



SANTA VENETIA

GALLINAS LEVEE UPGRADE PROJECT

- BACKGROUND
- HISTORY
- FLOODS/TAXES/WATERSHED PROGRAM

- CURRENT PROJECT STATUS
- CEQA PROCESS
- DESIGN BASIS

- BALLOT MEASURE
- BALLOT LANGUAGE
- DURATION, AMOUNT, EXEMPTIONS

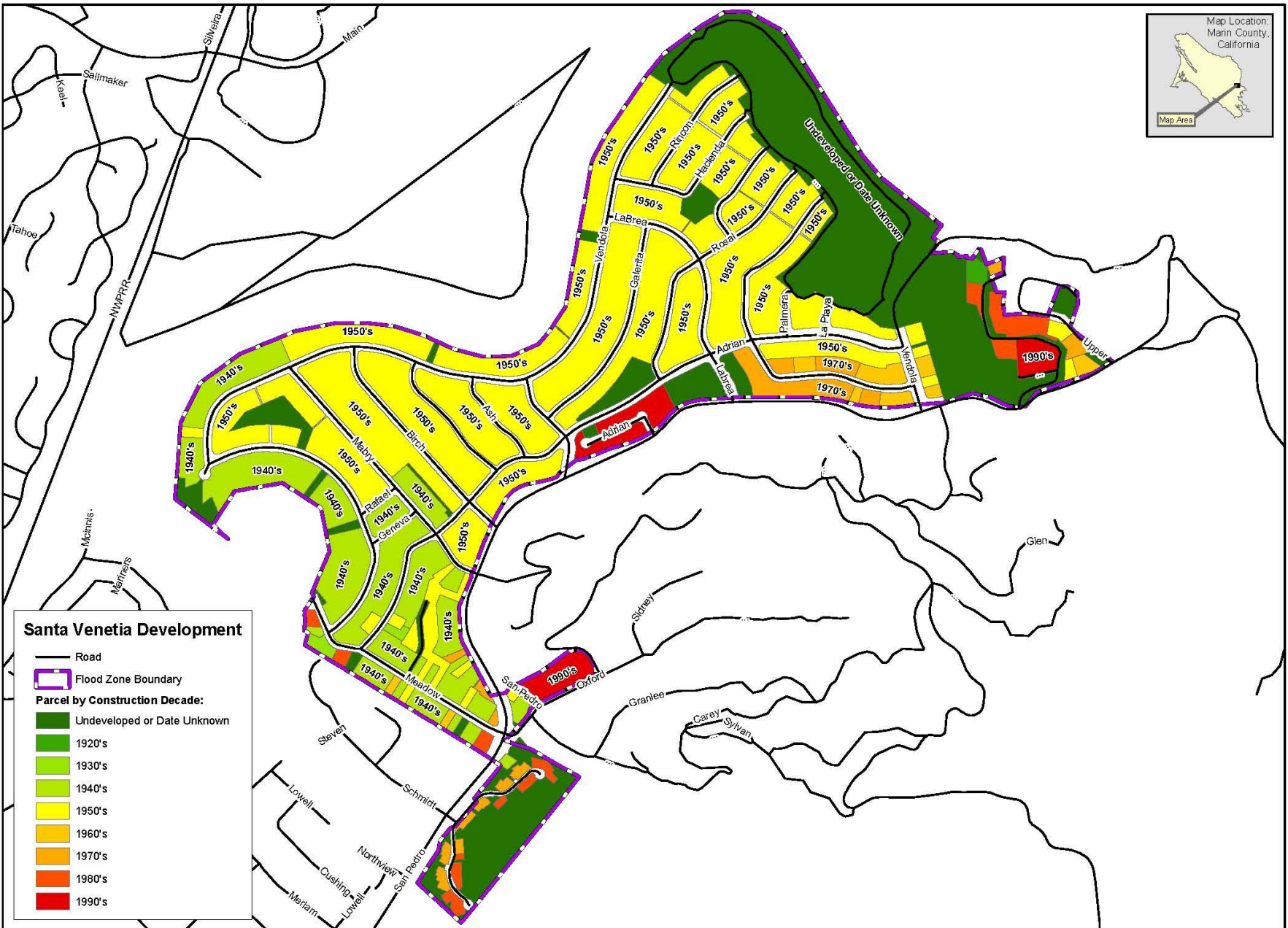
- NEXT STEPS
- ELECTION / FEMA GRANT

Zone 7 Advisory Board
August 21, 2019
Marinwatersheds.org

SANTA VENETIA IN 1940

HOUSES AROUND SANTA MARGARITA ISLAND





Santa Venetia Development

- Road
- ▭ Flood Zone Boundary
- Parcel by Construction Decade:**
- ▭ Undeveloped or Date Unknown
- ▭ 1920's
- ▭ 1930's
- ▭ 1940's
- ▭ 1950's
- ▭ 1960's
- ▭ 1970's
- ▭ 1980's
- ▭ 1990's

