

An aerial photograph of a residential neighborhood with a winding creek. A multi-lane highway is visible in the bottom left corner. The text is overlaid on the image.

**San Francisquito Creek
S.F. Bay-Highway 101 Project**

SF Bay Regional Water Quality Control Board

August 13, 2014

**Len Materman, Executive Director
San Francisquito Creek Joint Powers Authority**



SFCJPA.ORG

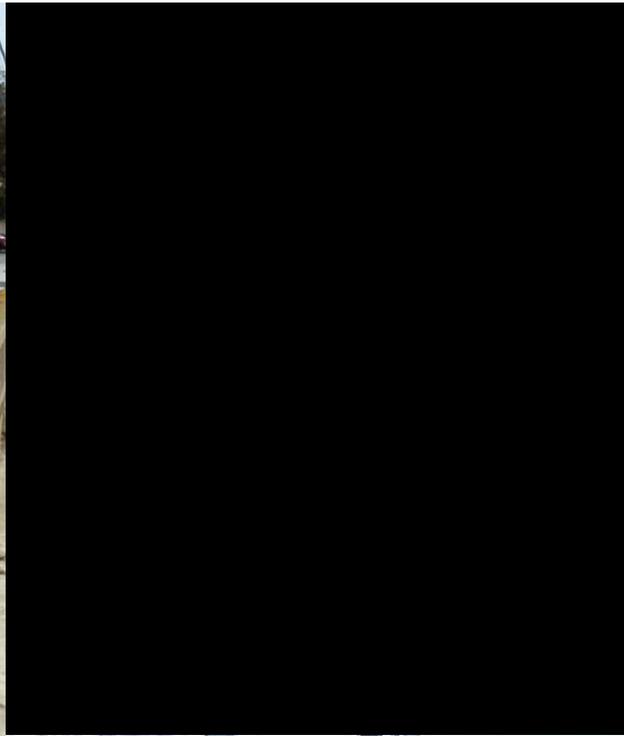
December 24, 2012

One day after a **15-year creek** flow caused flooding

