



SAN JOAQUIN COUNTY  
**FLOOD CONTROL & WATER  
CONSERVATION DISTRICT**

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KRIS BALAJI  
DIRECTOR OF PUBLIC WORKS

## ADVISORY WATER COMMISSION

December 18, 2019, 1:00 p.m.

Public Health Conference Room, 1601 E. Hazelton Avenue, Stockton, California

### AGENDA

- I. Roll Call
- II. Approve Minutes for the Meeting of November 20, 2019
- III. Discussion Items:
  - A. Sustainable Groundwater Management Act (SGMA) – Matt Zidar, San Joaquin County
    1. Eastern San Joaquin Subbasin
    2. Tracy Subbasin
- IV. Action Items:
  - A. Recommendation to Develop a Work Program to Establish a Potential Water-related Sales Tax Measure
- V. Informational Items (See Attached):
  - A. December 2, 2019 – Sonoma County Gazette “Water Connections for Groundwater Sustainability Plans”
- VI. Public Comment: *Please limit comments to three minutes.*
- VII. Commissioners’ Comments:
- VIII. January Agenda Items
- IX. Adjournment:

**Next Regular Meeting**  
**January 15, 2020, 1:00 p.m.**  
Public Health Conference Room

Commission may make recommendations to the Board of Supervisors on any listed item.

If you need disability-related modification or accommodation in order to participate in this meeting, please contact the Water Resources Staff at (209) 468-3089 at least 48 hours prior to the start of the meeting. Any materials related to items on this agenda distributed to the Commissioners less than 72 hours before the public meeting are available for public inspection at Public Works Dept. Offices located at the following address: 1810 East Hazelton Ave., Stockton, CA 95205. These materials are also available at <http://www.sjwater.org>. Upon request these materials may be made available in an alternative format to persons with disabilities.

**REPORT FOR THE MEETING OF  
THE ADVISORY WATER COMMISSION OF THE SAN JOAQUIN COUNTY  
FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
November 20, 2019**

The regular meeting of the Advisory Water Commission of the San Joaquin County Flood Control and Water Conservation District was held on Wednesday, November 20, 2019, beginning at 1:00 p.m., at Public Health Services, 1601 E. Hazelton Avenue, Stockton, California.

Mr. Tom McGurk, Chairman of the Advisory Water Commission (AWC), called the meeting to order at 1:02 p.m.

**I. Roll Call**

Present were Commissioners Nomellini, Roberts, Torres-O'Callaghan, Swimley, Breitenbucher, de Graaf, Winn, Herrick, Holbrook, Hartmann, Price, Neudeck; Alternates Wright, Reyna-Hiestand, Henneberry-Schermesser; Secretary Zidar and Chairman McGurk.

Others present are listed on the Attendance Sheet. The Commission had a quorum.

**II. Approval of Minutes for the September 18, 2019 Meeting**

Motion and second to approve the minutes of September 18, 2019.

Commission approved unanimously.

**SCHEDULED ITEMS**

Mr. Tom McGurk, Chairman of the Advisory Water Commission (AWC), led the agenda.

**III. Discussion / Action Items:**

**A. Receive Fall 2018 Groundwater Report – Matt Zidar / Michael Callahan, San Joaquin County**

Michael Callahan from San Joaquin County Public Works presented the Spring 2018 Groundwater Report, distributing presentation slides and copies of the Report to the Commission and Public. A correction to the agenda was made, to reflect the Report being presented was for Spring 2018 rather than Fall 2018. Mr. Callahan reviewed the charts and mapping from the Report summarizing the groundwater data collected and provided details on the areas with noteworthy groundwater elevation decrease or increase. Mr. Callahan explained that the changes in groundwater elevation were due to historical ups and downs, demand changes as well as precipitation patterns.

Matt Zidar from San Joaquin County added details on the reporting progress for subsequent periods. Mr. Zidar asked for input from the Commission on report materials needed and how to distribute more effectively.

**B. Flood Conveyance and Levee Maintenance (CALM) Assessment Recommendations to the Board of Supervisors – Flood Ordinances Revisions / Notice of Intent – Matt Zidar, San Joaquin County**

Matt Zidar from San Joaquin County presented updated information on the Flood Conveyance and Levee Maintenance (Flood CALM) Assessment and the recommendation to the Board of Supervisors. Mr. Zidar reviewed the previous presentations made to the Commission and the Farm Bureau, the amended engineers report and the planned public outreach efforts. Clarification to the Commission was provided on the assessment calculation tool and its functionality.

Mr. Zidar reviewed the timeline of next steps, including dates for Board of Supervisors, Resolution of Intent, launch of the assessment calculation tool, balloting and public hearing.

**C. SJAFCA Updates – Smith Canal / Lower San Joaquin Flood Risk Response Project Phase 1 – Chris Elias**

Chris Elias was introduced to discuss SJAFCA Updates pertaining to the Smith Canal Project as well as the Lower San Joaquin Flood Risk Response Project Phase 1. Presentation materials were distributed to the Commission members and public.

Mr. Elias reviewed his presentation slides, providing an overview of the Smith Canal project and its history. Mr. Elias provided details of the area to be protected as well as the gate features and operation. Details regarding the funding and agencies involved were provided, as well as details on outreach efforts to the area residents. Mr. Elias provided an overview of the project milestones and of the schedule based on compliance with state and federal regulations, stating project completion by summer of 2021 and remapping by 2022.

Mr. Elias presented an overview of the Lower San Joaquin Flood Risk Response Project Phase 1, detailing the SJAFCA area included in Phase 1. Mr. Elias reviewed the recommended plan for Phase 1 as well as the costs involved. Details were provided on the project history and the projected processes with dates of completion. Additionally, Mr. Elias briefly discussed Phase 2 of the project, explaining the study purpose and area. Mr. Elias provided an overview of the Phase 2 steps once the study is complete and explaining funding needed.

**D. Sustainable Groundwater Management Act (SGMA) – Matt Zidar, San Joaquin County**

Chairman McGurk gave the floor to Matt Zidar from San Joaquin County to provide updates on the Sustainable Groundwater Management Act (SGMA).

1. Eastern San Joaquin Subbasin

Mr. Zidar reviewed the SGMA ESJGWA timeline for each Groundwater Sustainability Agency (GSA) to adopt the Groundwater Sustainability Plan (GSP), GSP submittal deadline to the Department of Water Resources (DWR) and actions by the GWA to accept the final GSP. An overview of the scheduled GSA adoption dates was provided to the Commission. Mr. Zidar explained the GWA Ad-Hoc Committee convened to discuss GSP implementation, cost allocation and operations.

2. Tracy Subbasin

Mr. Zidar provided an overview of the Tracy Subbasin GSP process and timeline that included a review of the Memorandum of Agreement with Tracy GSA's partners; the grant cost share agreement with the City of Brentwood; and consultant agreements for technical support and outreach. He also provided details of the public workshop plans, website, and production schedule for public review of the Draft GSP (currently scheduled for July of 2021).

**E. IRWM Update Project Initiation and Participation – Glenn Prasad, San Joaquin County**

Glenn Prasad from San Joaquin County presented a brief overview of the IRWM Update Project. Mr. Prasad reviewed the items on the first Coordinating Committee Agenda. Mary Elizabeth from the Sierra Club, questioned what the agenda item "GBA Discussion" would be about. Mr. Prasad explained that a quick discussion would be had during the Coordinating Committee Meeting regarding the GBA and how it relates to this new Coordinating Committee.

Information was requested on why the IRWM update was needed. Mr. Prasad explained that an updated plan containing planned projects is needed in order to receive the 6.5 million dollars for the IRWM area, including funds for disadvantaged communities.

Fritz Buchman from San Joaquin County added that additional organizations and agencies are encouraged to join by signing the Memorandum of Agreement and participate in the planning process. It was also advised that agencies with planned projects should participate and get their proposed projects submitted for consideration and inclusion in the updated plan.

**IV. Informational Items:**

Informational items were not discussed.

**A. September 25, 2019 – The Sacramento Bee "California farmers face 'catastrophic' water restrictions. Can they adapt to survive?"**

**B. Streamlined Processing for Standard Groundwater Recharge Water Rights.**  
[https://www.waterboards.ca.gov/waterrights/water\\_issues/programs/applications/groundwaterrecharge/streamlined\\_permits.html](https://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/groundwaterrecharge/streamlined_permits.html)

**V. Public Comment: Public comments, adopted by the Advisory Water Commission on January 17, 2018, will be limited to 3-minutes, unless extended to the discretion of the Chair.**

The agenda item for Public Comments was moved to follow Discussion / Action Item B, as time permitted while presentations were brought up.