Staging of Development in Santa Venetia by Decade

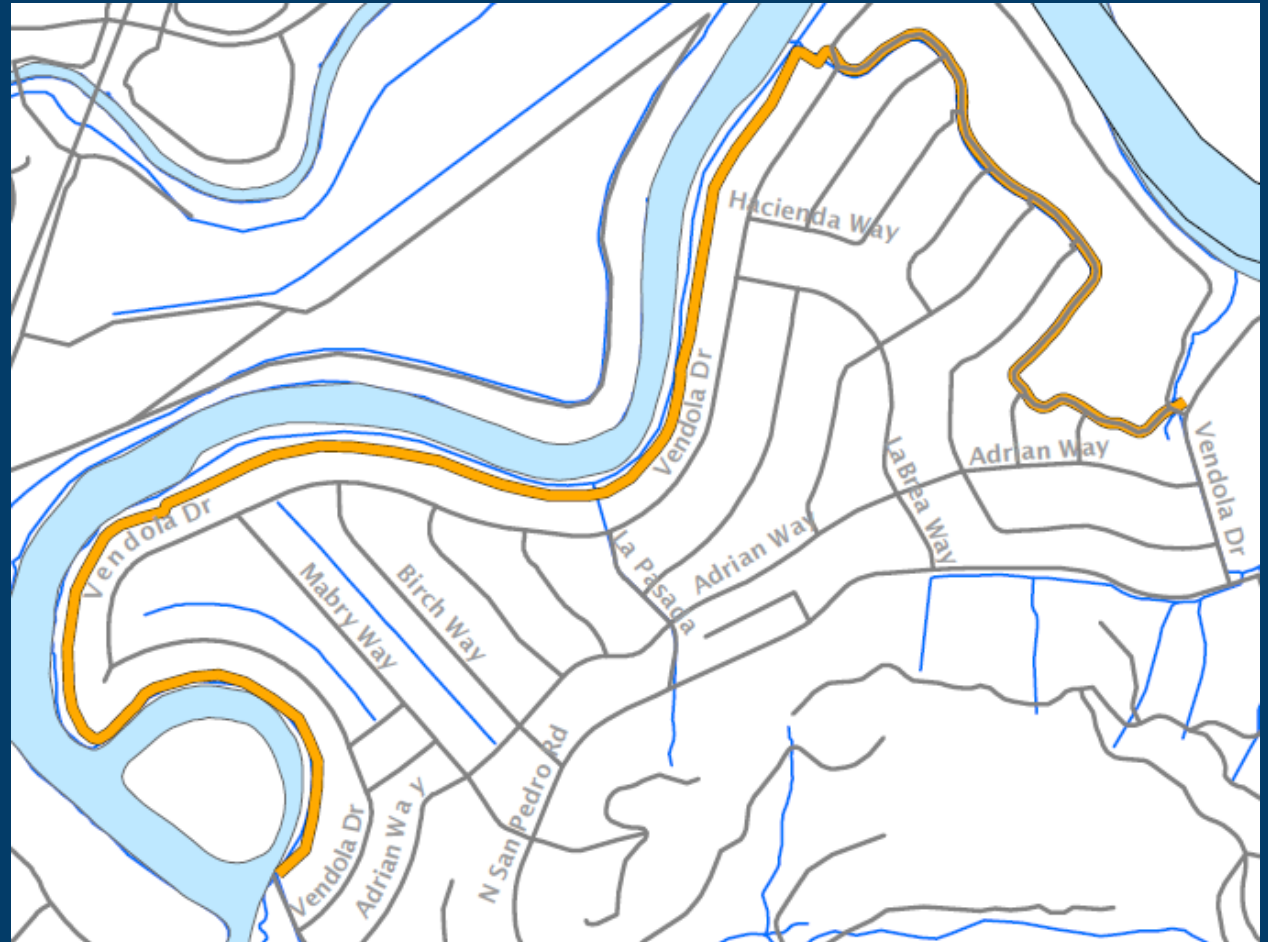


Marin County Flood Control and Water Conservation District
 County of Marin
 Date: October 2005
 THIS MAP IS REPRESENTATIONAL ONLY. DATA ARE NOT SURVEY ACCURATE.