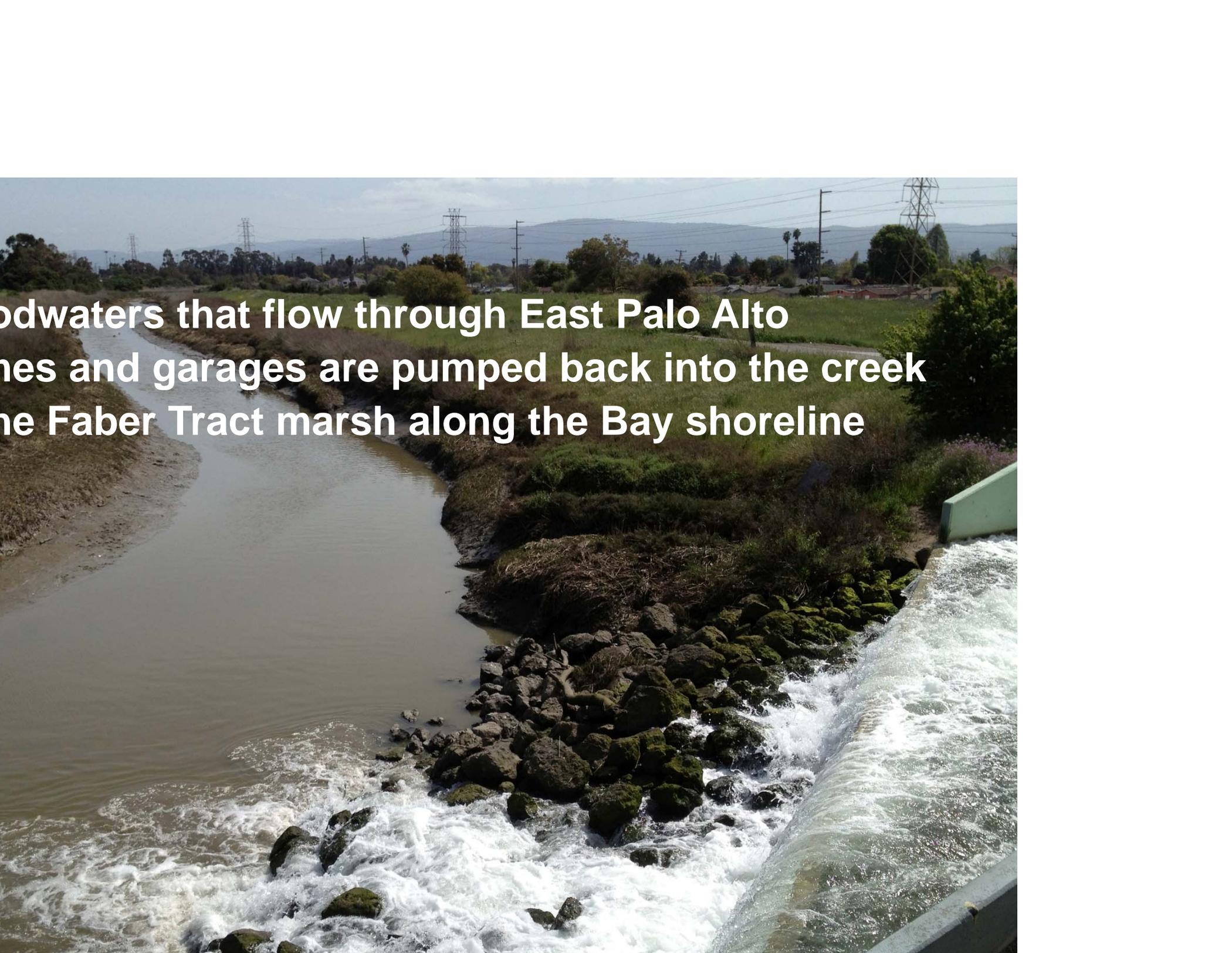


December 2012 East Palo Alto





31/2005



**Wastewater that flows through East Palo Alto
homes and garages are pumped back into the creek
at the Faber Tract marsh along the Bay shoreline**



Francisquito Creek

S.F. Bay-Highway 101

A project in the public eye

1941: Congress authorizes Corps of Engineers studies

1993-97: Broad stakeholder group drafts management plan, including SF Bay–Hwy. 101

1998: an estimated 45-year flow caused the flood of record, damaging about 1,700 properties