Mary Elizabeth from the Sierra Club suggested that the assessment tool could be saved for future use in calculating zone 2 fees or any other subsequent fees.

Kris Balaji from San Joaquin County responded, explaining that when outreach tools are created for a specific purpose, they are kept for that purpose, but the public can reach out to find any additional fees owed.

**VI. Commissioner's Comments:**

The agenda item Commissioner's Comments was moved for discussion following Discussion / Action Item E.

Commissioner Winn spoke regarding funding needs for water and flood for projects. A project list was prepared by Public Works to include IRWM, GSP and flood related projects. Commissioner Winn discussed opportunities to fund major capital projects through a potential sales tax which may be included in next year's ballot, in order to provide a source of capital. The initiative would be similar to that which was conducted to obtain transportation funds via sales tax, noting that the sponsorship and support for such a tax initiative would need to come from the business community. Further discussion was had on the short and long term project needs, funding sources and constraints, and the need to find local funding to match state and federal monies. Commissioner Winn further discussed the process and benefit of a sales tax proposition.

Commissioner Winn asked that this sales tax proposition item be included on the December agenda, so a decision could be made on whether the Commission would support and endorse the sales tax funding initiative and move the idea forward.

Further discussion was had by Commission members regarding the need for this sales tax proposition. It was generally recognized that there are large capital projects which need funding; very limited ways to generate money for these projects; and that these projects are needed to support the local economy, protect life and property and sustain the communities.

A Motion was made and seconded to add this tax proposition item to the December agenda.

Motion was unanimously approved by the Commission.

Additionally, Commissioner Winn gave a brief update on the Delta tunnel discussions which occurred in the meetings with the State.

**Next Regular Meeting:** December 18, 2019 at 1:00 p.m.  
Public Health Conference Room

**VII. December Agenda Items:**

Item not discussed.

**VIII. Adjournment:**

Chairman McGurk adjourned the meeting at 2:44 p.m.



**SAN JOAQUIN**  
— COUNTY —  
*Greatness grows here.*



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# Advisory Water Commission

November 20, 2019

# Agenda

## I. Role Call

## II. Minutes

## III. Discussion Items

A. Spring 2018 Groundwater Report

B. Flood Conveyance and Levee Maintenance ( Flood CALM)  
Assessment

C. SJAFCA Updates

- Smith Canal
- Lower San Joaquin River Flood Risk Response Plan

D. SGMA Updates

- East San Joaquin Subbasin
- Tracy Subbasin

E. IRWM Update

## IV. Discussion Items

## V. Public Comments

## VI. Commissioners Comments





# 2018 Groundwater Report Discussion

- **Future Reports Pending- Spring and Fall**
- **Report Objectives, Purpose, Need and Use**
- **Opportunities for Improvement**
- **Program Integrations**
  - GSPs
  - CASGEM



# Flood Conveyance and Levee Maintenance (Flood CALM)



- **Four presentations to AWC**
- **Two presentations to the Farm Bureau**
- **Engineers Report (ER) Amended based on input**
- **Planned Public outreach**
  - Community meetings (6)
  - Small group meetings
  - Direct mail
  - Assessment hotline
  - Email for questions
  - Social media campaign

# Flood Conveyance and Levee Maintenance (Flood CALM)

Date	Item
July 17, 2019 AWC	Motion recommending approval of the Engineer's Report and the initiation of proceedings
<b>Pending Board of Supervisors:</b>	
December 10, 2019	Amend Flood Ordinance to align its authorities with state statutes to implement Flood-CALM if approved by property owners.
December 17, 2019	Consider the Flood-CALM Resolution of Intention (ROI), authorizes balloting and establishes the public hearing date
December 18, 2019	Launch a webpage with an assessment calculator (look up tool)
January 27, 2020	Ballots sent
March 24, 2020	Board hearing

# SJAFCCA Update

- **Smith Canal**
- **Lower San Joaquin Flood Risk Response Project Phase I**



# SGMA Update East San Joaquin Subbasin

Dates	Actions
Nov. 15, 2019	Proposition 68 Grant Submitted to support implementation
Nov. 13, 2019	ESJGWA Recommended GSAs adopt the ESJGSP
Nov. 14, 2019 – Jan. 1, 2020	Individual GSAs to adopt Final GSP
Dec. 17, 2019	County to adopt for SJC #1 and #2
Jan. 31, 2020	Submittal GSP deadline to DWR
Jan 8, 2020	ESJGWA action to accept Final GSP

# GSA Adoption Dates



Agency Name	Public Hearing Date	Meeting Time
Central Delta Water Agency	10-Dec-19	9:30 AM
Central San Joaquin Water Conservation District	21-Nov-19	Noon
City of Lodi	20-Nov-19	7:00 PM
City of Manteca	3-Dec-19	7:00 PM
City of Stockton	10-Dec-19	5:30 PM
Lockeford Community Services District	14-Nov-19	9:00 AM
North San Joaquin Water Conservation District	16-Dec-19	2:00 PM

# GSA Adoption Dates



Agency Name	Public Hearing Date	Meeting Time
Oakdale Irrigation District	10-Dec-19	9:00 AM
San Joaquin County #1	10-Dec-19	9:00 AM
San Joaquin County #2	10-Dec-19	9:00 AM
South Delta Water Agency	4-Dec-19	1:30 PM
South San Joaquin GSA	20-Nov-19	9:00 AM
Stockton East Water District	17-Dec-19	Noon
Woodbridge Irrigation District	14-Nov-19	9:00 AM

# GSA Adoption Dates



Agency Name	Public Hearing Date	Meeting Time
<b>Eastside San Joaquin GSA</b>		
Calaveras County Water District	11-Dec-19	9:00 AM
Stanislaus County	10-Dec-19	9:00 AM
Calaveras County	10-Dec-19	9:00 AM
Rock Creek Water District	11-Dec-19	6:00 PM



# Status of Tracy Subbasin GSP Process

- **MOA with Tracy GSA's, grant cost share agreement with Brentwood and GEI consultant agreement are all signed**
- **Preparing contract with Stantec for outreach and application for DWR Facilitation Services Funding**
- **Preparing TSS Application for new multi-cluster monitoring wells**
- **GSP effort underway with first 3 chapters and public workshop out in March**
- **Draft GSP to public in July 2021**
- **Website has been launched at: <http://tracysubbasin.org/>**

# IRWM Update Project

## Coordinating Committee Agenda

1. **RWMG Governance Structure (County, W&C)**
2. **Communications and Logistics (County)**
3. **Proposition 1 Overview (County, W&C)**
4. **GBA Discussion (County)**
5. **Disadvantaged Community Involvement Grant (W&C)**
6. **IRWM Plan Update (GEI)**
7. **Stormwater Resources Plan Need (County, GEI)**