Scale: 1:10,000



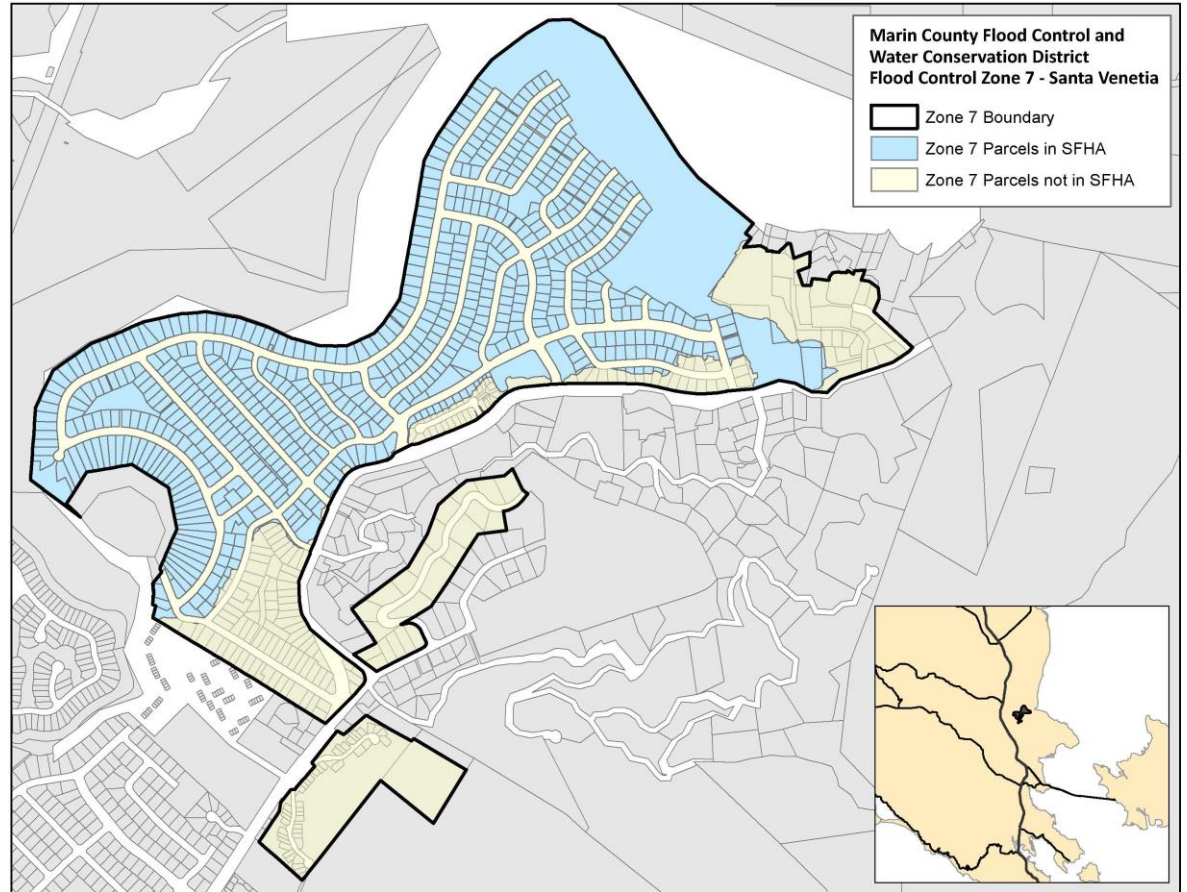
PERIMETER LEVELS



1950'S FLOODS



ZONE 7 FORMATION 1962 FEMA FLOOD INSURANCE PROGRAM 1968



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FLOODING IN 1970s & 1980s



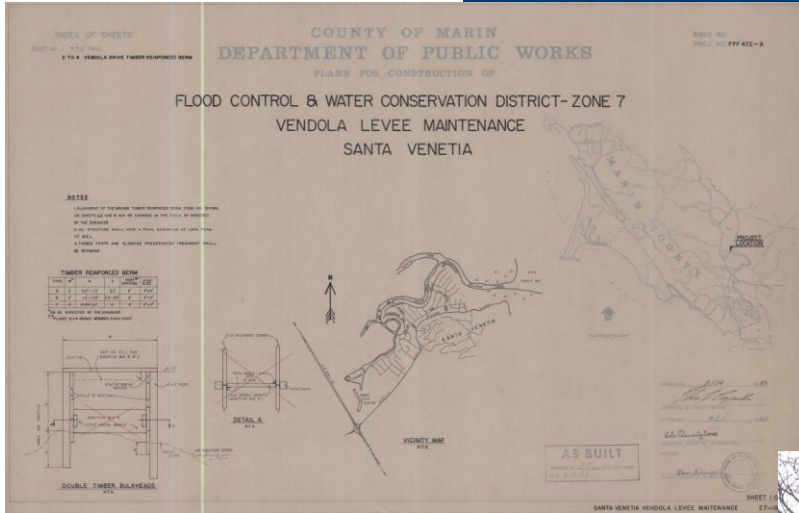
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TIMBER-REINFORCED BERM