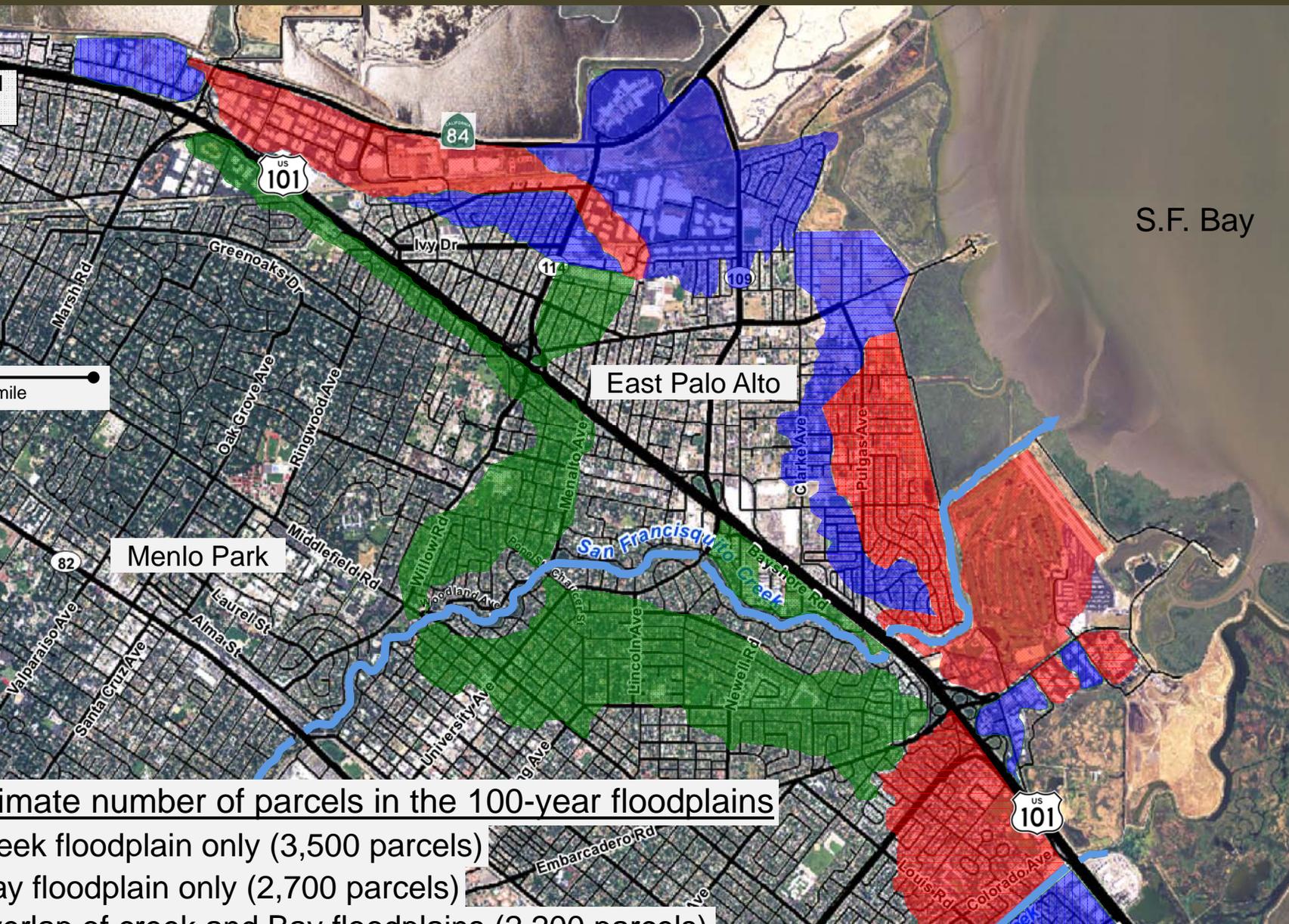
-year event in 1998



year event in 1998



100-year Floodplains in Menlo Park, East Palo Alto and Palo Alto



S.F. Bay-Highway 101

A project in the public eye

9: SFCJPA formed by three cities and two countywide agencies to fund, plan and implement work across boundaries.

0-08:

the alternatives evaluated against 14 criteria

9: SFCJPA consultant recommends alternative that:

widens channel into golf course, converting >7 acres into marsh

raises levees, and builds new floodwalls in constrained areas

-establishes connection between creek and tidal marsh

S.F. Bay-Highway 101: a project in the public eye

0: SFCJPA consultants begin design and EIR. Protection goal is 10-year creek flow during extreme tide with Sea Level Rise.

2:

SFCJPA gets \$8 million grant from State Dept. of Water Resources

SFCJPA certifies EIR

Santa Clara Valley Water District ballot measure approved

3:

SFCJPA submits permit application (March)

Regional Water Board deems application complete (Sept.)

Final SFCJPA Proposed Project

(March 12, 2013)

Protect people and property along San
Francisco Creek from SF Bay to Hwy. 101
at a 100-year creek flow during a
spring tide with 26" of Sea Level Rise

Improve water quality by keeping high flows
to the Bay within a new marsh channel rather
than over streets and through homes

Protect homes previously flooded in East PA
Create about 14 acres of new marsh habitat
Reconnect creek to adjacent marsh
Accommodate new eco-friendly golf course
Complete flood protection work upstream
Install the new, safer PG&E gas pipeline



Faber levee
degraded

New levee
set back into
golf course

Floodwalls

S.F. Bay-Highway 101: a project in the public eye

14:

SFCJPA refines design in response to resource agencies (Jan)

Regional Water Board denies application without prejudice (Feb)

SFCJPA, its consultants and partners conduct additional analysis on project alternatives requested by Regional Water Board (March-June)

SFCJPA presents analysis at multiple meetings and further refines design to accommodate resource agencies. (Mar-June)

SFCJPA and five agencies approve shared funding agreement (June)