# Public and Directors Comments





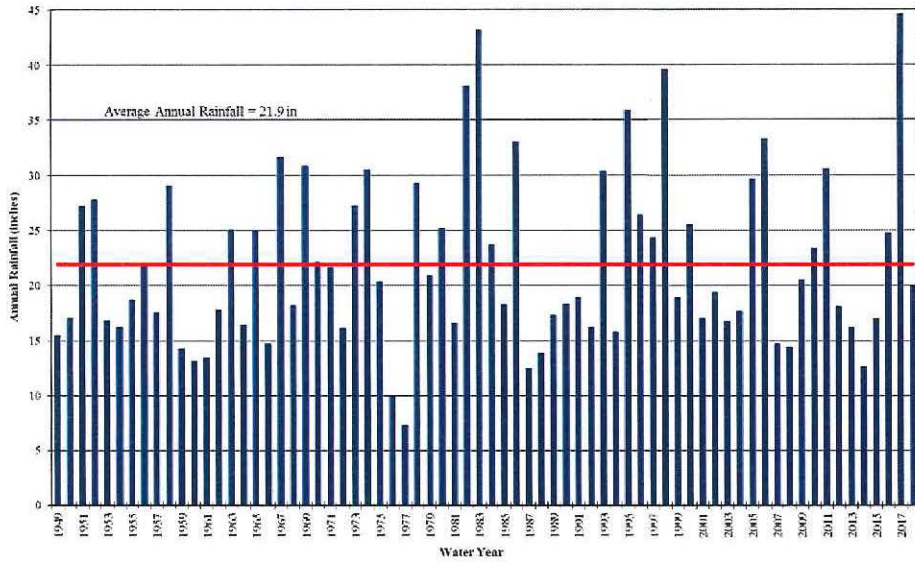
**Groundwater Report**

**Spring 2018**

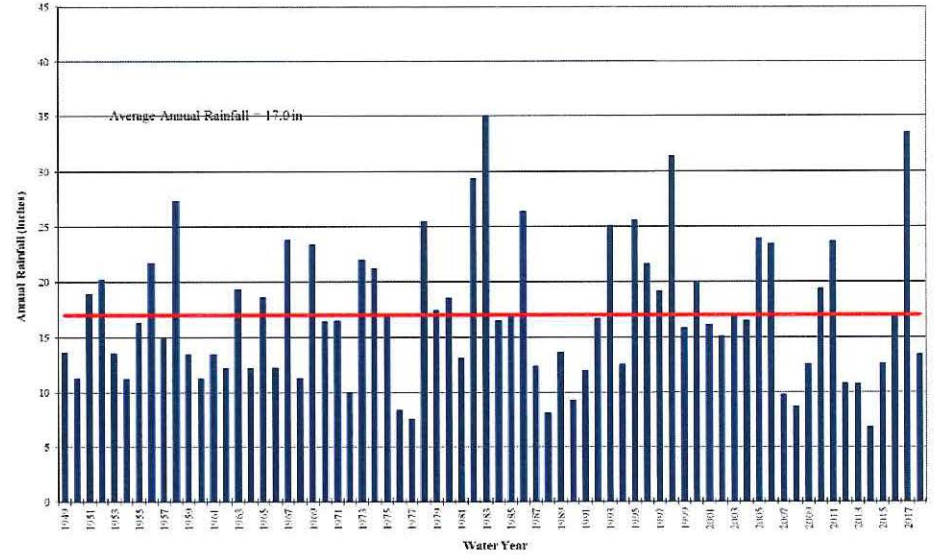
**San Joaquin County  
Flood Control and Water Conservation District**



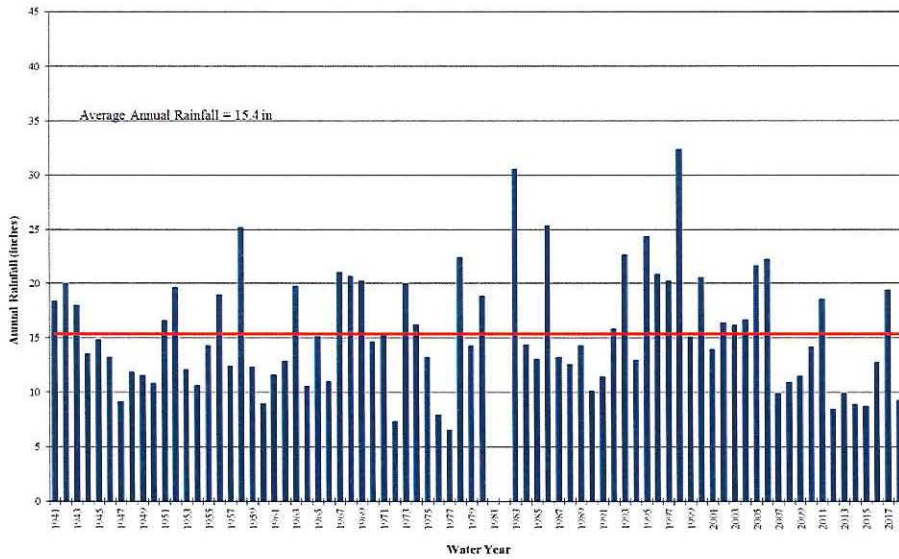
Total Water Year Rainfall (Camp Pardee Station)



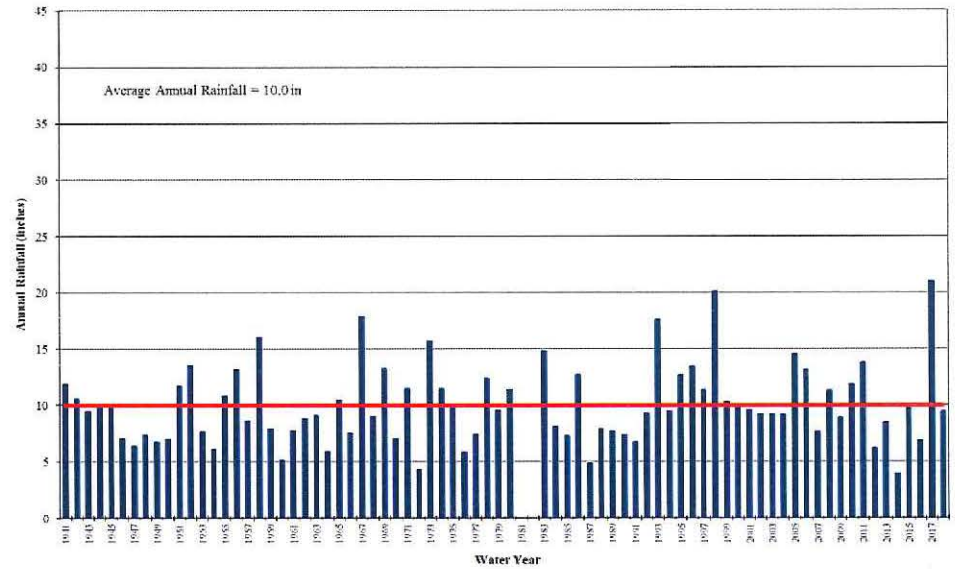
Total Water Year Rainfall (Lodi Station)



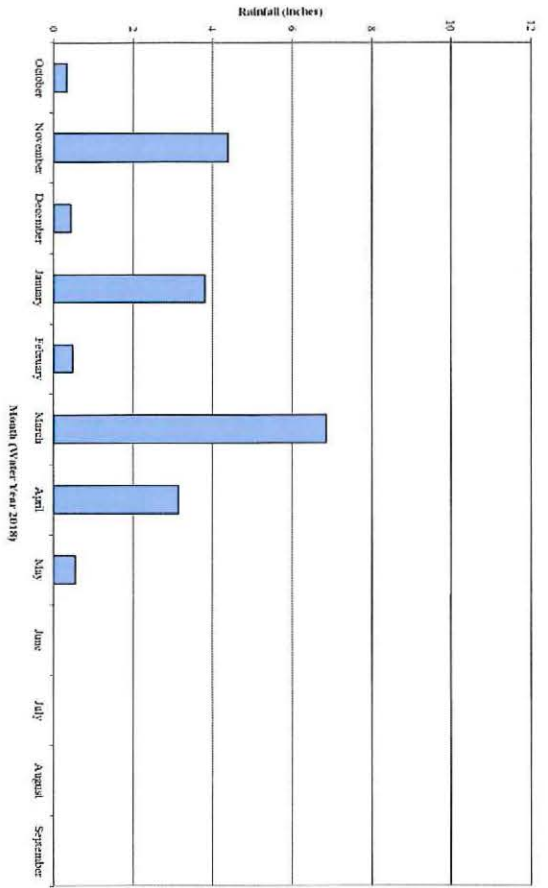
Total Water Year Rainfall (Stockton Fire Station)



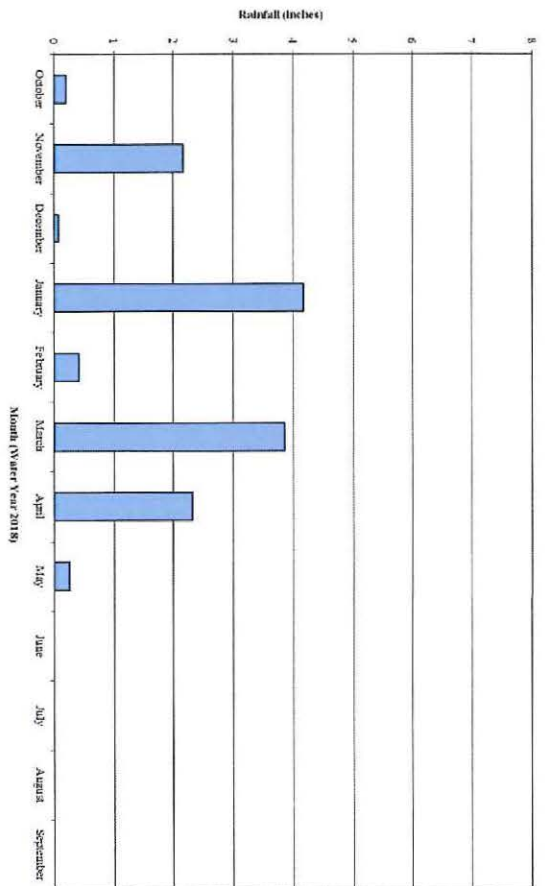
Total Water Year Rainfall (Tracy Carbona Station)