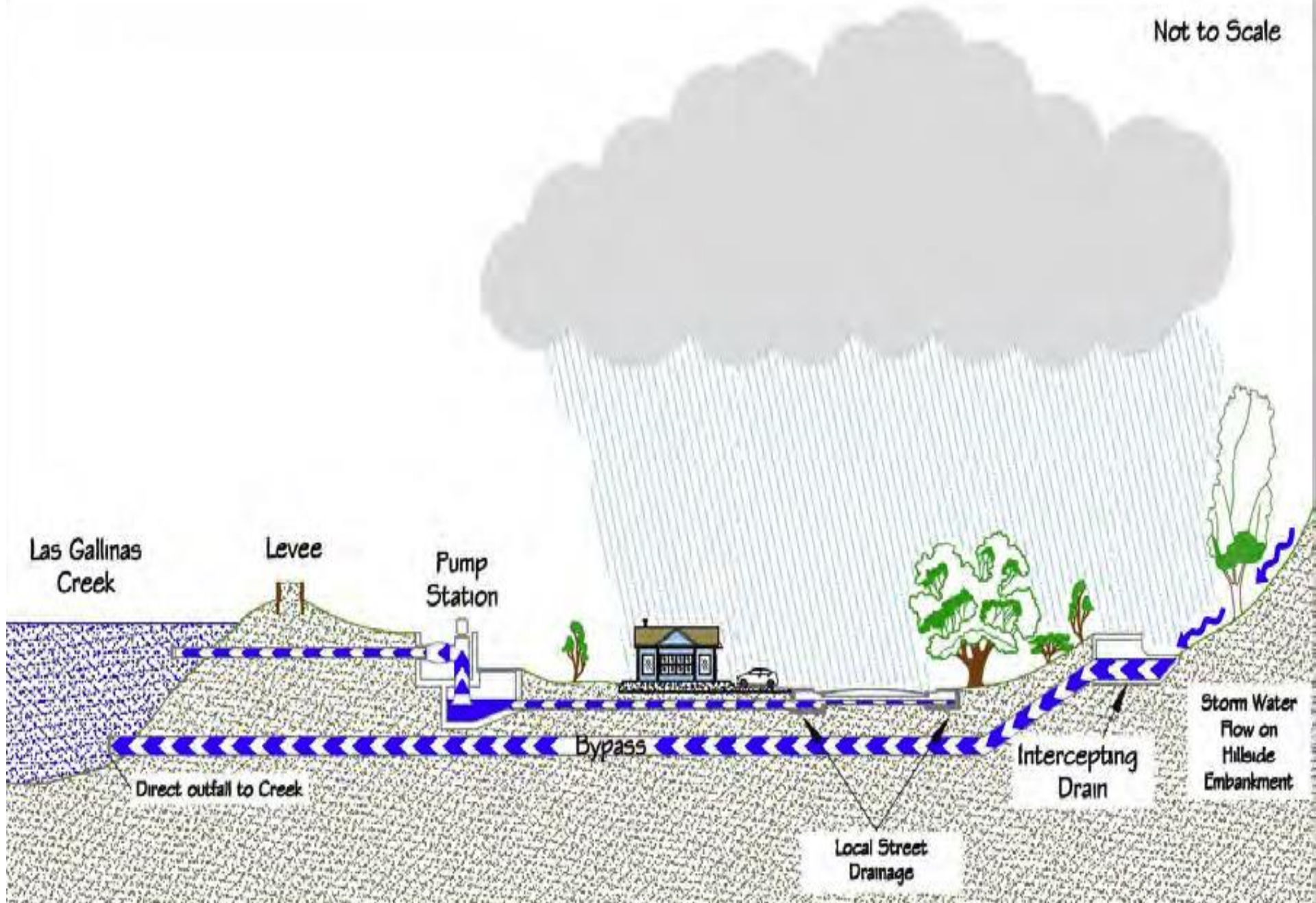
COMPLETED 1984

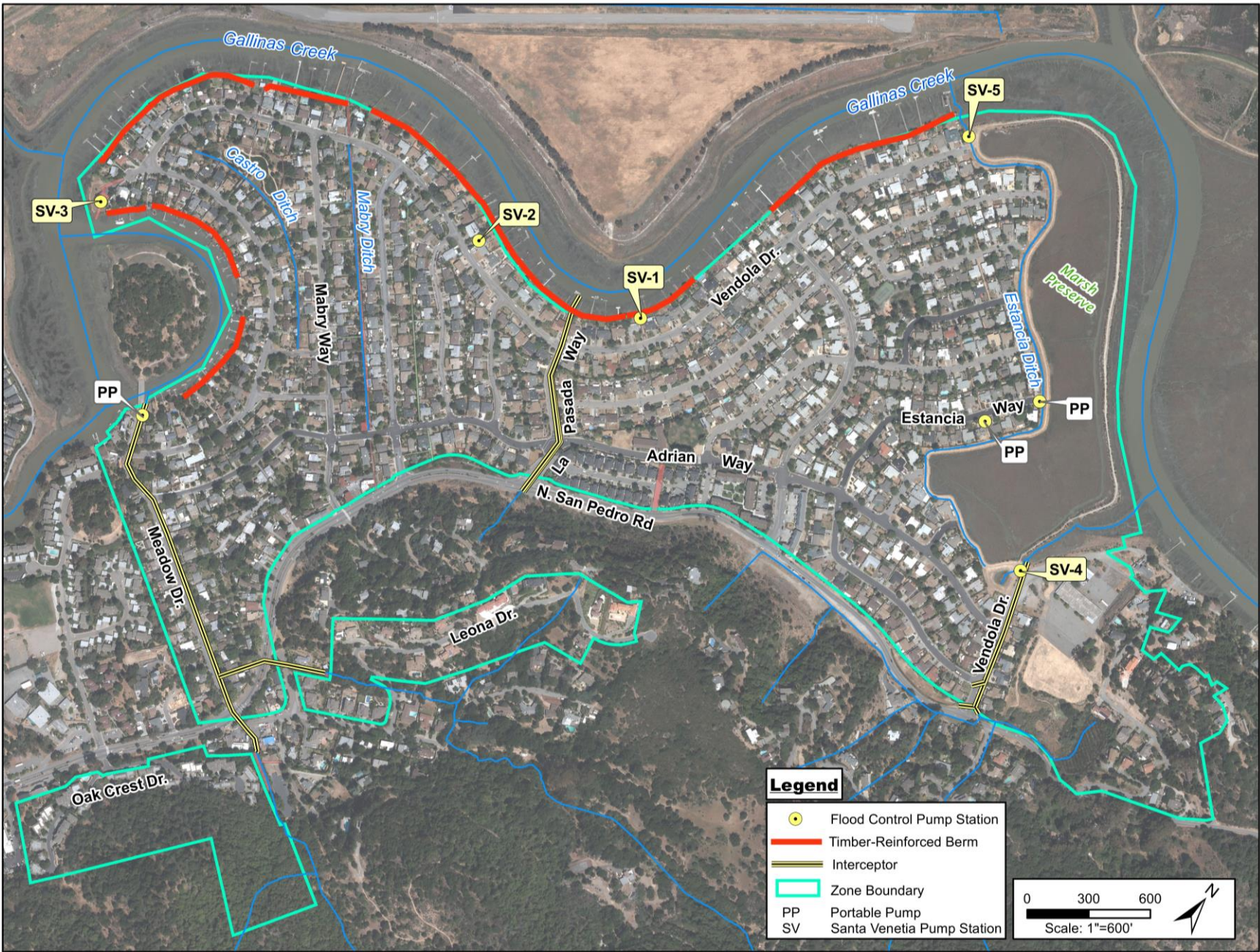
HIGHEST TIDES ON RECORD:

JAN 1983	8.7
DEC 1983	8.69 NAVD88



Not to Scale





Legend

- Flood Control Pump Station
- Timber-Reinforced Berm
- Interceptor
- Zone Boundary
- PP Portable Pump
- SV Santa Venetia Pump Station