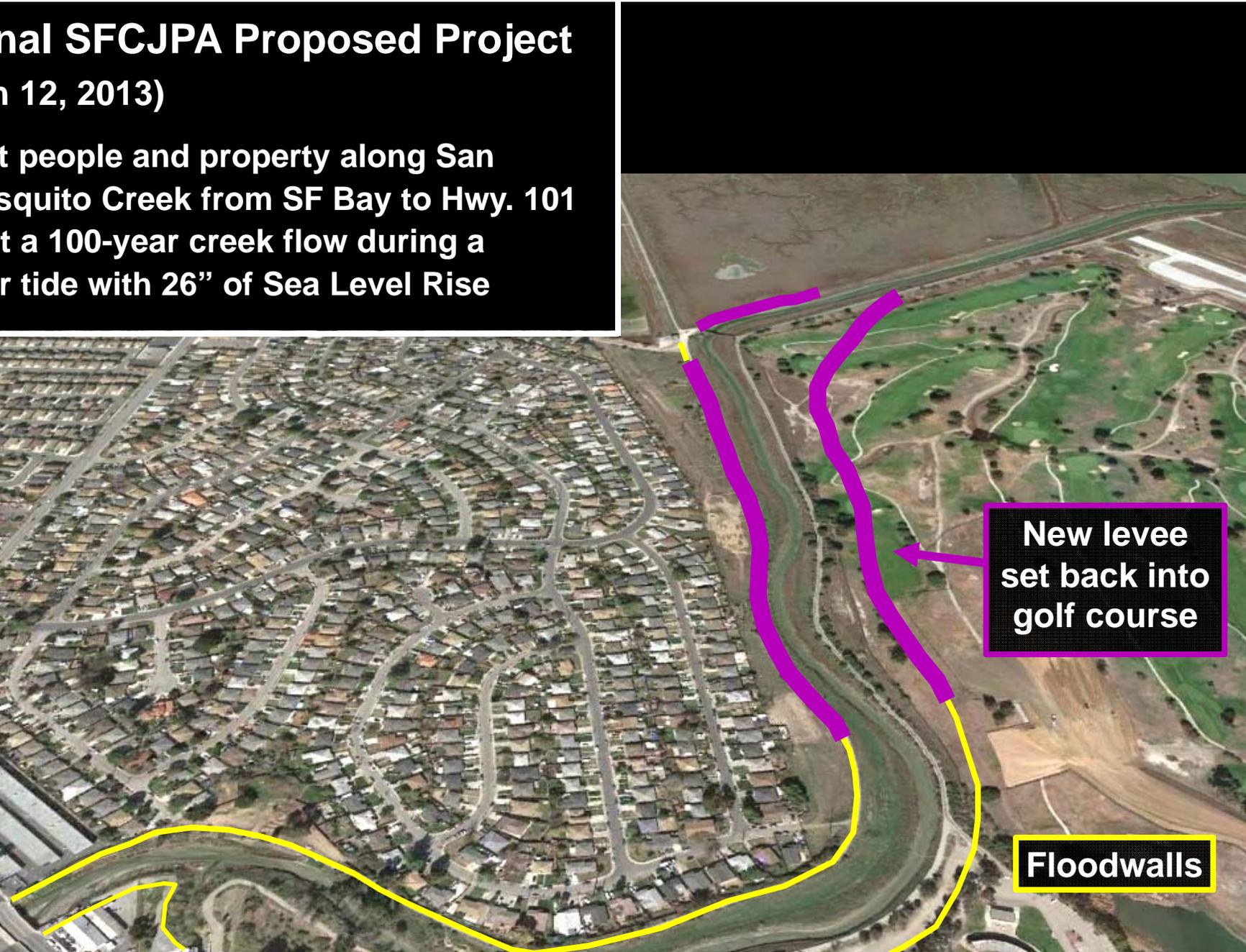
Independent consultant chosen by Regional Water Board analyzes and corroborates SFCJPA hydraulic results (July 10)

Regional Water Board Executive Officer accepts SFCJPA's LEDPA analysis and requests new application (July 11)

SFCJPA submits new application (July 31)

Final SFCJPA Proposed Project
(March 12, 2013)

Protect people and property along San
Siquito Creek from SF Bay to Hwy. 101
at a 100-year creek flow during a
spring tide with 26" of Sea Level Rise



**New levee
set back into
golf course**

Floodwalls

and SFCJPA application

(31, 2014)

to protect people and property along San
Quinto Creek from SF Bay to Hwy. 101
from a 100-year creek flow during a
spring tide with 26" of Sea Level Rise