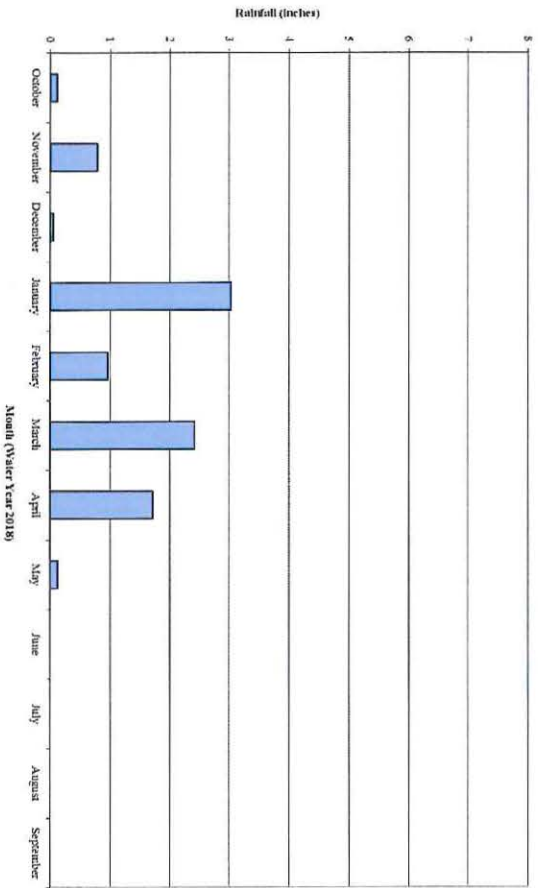
Monthly Rainfall Distribution (Camp Pardee)



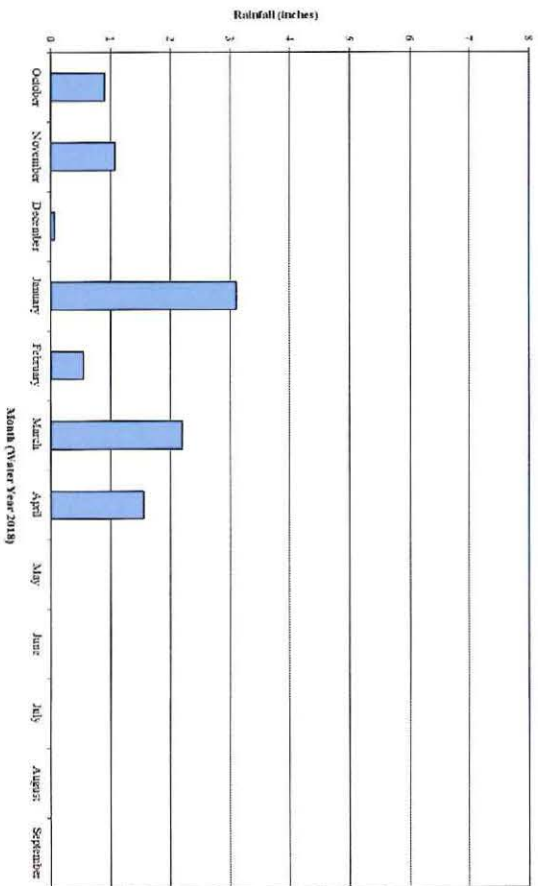
Monthly Rainfall Distribution (Lodi Station)



Monthly Rainfall Distribution (Stockton Fire Station)

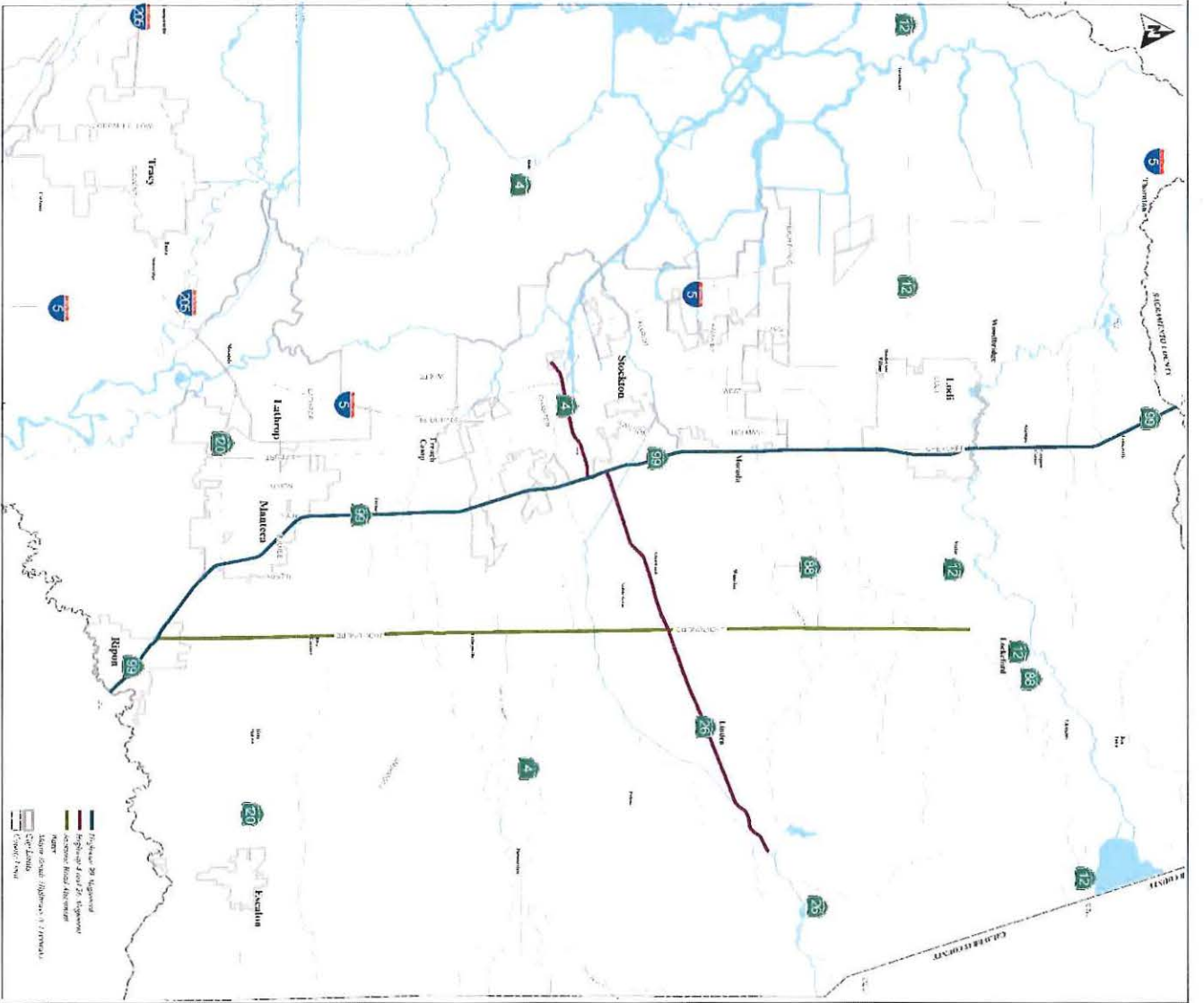


Monthly Rainfall Distribution (Tracy Carbon Station)