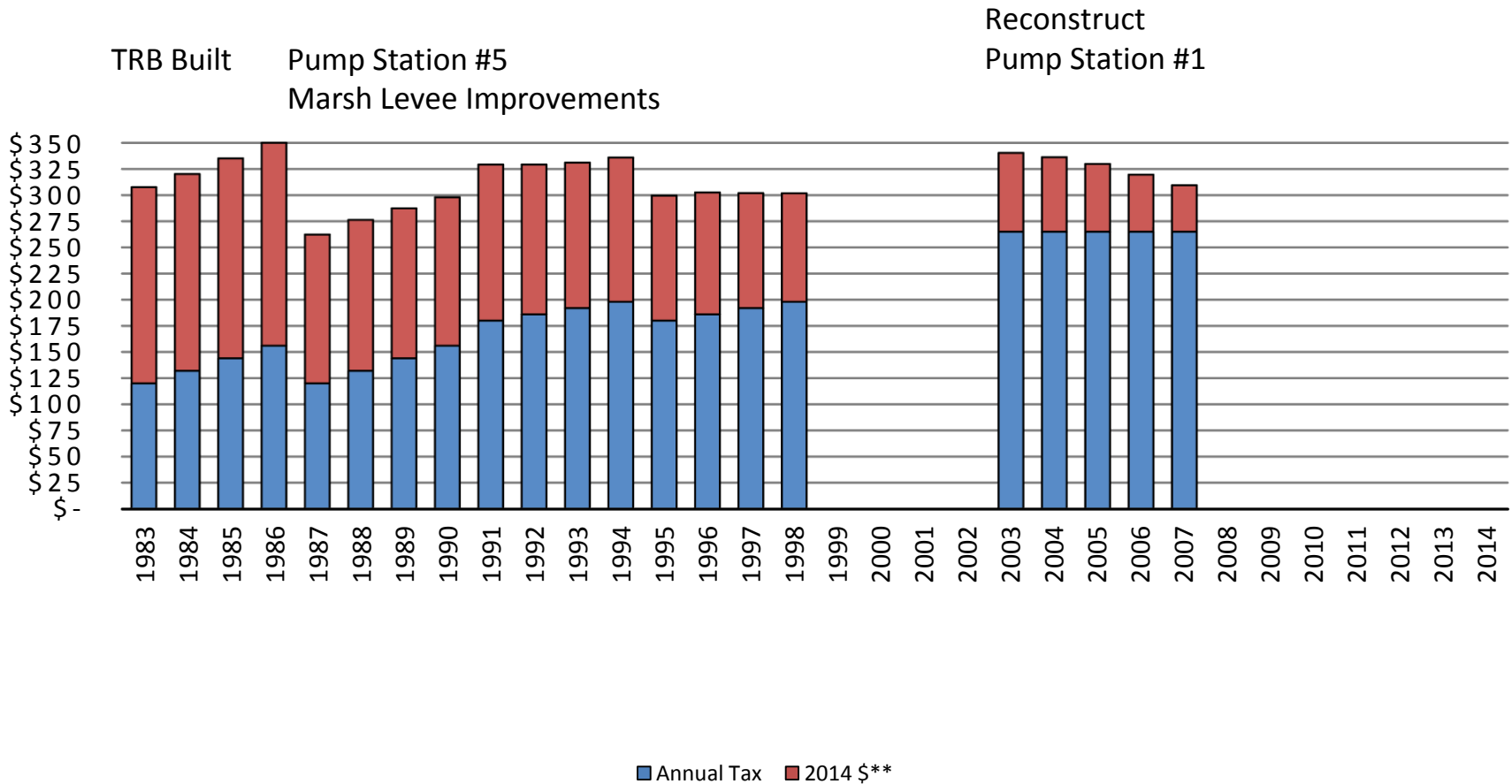
0 300 600

Scale: 1"=600'

ZONE 7 VOTER-APPROVED SPECIAL TAX HISTORY

RED=IN 2014 DOLLARS

History of Special Taxes In Flood Zone #7



WHY FOCUS ON THIS PROJECT NOW ?

- INDEED ALL ASPECTS OF THE ZONE NEED MAINTENANCE
- ZONE HAS BEEN OPERATING ON LIMITED FUNDING FOR A LONG TIME
- FUNDING OPPORTUNITIES ARE LIMITED
- MOST PUMP STATIONS HAVE DISCHARGE CAPACITY
- STORMDRAIN PIPES ARE LIMITING FACTOR & NOT FLOOD DISTRICT RESPONSIBILITY
- DISTRICT FOCUSED ON COMMUNITY-WIDE & HIGH IMPACT EVENTS
 - 100-YEAR FLOOD WOULD INUNDATE SEVERAL HUNDRED HOMES
 - SEA LEVEL RISE, LAND SUBSIDENCE





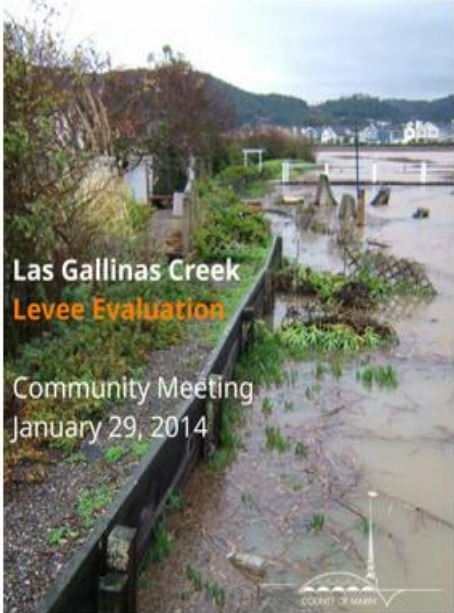
Home > Resources > Publications & Reports > Las Gallinas Creek Levee Evaluation Reports And Documents

Resources

Publications & Reports

Las Gallinas Creek Levee Evaluation Reports and Documents

Publication Date: September 06, 2017 Document Type: Report Zone 7: Santa Venetia
Watershed Reference: Gallinas Creek



- Army Corps of Engineers and District
 - Las Gallinas Levee Evaluation
 - Geotechnical Alternatives Analysis
 - Hydrology and Hydraulics
- Santa Venetia Interior Drainage Study
- Gallinas Creek Sea Level Rise Vulnerability Assessment
- Geomorphic Dredge Memo

Document File
CAP 205 Study Termination Letter for Las Gallinas (U.S. Army Corps of Engineers, 2017)
Geotechnical Alternatives Analysis, Las Gallinas Levee System, San Rafael, California (Kleinfelder, Inc., 2014)
Las Gallinas Creek, CA - Preliminary Flood Damage Analysis (U.S. Army Corps of Engineers, 2014)