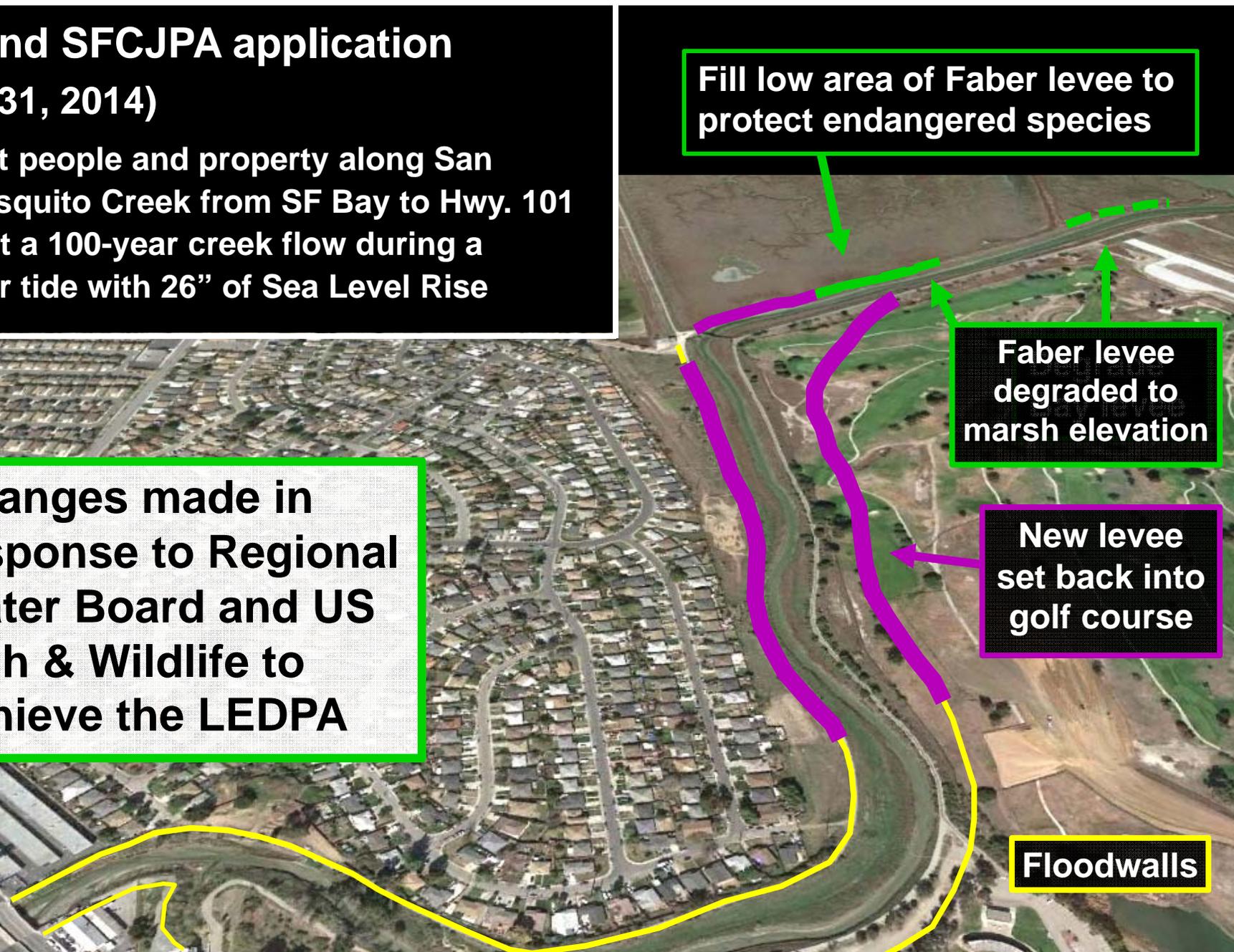
Changes made in
response to Regional
Water Board and US
Fish & Wildlife to
achieve the LEDPA

