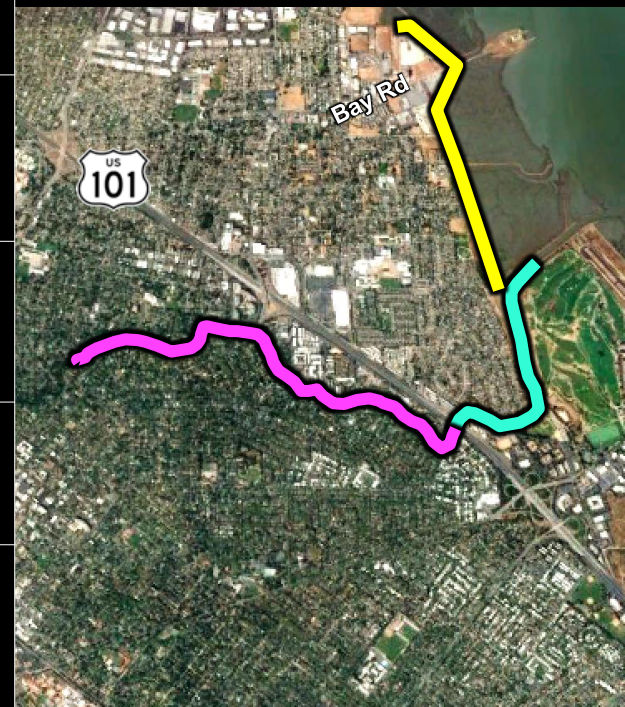
NEXT BOARD MEETING

Thursday, March 28, 2019

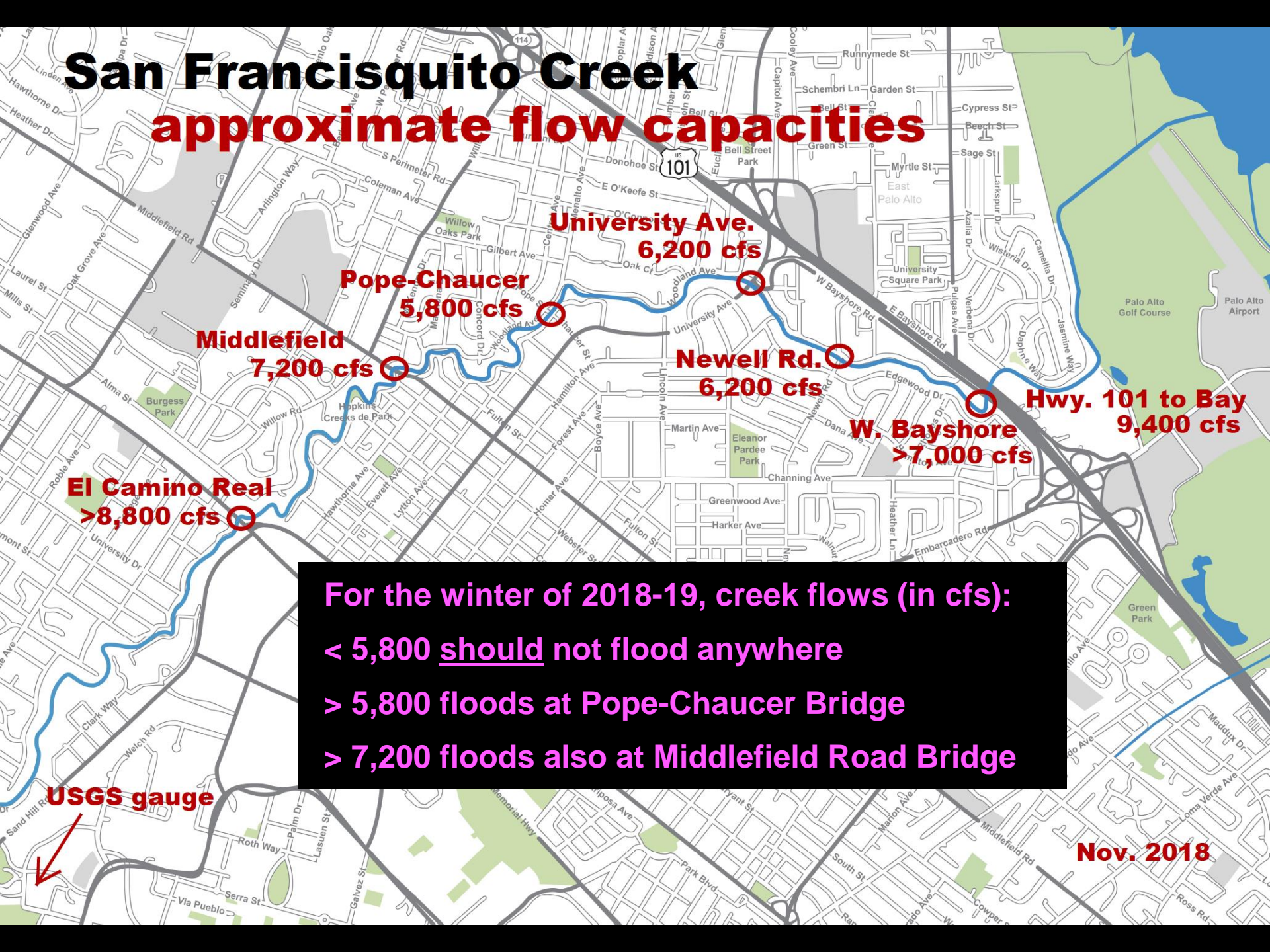
3:30 p.m.