PUBLIC PROCESS TO DATE

LEVEE ALTERNATIVES

- 2008 Questionnaire to levee owners
- Fall 2013 Santa Venetia Neighborhood Association Meeting
- January 29, 2014 Levee Evaluation Community Meeting
- October 27, 2015 Santa Venetia Neighborhood Association Meeting
- June 5, 2017 Town Hall Meeting
- September 13 Town Hall Meeting
- 2018 Questionnaire to levee owners

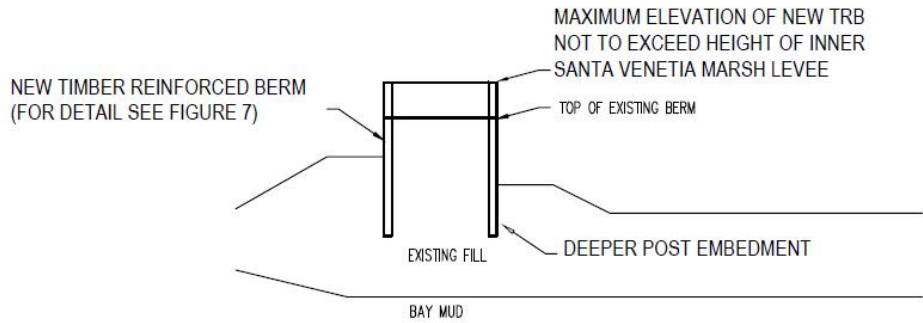


HOW DID WATERSHED PROGRAM INFORM NEEDS ASSESSMENT FOR SANTA VENETIA?

- Levee and stormwater drainage studies showed that levees are key to flood protection in Santa Venetia
- Tidal flood risk is greater than stormwater; levees are crucial to protecting this community
- Stormwater from upper watershed contributes, at much smaller magnitude



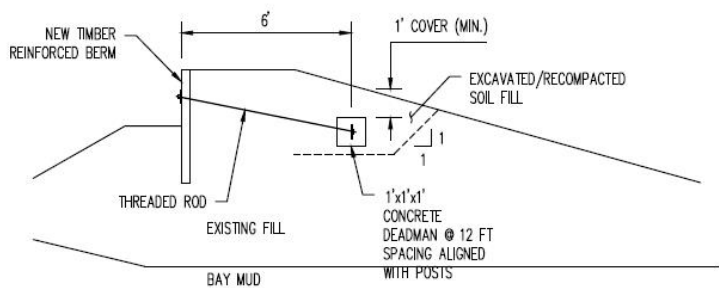
THIS TAKES US TO THE CURRENT PROJECT PROPOSAL



TYPICAL PROPOSED SECTION #1 RECONSTRUCTED TIMBER REINFORCED BERM WITH NO LANDSIDE SOIL BUTTRESS
 NOT TO SCALE



EXAMPLE PHOTO OF SECTION #1 (303 VENDOLA)



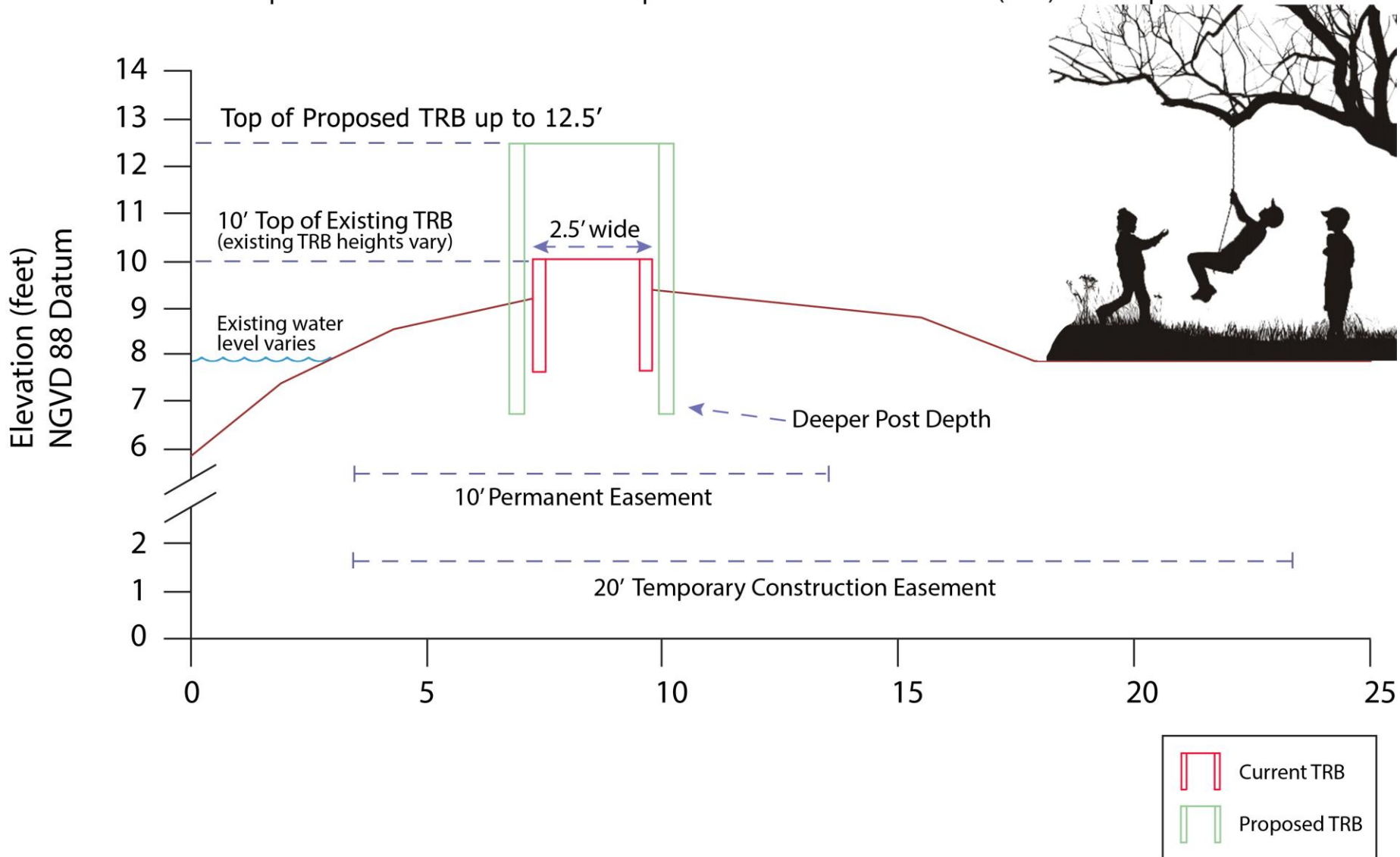
TYPICAL PROPOSED SECTION #2 RECONSTRUCTED TIMBER REINFORCED BERM WITH OPTIONAL DEADMAN, SLOPED LANDSIDE SOIL BUTTRESS
 NOT TO SCALE