GROUNDWATER ELEVATION COMPARISON SPRING 2018 TO SPRING 2017

DISTRICT	Number of Wells	Number of Wells Compared	Wells with Decrease	Wells with Increase	Wells with no Change	Range of Change	Average Change
WID	32	24	14	10	0	-10.0 to 27.5	-0.95
NSJWCD	155	26	7	18	1	-31.0 to 13.5	-0.07
SEWD	150	53	27	22	4	-31.0 to 69.0	0.13
CSJWCD	57	16	11	5	0	-25.5 to 12.0	-4.22
SSJID	40	7	2	3	2	-4.0 to 12.0	1.14
OID	2	0	0	0	0	----	----
SOUTHWEST COUNTY	19	9	9	0	0	-5.0 to -1.6	-3.08



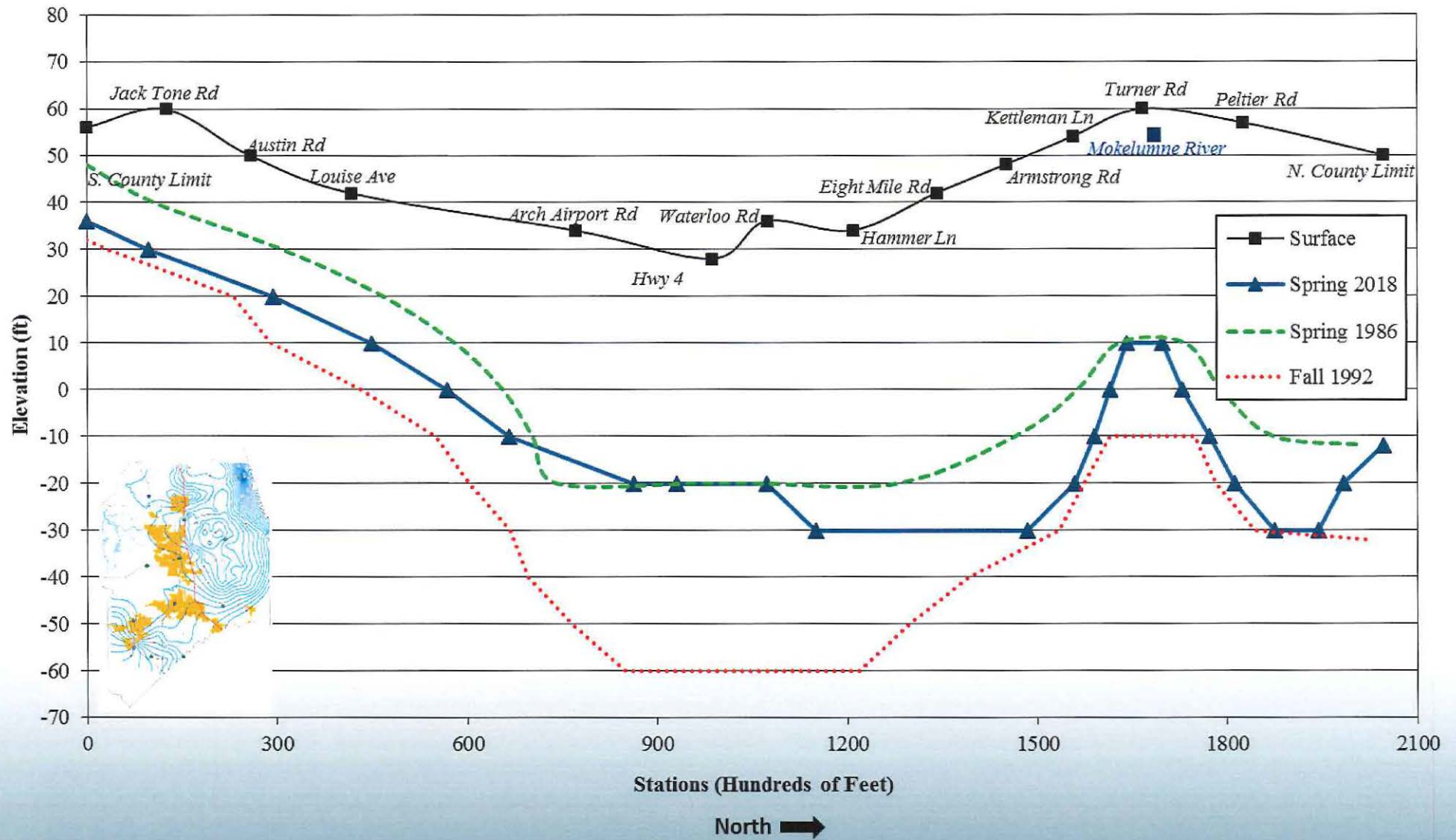
**CROSS-SECTION ALIGNMENTS**

This map is for informational purposes only. It is not intended to be used as a legal document. The information on this map is subject to change without notice. The information on this map is subject to change without notice.