Fill low area of Faber levee to
protect endangered species

Faber levee
degraded to
marsh elevation

New levee
set back into
golf course

Floodwalls



Constraints to overcome to meet the project objective

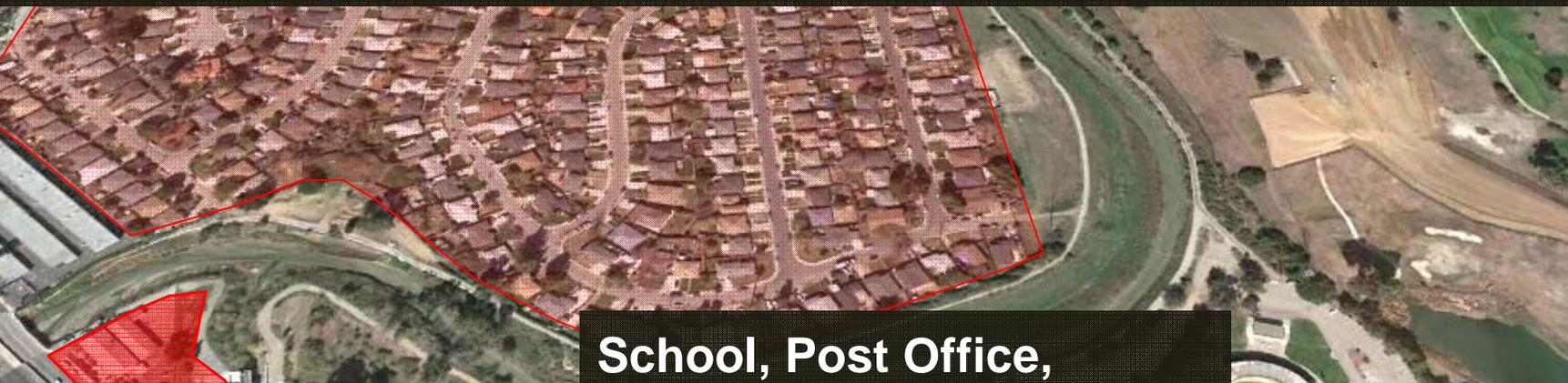


Faber Tract Marsh

Palo Alto airport

East Palo Alto homes

The “P” in LEDPA stands for “Practicable”



School, Post Office,

levee tops above

59 PG&E

s transmission

e under the

ek and along

ckyard fences



The “Least Environmentally Damaging Practicable Alternative”

SFCJPA project is the LEDPA because it:

meets objective for flood protection: no creek water entering neighborhoods during highest flow possible with extreme tide

avoids long-term impacts and minimizes construction-related impacts to endangered species and waters of the State

utilizes land that is being made available to the project

represents a reasonable cost to local and State taxpayers; shared funding secured by multiple local agencies

project is not just the LEDPA, it creates additional and higher-quality wetlands, and improves water quality.

The SFCJPA project and S.F. Bay Basin Plan

Basin Plan for San Francisquito Creek lists 7 beneficial uses, which will be negatively impacted by the project. The project will:

upstream steelhead **migration** during winter flows suitable for migration

have no impact on **spawning**

will not adversely impact **cold** water or **warm** water beneficial uses.

will not impact tidal marsh habitat for the salt marsh harvest mouse, clapper rail or other **wildlife**, and will mitigate temporary construction impacts.

will not impact human contact uses like fishing or swimming (**Rec 1**)

will slightly improve non-contact uses such as hiking and sightseeing through new built trails and new interpretive signage (**Rec 2**)

The SFCJPA project complies with other Regional Water Board policies and interests

project:

adheres to the State's policy of no net loss of wetlands, and in fact provides a net gain of wetlands

complies with the State's Anti-Degradation Policy because it improves surface water quality and will not impact ground water quality

design efficiently conveys fluvial sediments through a stable low-flow channel flanked by marsh terraces

does not result in other environmental harms

L O O D S

ESTUARY NEWS FEB 2013

aving Homes from Swollen Creek

On a day of super-high "king" tides in December, Len Materman walked the levee on the south bank of Creek. The Palo Alto

needs maintenance," says Caitlin Sweeney of the San Francisco Estuary Partnership, who is managing the \$3.1 million project, which includes a \$1.6



CLIMATE CHANGE ADAPTATION IN ACTION

San Francisquito Creek Joint Powers Authority Factors
Future Sea Level Rise Into Coordinated, Watershed-Level
ood Protection

Protect
act

1998 flood



Responsibility and Accountability

JPA proposed project meets the region's goals for flood protection and environmental enhancement.

Communities ask the Regional Water Board to approve the Water Quality Certification for this project immediately following the conclusion of the public comment period on August 22.

Action is needed now to ensure funding is not jeopardized and work is completed before the 2016-17 rainy season.

Delaying permit approval prolongs the known risk to life and property faced by the underserved community of East Palo Alto.