Palo Alto City Council Chambers

Flood protection objective	Project completion	Comments
Between Bay-Hwy. 101, max creek flow w/ sea level 10 feet above current high tide	Nov. 2018	Parcels adjacent to the Creek would remain in Bay floodplain.
Upstream of Hwy. 101, a 70-year creek flow (1998 flood of record)	Dec. 2022	Now floods above a 22-yr flow. 70-yr = st. flooding @ Middlefield
Along Bay shoreline, a sea level ~ 9 feet above current high tide	Unknown	Possible 1 st phase of SAFER Bay – Creek to Tara St – built by 2022
Upstream of Hwy. 101, a 100-yr. flow (eliminate FEMA floodplain)	After 2023	Stanford modifies Searsville Dam, <u>or</u> JPA builds Webb Ranch basin



San Francisquito Creek approximate flow capacities



For the winter of 2018-19, creek flows (in cfs):
< 5,800 should not flood anywhere
> 5,800 floods at Pope-Chaucer Bridge
> 7,200 floods also at Middlefield Road Bridge

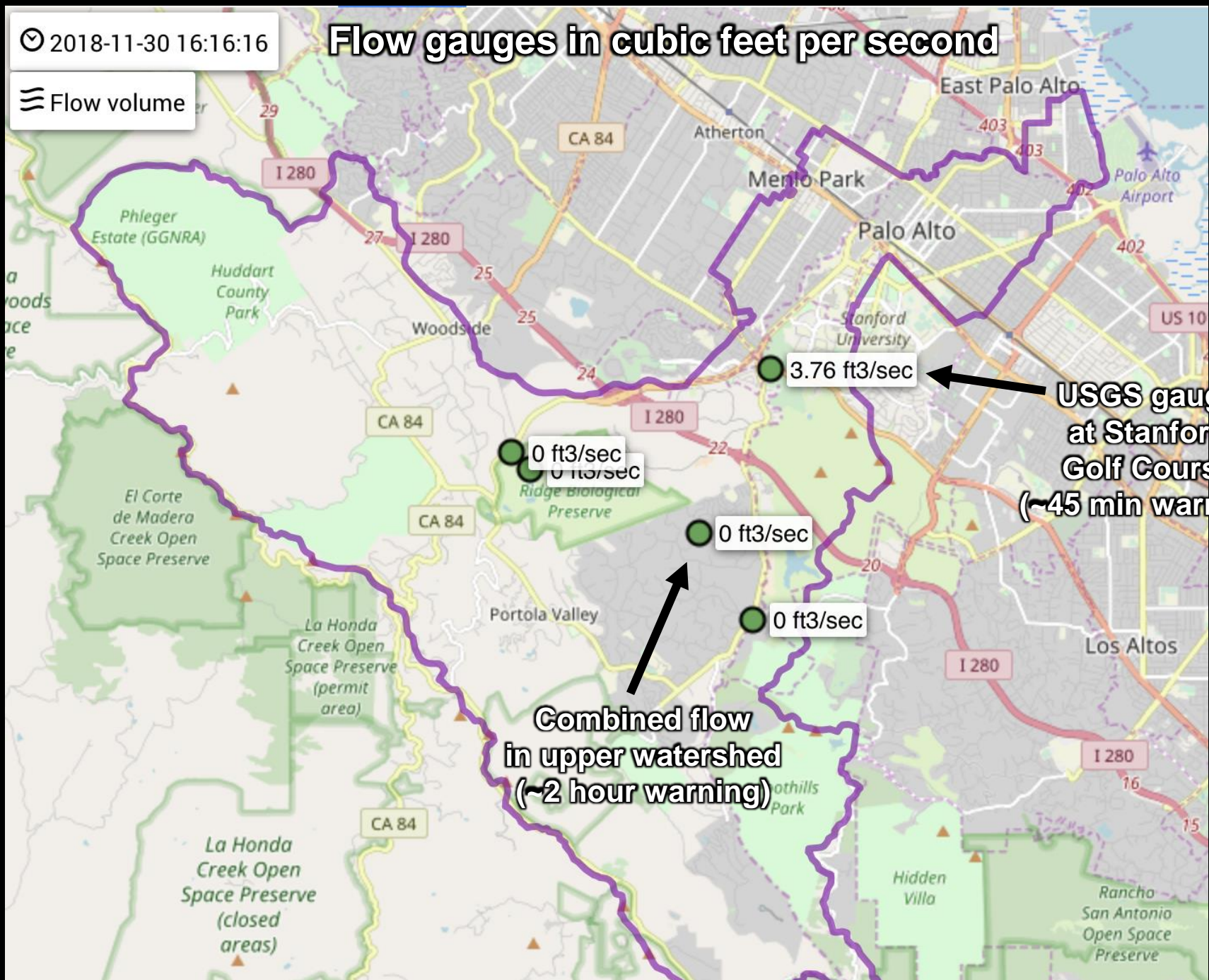
USGS gauge

Nov. 2018

🕒 2018-11-30 16:16:16

Flow gauges in cubic feet per second

☰ Flow volume



USGS gauge at Stanford Golf Course (~45 min warning)

Combined flow in upper watershed (~2 hour warning)

Flood Early Warning System website and alerts triggers

Winter 2018-19 updates

<u>Site</u>	<u>Yellow Trigger</u>	<u>Red Trigger</u>
Middlefield Road	4,100 c fs	6,800 cfs
Pope-Chaucer St	3,500 cfs	5,800 cfs
University Ave	3,500 cfs	5,800 cfs
u/s of W Bayshore	2,800 cfs	4,700 cfs
d/s of E Bayshore	2,750 cfs	4,600 cfs
% of creek capacity	60%	100%

SFCJPA staff monitor and discuss rain and flow data with SCVWD hydrologists and staff leadership of cities. Based on discussions, and if the combined flow in the upper watershed reaches a trigger value, the SFCJPA may send a text/e-mail alert and change the system's map.

Palo Alto Creeks, Flood Basin & Tide

1/17/2019
1:00:32 PM

San Francisquito Creek

Matadero Creek

Adobe Creek

Waverley St.

Chaucer St.

W. Bayshore Rd.

W. Bayshore Rd.

E. Meadow Dr.

1.3 ft

2.6 ft

0.7 ft

2.0 ft

Flood Stage Levels (Max Capacity)