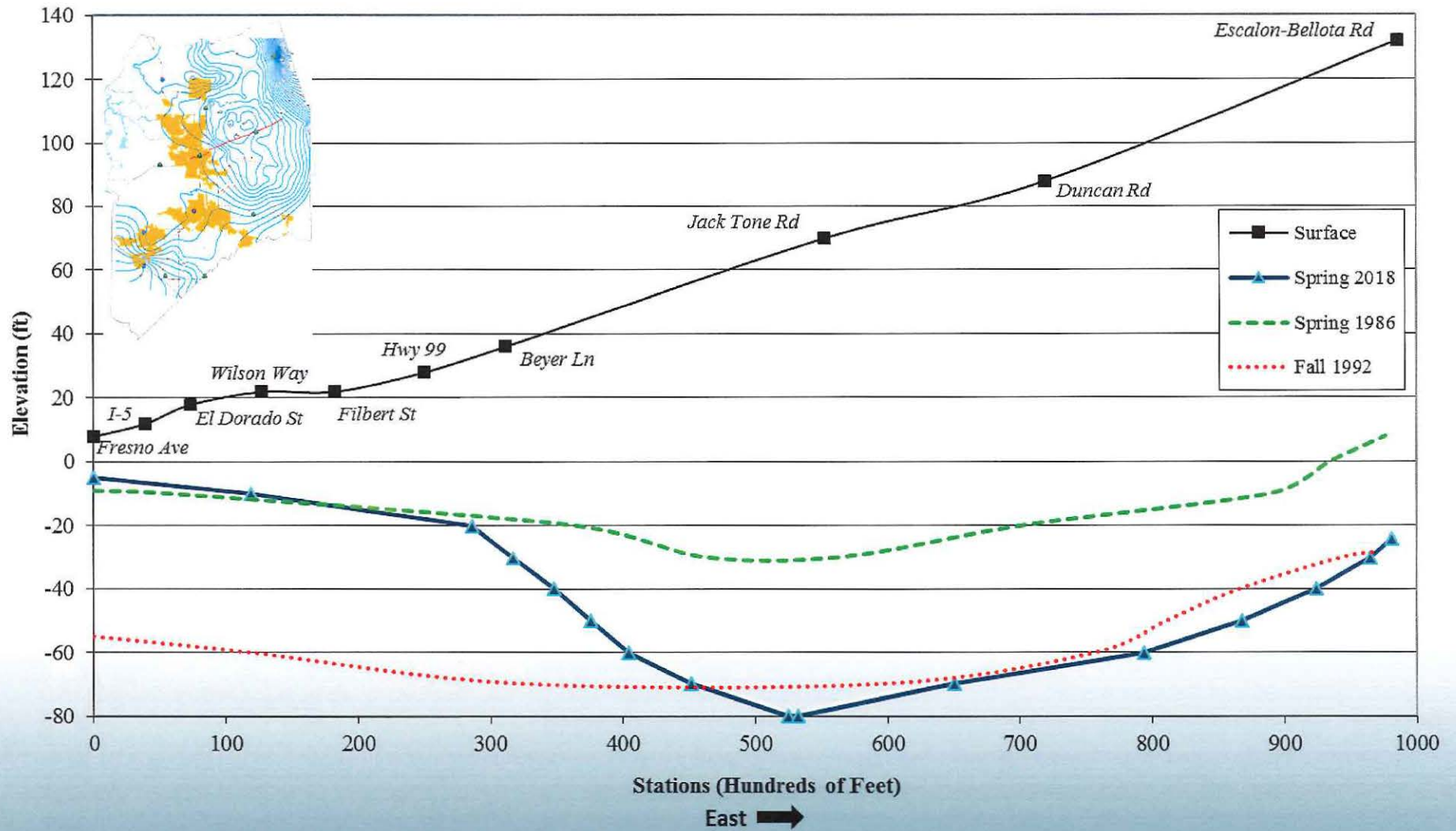




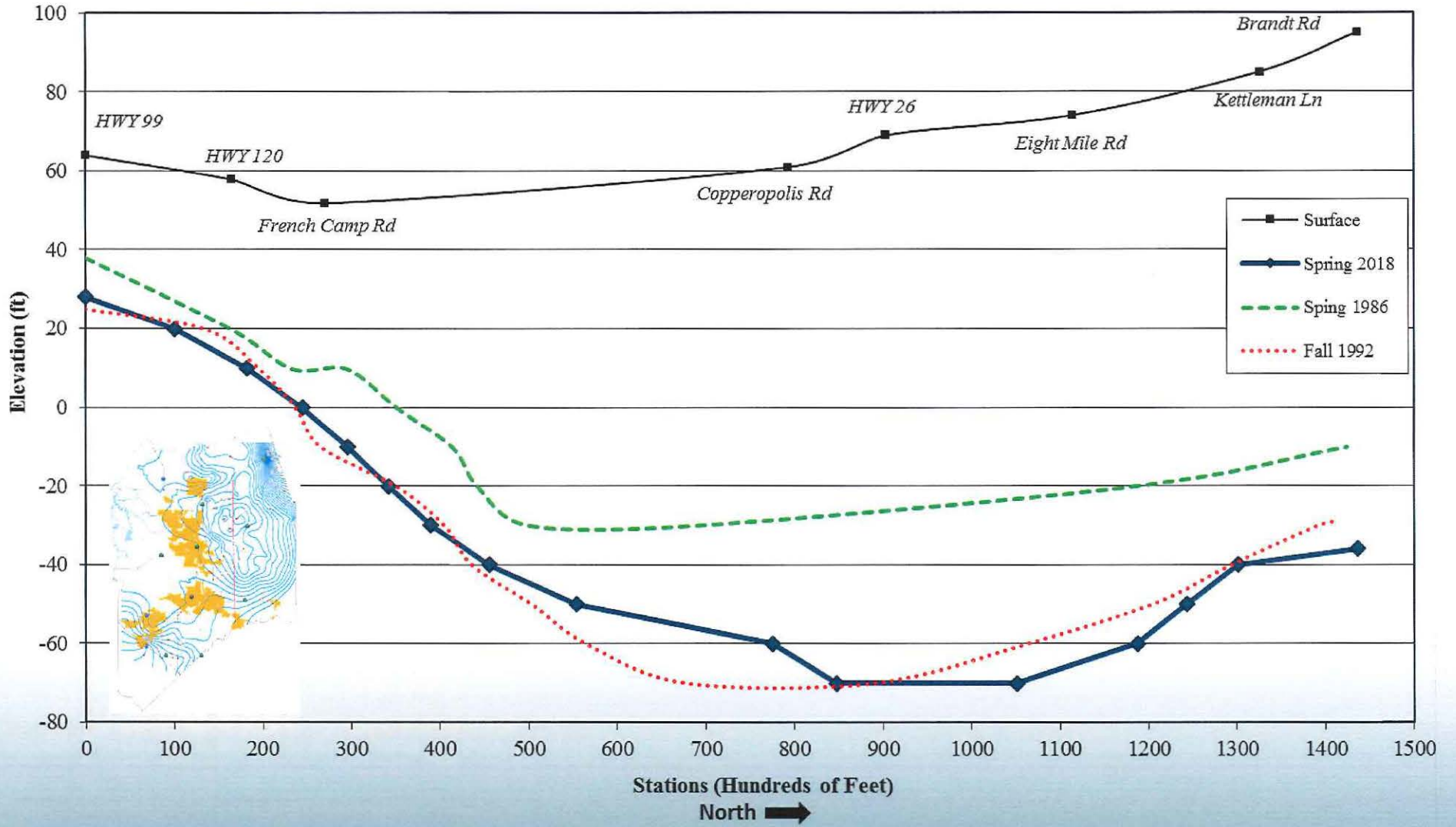
## Cross Section along Highway 99 Alignment (South County Limit to North County Limit) Spring 2018