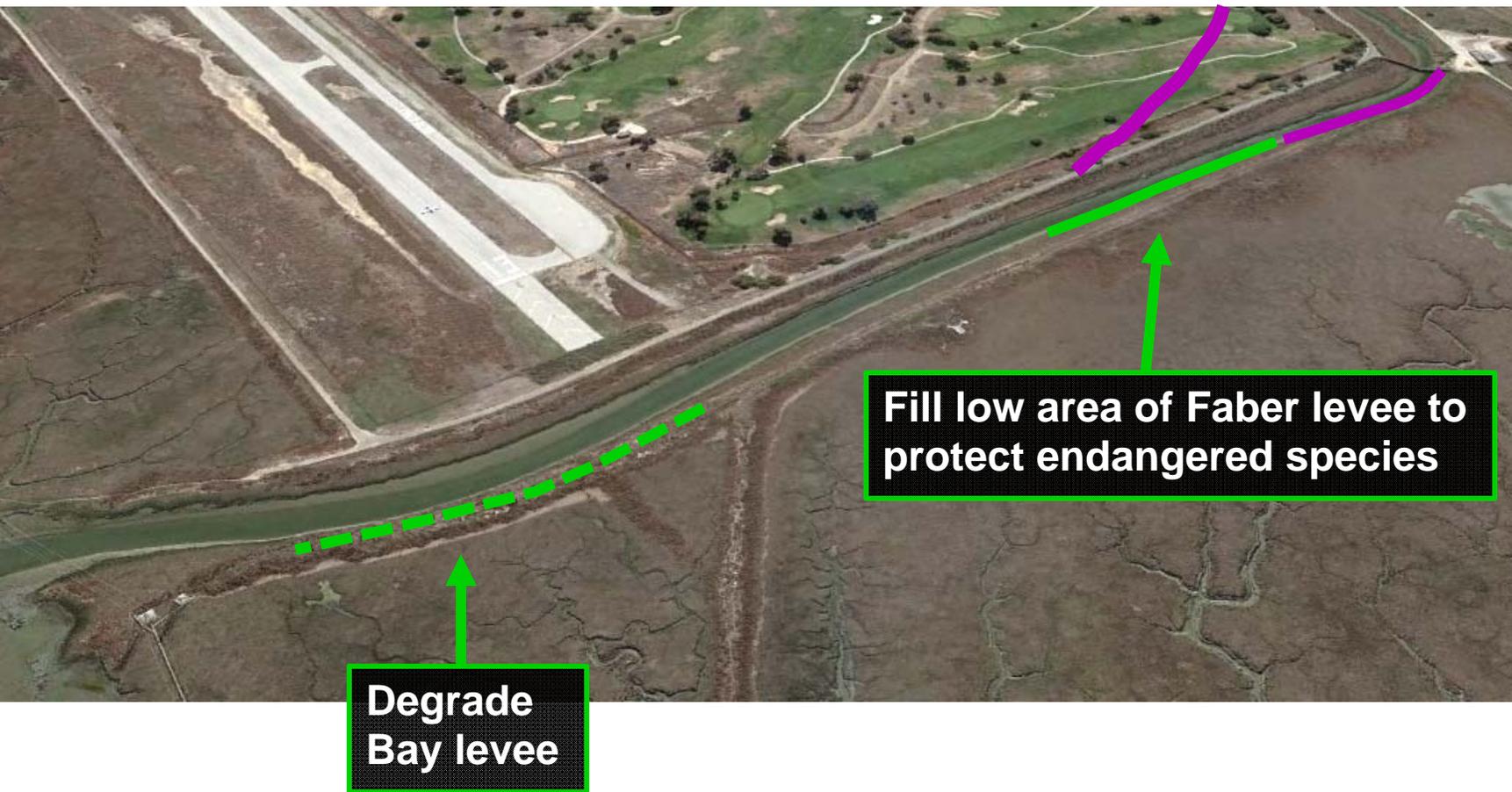
Delaying approval also means that polluted water can continue to flow into the Bay and Faber Tract marsh, and it means less wetland habitat for endangered species.

THANK YOU



SFCJPA.ORG

Changes to the levee separating the creek from the Faber Tract marsh and from the Bay



Degraded Bay levee

Fill low area of Faber levee to protect endangered species

San Francisquito Creek Existing versus Proposed Project 7400 cfs at 7.1' Tidal Event (MHHW)