28.0 ft

24.0 ft

16.7 ft

12.5 ft

12.0 ft

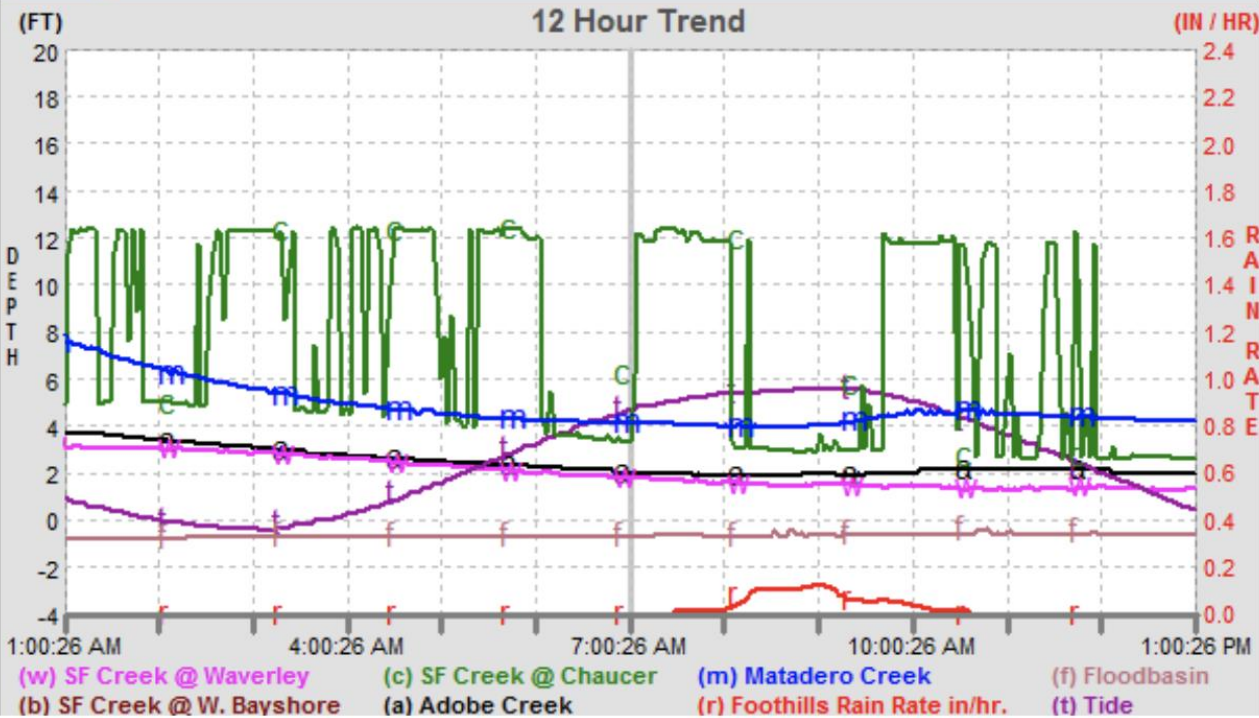
12.8 ft

16.0 ft

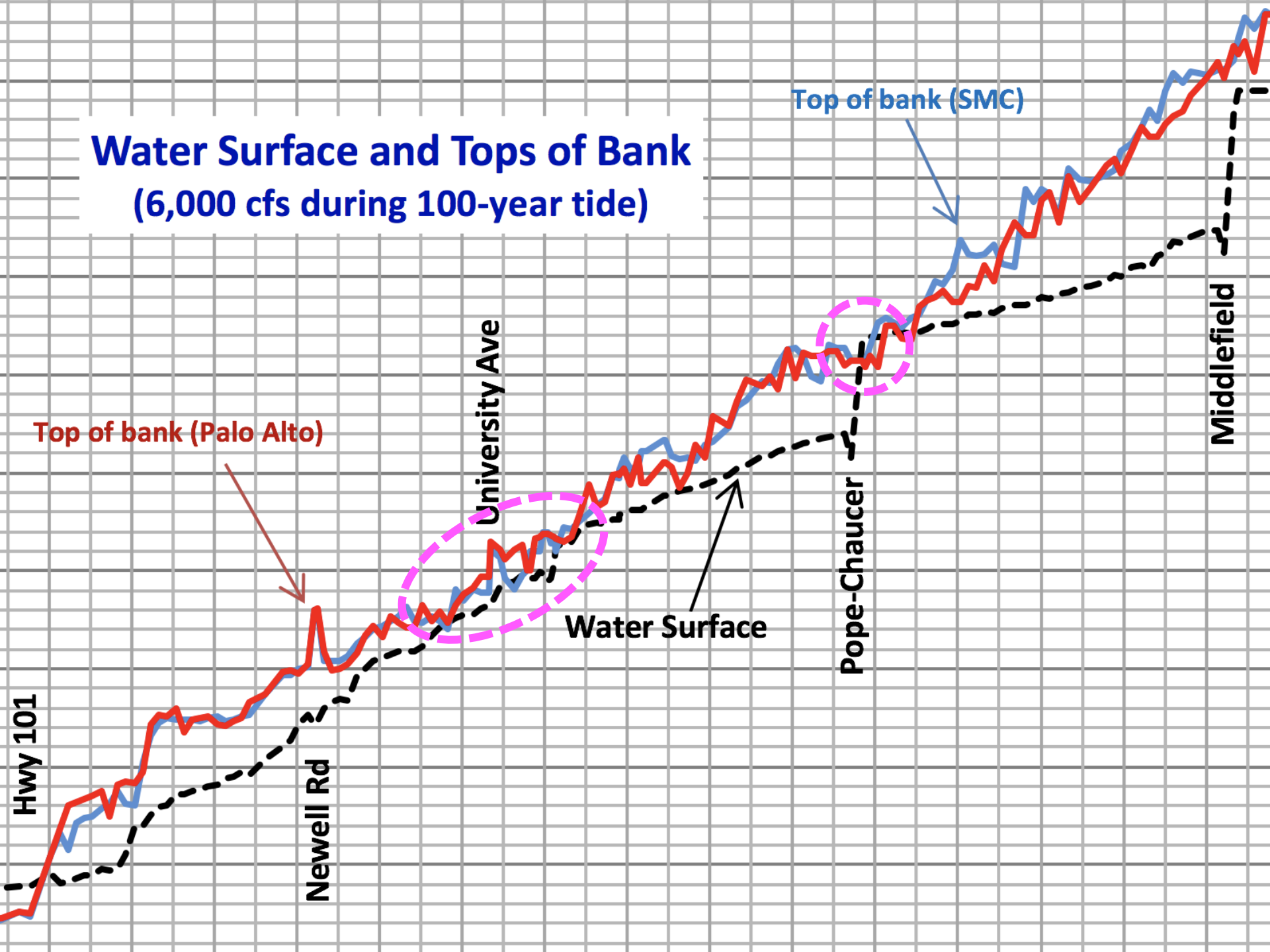


Flood Basin: -0.61 ft Tide 0.36 ft

Rain @ Foothills Park: Rain Rate 0.00 in/hr 24 Hours 2.49 in Annual Rain: 11.12 in