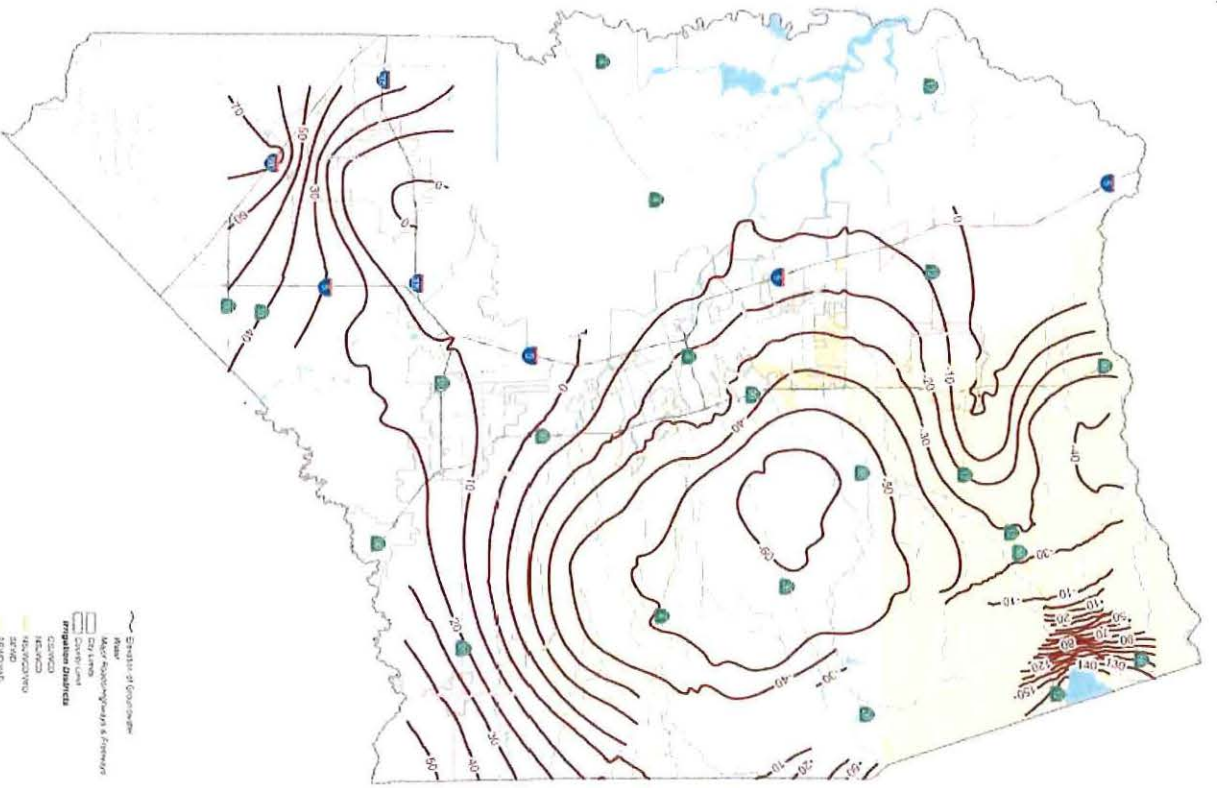


## Cross Section along Highway 4 and Highway 26 Alignment (Fresno Ave to Escalon-Bellota Rd) Spring 2018



## Cross Section along Jacktone Rd Alignment (Highway 99 to Brandt Rd) Spring 2018





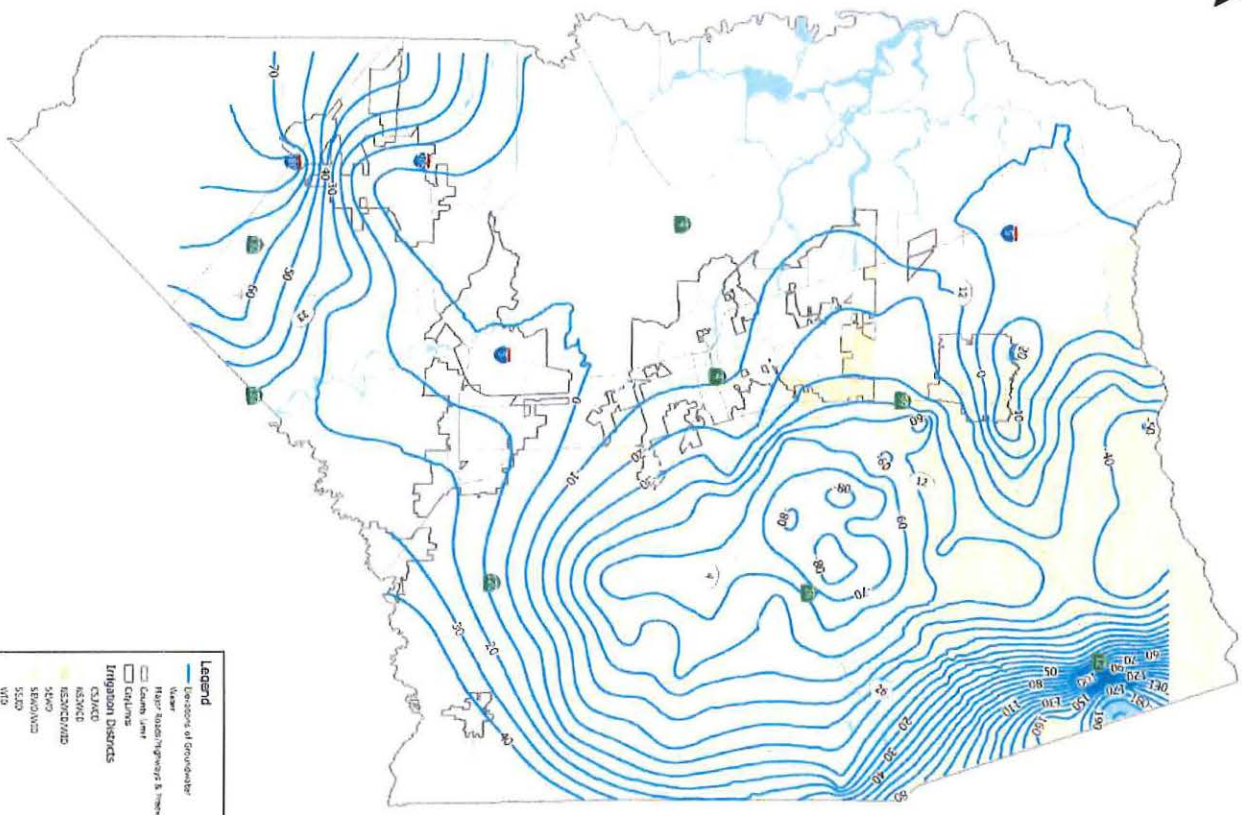
- Boundary of Governmental Spring
- Major Roadway/Highway & Freeway
- Dry Lake
- City Limit
- Public Works
- Proposed Districts
- SEACED
- SEACED/NO
- SEACED
- SEACED/NO
- SEACED
- SEACED/NO
- NO



LINE OF 100 ft ELEVATION OF GOVERNMENTAL SPRING, UT

Map of Governmental Spring, Utah, showing the 100-foot elevation line and the locations of various public works projects. The map is a topographic map showing contour lines and the locations of various public works projects. The map is a topographic map showing contour lines and the locations of various public works projects.





**Legend**

- Locations of Groundwater Viewer
- Major Subdivisions & Municipalities
- County Lines
- City Limits
- Intrusion Districts
  - CS/ACD
  - NS/NC/ND
  - SC/OS
  - SK/OW/OD
  - WD