EXAMPLE PHOTO OF SECTION #2

TYPICAL CROSS SECTION OF TRB AND EASEMENT

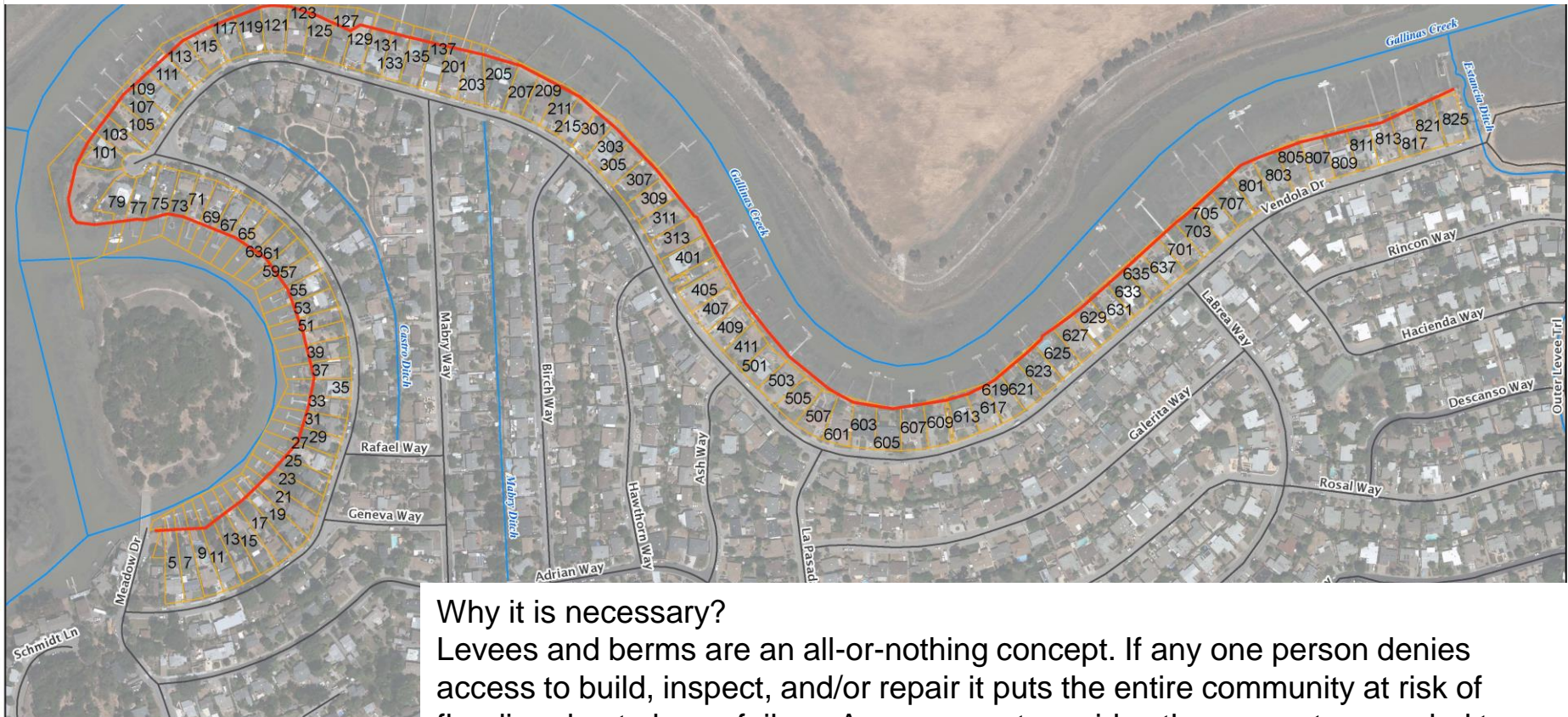
Comparison between Current and Proposed Timber-Reinforced Berm (TRB) and Proposed Easements



easement

a right to cross or otherwise use someone else's land for a specified purpose.

- Permission to use a specific portion of your property for a specific purpose, to be described in your deed. Can be very specific as appropriate.
- Often employed for utility maintenance.
- Ownership does not change



Why it is necessary?

Levees and berms are an all-or-nothing concept. If any one person denies access to build, inspect, and/or repair it puts the entire community at risk of flooding due to levee failure. An easement provides the guarantee needed to implement a full levee upgrade and ongoing inspection and maintenance.

CEQA DOCUMENT

CALIFORNIA ENVIRONMENTAL QUALITY ACT

State law requiring disclosure of environmental impacts.

Focused on marsh habitat and work around protected species (marsh mouse and birds).

Initial Study drafted and released for comments, responses currently being prepared.

Will be posted soon.

Describes envelope of maximum impact.