Flows into Faber Tract

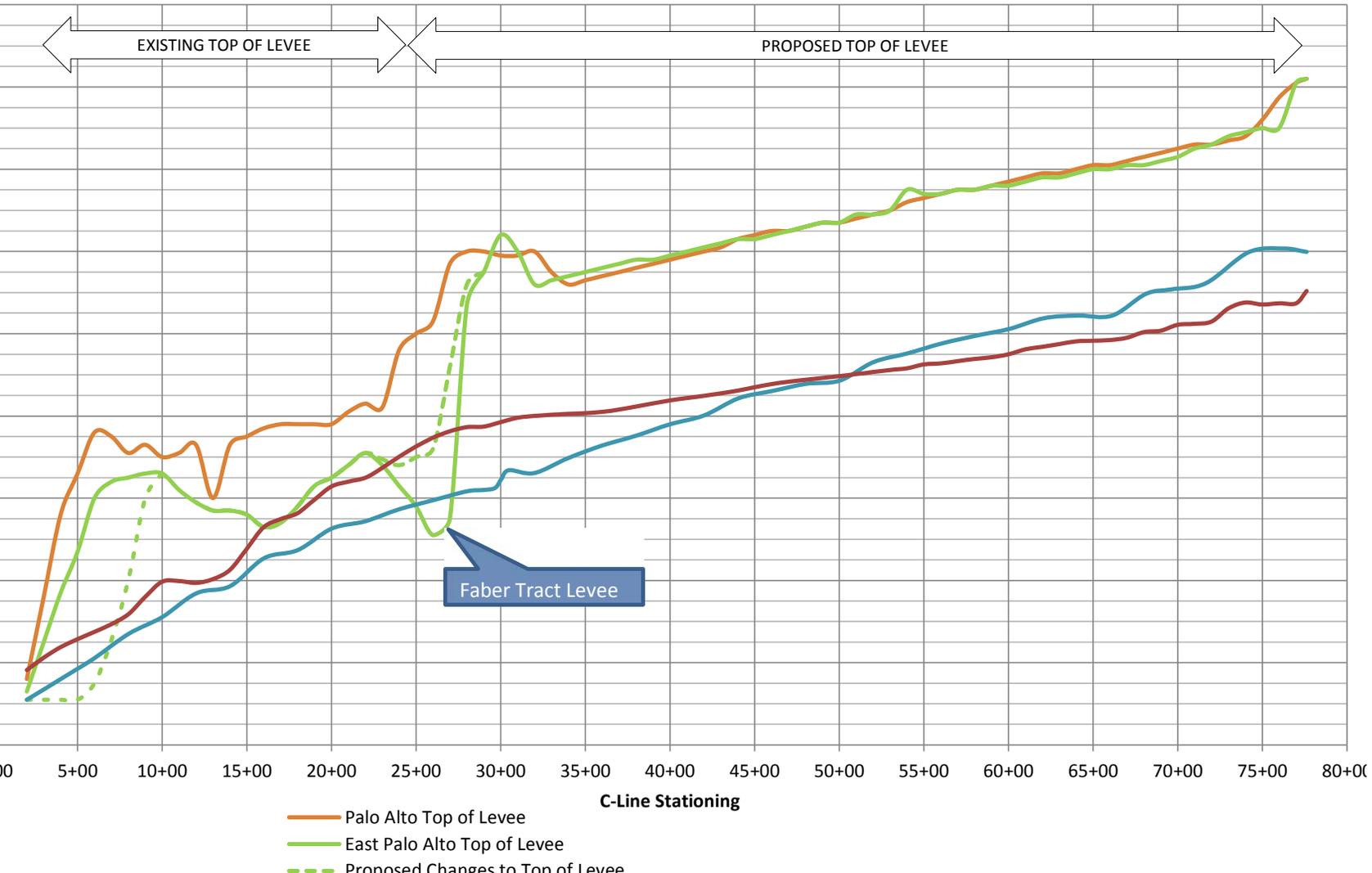
Existing Conditions = 155 cfs

FT Levee Raise Optimized + Bay Levee Degraded = 85 cfs

Flows into Neighborhoods

Existing Conditions = 2205 cfs

FT Levee Raise Optimized + Bay Levee Degraded = 0 cfs



San Francisquito Creek

Existing versus Proposed Project Alternatives

7400 cfs at 7.1' Tidal Event (MHHW)

Flows into Faber Tract

Existing Conditions = 155 cfs
 FT Levee Raise Optimized + Bay Levee Degraded = 85 cfs
 FT Levee Raise Optimized + Bay Levee Degraded + Larger Setback = 105 cfs

Flows into Neighborhoods

Existing Conditions = 2205 cfs
 FT Levee Raise Optimized + Bay Levee Degraded = 0 cfs
 FT Levee Raise Optimized + Bay Levee Degraded + Larger Setback = 0 cfs