Water Surface and Tops of Bank (6,000 cfs during 100-year tide)



Top of bank (Palo Alto)

Top of bank (SMC)

University Ave

Water Surface

Pope-Chaucer

Middlefield

HWY 101

Newell Rd

HISTORIC PEAK STREAMFLOW RATES

SAN FRANCISQUITO CREEK AT USGS GAGE (LOCATED NEAR JUNIPERO SERRA BLVD)

1930 - 1941; 1950 - 2018

<u>DATE</u>	<u>PEAK FLOW RATE (CFS)</u>
1. FEBRUARY 3, 1998	7200
2. DECEMBER 22, 1955	5560
3. DECEMBER 23, 2012	5400
4. JANUARY 4, 1982	5220
5. JANUARY 1, 2005	4840
6. FEBRUARY 7, 2017	4820
7. APRIL 2, 1958	4460
8. JANUARY 21, 1967	4000
9. FEBRUARY 13, 2000	3930
10. FEBRUARY 16, 1982	3760



What we're doing for winter preparedness

- **Annual maintenance walk**
- **Flood Early Warning System**
- **SF Creek Multi Agency Coordination**
- **Public outreach with Communications Working Group**
- **Short term measures to provide flood protection**
- **Long term measures to provide flood protection**

BIG PICTURE: S.F. Bay–Pope-Chaucer Bridge Projects	Estimated Amount
S.F. Bay – Highway 101 ¹	\$76,277,000
Upstream of Hwy. 101 (replace Pope-Chaucer, Newell, widen channel) ²	\$34,270,000
Total Estimated Costs	\$110,547,000
Total funds available as of October 2018 ³	\$97,777,000
Funding needed to construct Upstream of Hwy. 101 ⁴	\$12,770,000

¹ Includes creek widening, floodwalls, levees, utilities, mitigations and Highway 101

² Assumes 25% contingency and 15% construction management costs

³ Assumes Caltrans Newell grant continues, CalOES FEMA second grant approved

⁴ Assumes \$1 million for Bay-Hwy. 101 and \$11.77 million for Upstream of Hwy. 101

- Costs above Funding Agreement for Bay-Hwy. 101 project**
 - + Costs to monitor, report and maintain Bay-101 restoration for years 2-10 (year 1 from Prop. 84 grant)**
 - + Costs to implement the Upstream of Hwy. 101 project selected for construction in EIR**
-

Comprehensive Agreement costs

Current funding provided by SCVWD and external grants

Potentially funded by: external grants, new finance district, Corps of Engineers, Member Agencies, private interests



Options to raise funds for construction by mid-2020

1. External grants

(2 grant apps to CalOES totaling \$8M, Prop. 1, 2018 statewide bond measures)

2. Contributions from SFCJPA Member Agencies

(of the committed \$56.4M from local agencies & grants, \$4.5M is from 3 cities and SMCFCFD)

3. Bond financing through:

- **Special Tax District** (~12 mo. post-decision, ~6 mo. Board/hearing/election process)
- **Assessment District** (~12 mo. post-decision, ~3 mo. Board/hearing/election process)
- **General Obligation Bonds** (by SFCJPA members, not JPA)
- **Enhanced Infrastructure Financing District** (at least one year)

4. Corps of Engineers (Feasibility Study/EIS to be released within two months)

5. Large private developers (cash/land contribution, or by assessment district)

6. Aggregated private flood insurance

S.F. Bay – Highway 101 Project INCOME and EXPENSES as of 10/24/18

Item	June 2016 Agreement	Change	Total
Total funding			\$44,377,351
Funds from SFCJPA member agencies	\$32,520,000		
Funds from grants	\$8,828,351	+ \$3,029,000	
Total costs to date			\$42,482,372
Cost of contracts managed by SFCJPA	\$9,724,000	+ \$1,173,000	
Cost of contracts managed by SCVWD	\$28,953,000		
Cost of change orders w/ merit		+ \$2,632,372	
Cost of claims under negotiation		+ \$3,465,192	
Funds remaining if current claims are paid in full			- \$1,570,213