Date	Task/Deliverable
07/03/19	CEQA Initial Study released for public comment
08/05/19	Public comment period for Initial Study closed
08/21/19	Advisory Board meeting update
End of August	Final Initial Study (includes responses to comments); will be posted to project website
End of August	Mitigated Negative Declaration signed by Raul Rojas, Director of Public Works Department
End of August	MND filed with County Clerk; starts 30 statute of limitations on court challenges to the approval under CEQA
End of September	End of 30-day statute of limitations on court challenges to the approval under CEQA

PROJECT FUNDING SOURCES

Parcel Tax Proceeds	\$1 M
Grant Target	\$3.11 M
County Contribution *contingent on successful tax measure & easements	\$840k
Existing ad valorem Zone 7 revenue in fund balance and expected over 7 years	\$1.35 M
Total:	\$6.3 M

BALLOT MEASURE

SUGGESTED TERMS FROM WORKING WITH SUBCOMMITTEE

- ~\$181 per parcel per year
- Duration: 7 years
- Low Income Senior Exemptions
- Election: March 2020
- \$1 Million revenue
- All \$ spent on this project



SUGGESTED BALLOT LANGUAGE

Flood Zone 7 Gallinas Levee Upgrade Project.

Shall Santa Venetia Flood Control Zone 7 obtain easements and upgrade the levee and timber reinforced berm protecting the neighborhood from tides by levying a tax of \$181 per developed parcel over seven years with low income senior exemptions, generating \$143,000 annually for the Gallinas Levee Upgrade Project?

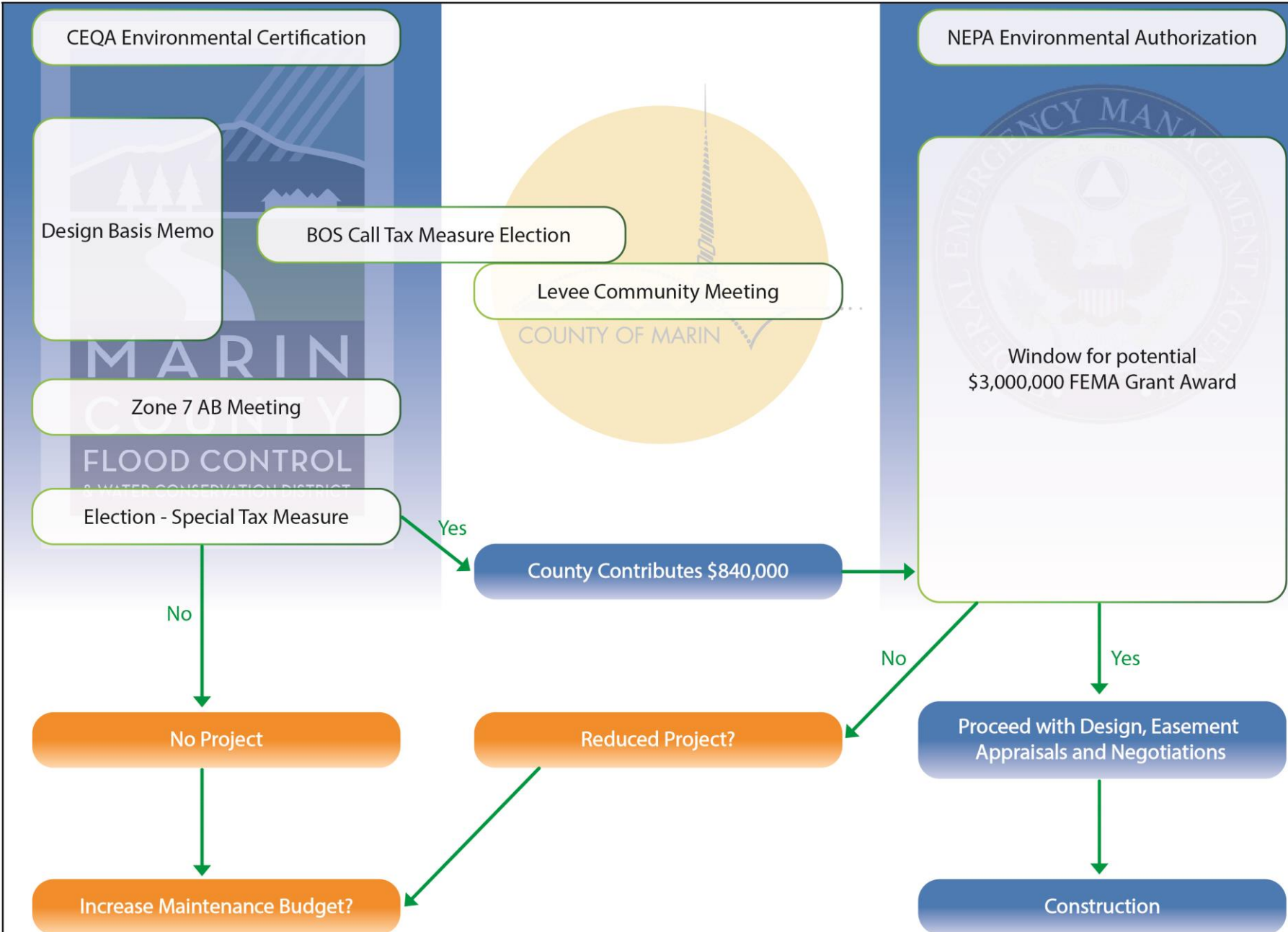


Flood District Zone 7

Marin County

FEMA

Sept 2019
Nov 2019
Feb 2020
March 2020
Dates TBD





THANK YOU

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CERTIFIED FLOODPLAIN MANAGER (CFM)
MS HYDROLOGIC SCIENCES**

**HANNAH LEE- SENIOR CIVIL ENGINEER
PE, CFM, QSP/QSD**

**LIZ LEWIS- WATER RESOURCES MANAGER
MS BIOLOGICAL SCIENCES**