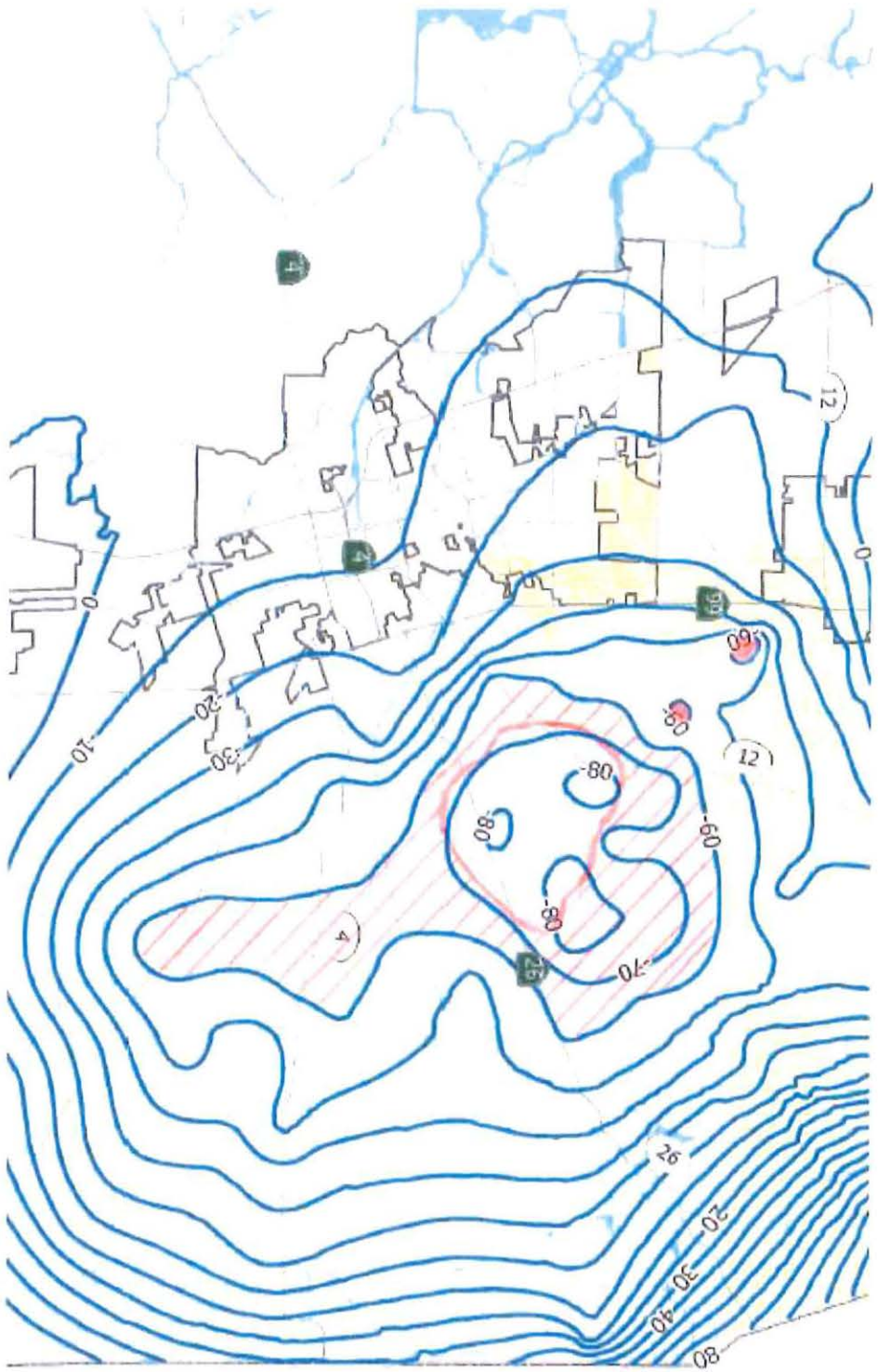


**Lines of Equal Elevation of Groundwater Spring 2018**

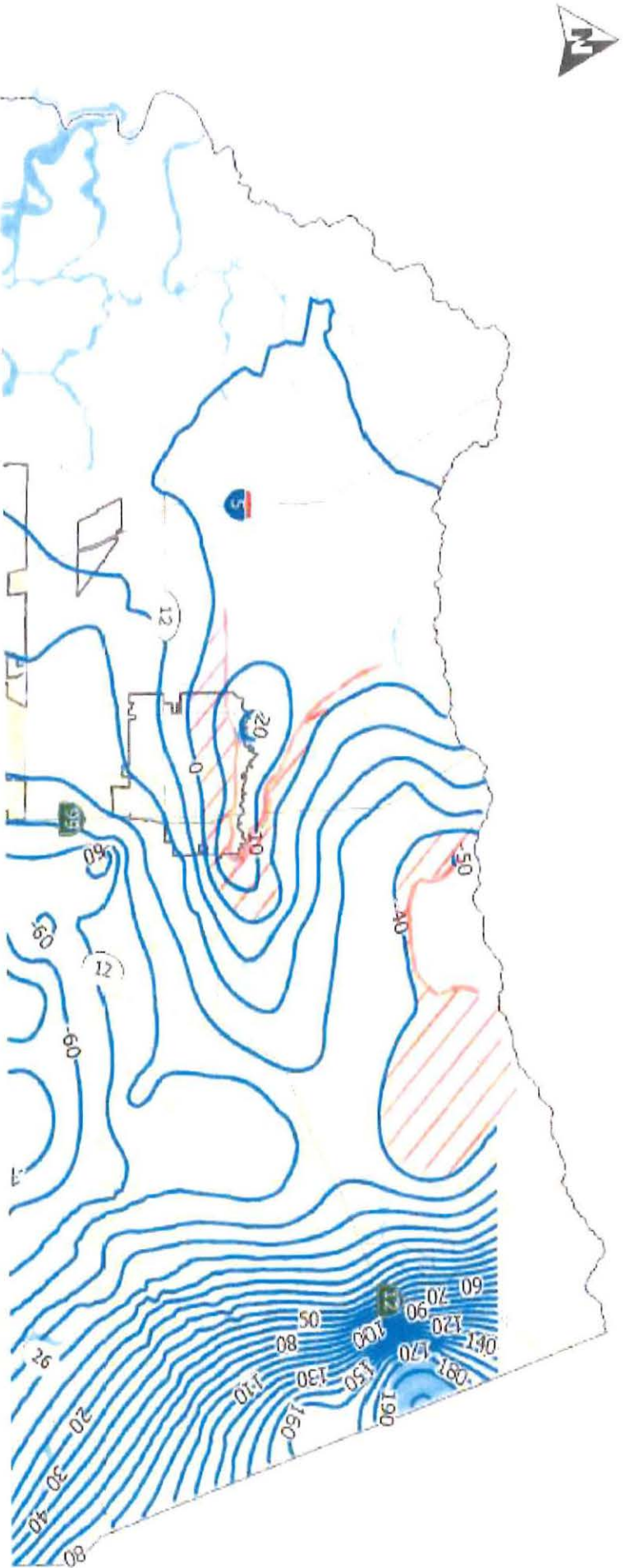
Map prepared by Public Works, Water Division  
 The information on this map is for informational purposes only. It is not intended to be used for legal or engineering purposes. For more information, contact the Water Division at (708) 235-3000.



# Expansion of -60 contour



# Expansion of -40 and 0 Contour






# Smith Canal Gate Project Update

ADVISORY WATER COMMISSION  
NOVEMBER 20, 2019

1



## Overview

- Project Partners
- Project Purpose
- Design & Construction
- Project Cost
- Q&A

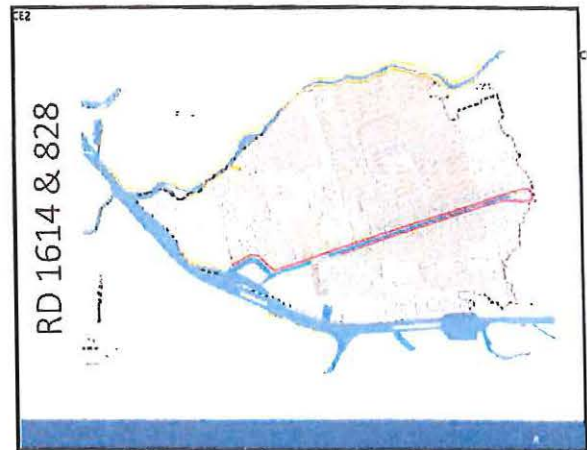
2

## Project Partners



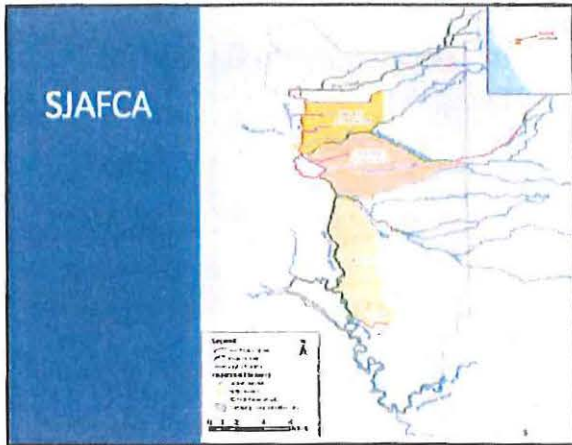


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## Smith Canal History

- Built by State in mid-1800s for sanitary and drainage purposes
- Navigable and tidally influenced
- Conveys urban runoff
- Leveed to prevent flooding from the Delta

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## Why Smith Canal Gate Project?

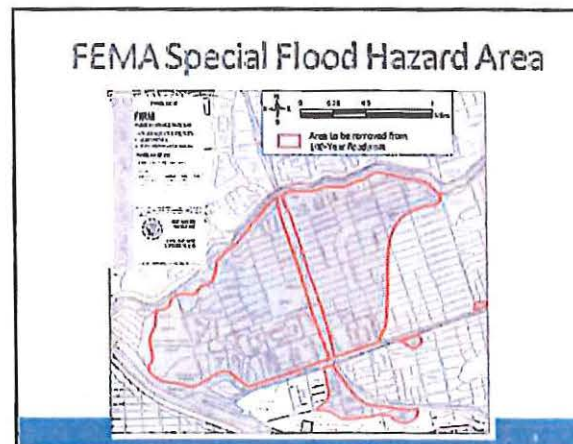
Smith Canal levees do not meet Federal Emergency Management Agency (FEMA) standards

- Levee encroachments

FEMA Special Flood Hazard Area

- 5,000 properties "mapped" in 2009
- Additional 3,000 properties to be mapped
- Requires mandatory flood insurance
- Building restrictions
- Elevation for new/replacement construction and significant repairs/remodels

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### State/Federal-Approved Solution


- 1) Fix Wisconsin Pump Station (RD 1614)
- 2) Isolate Smith Canal from Delta (SJAFCA)

Must accomplish **BOTH** to remove FEMA Special Flood Hazard Area

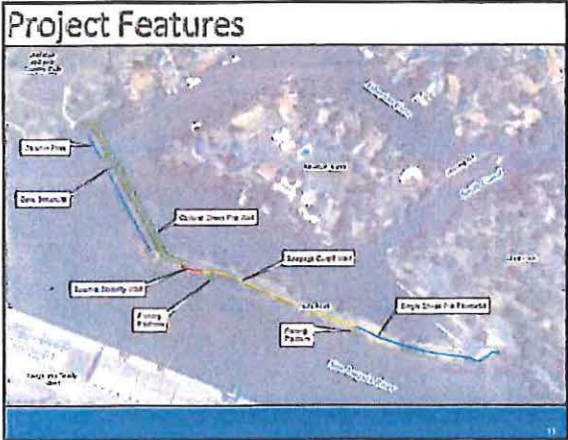
9

### Isolating Smith Canal from Delta

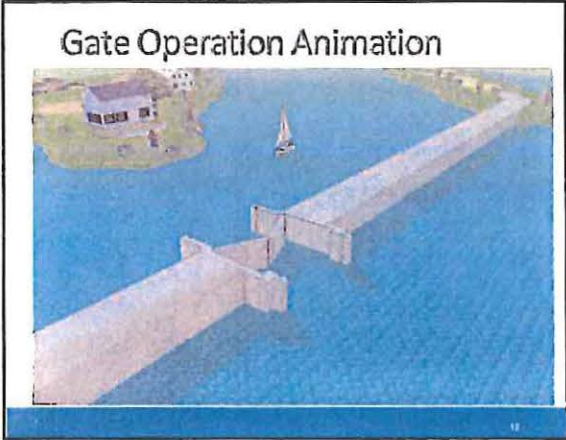
- Smith Canal Gate
- Meets FEMA standards if constructed as proposed
- Accepted into State/Federal Plan of Flood Control
- Extensive third-party expert review



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### Estimated Project Costs & Funding

<b>Total Project Costs (updated)</b>	
Engineering / Soft Costs	14,635,000
Right of Way	576,000
Environmental Review, Permitting & Mitigation	2,106,000
Construction	50,066,000
<b>Total Project Costs</b>	<b>\$67,383,000</b>
<b>Project Funding Sources (updated)</b>	
DWR Grants (up to 63% of project cost)	38,284,000
Smith Canal AD Revenues	13,252,000
Smith Canal AD Net Financing	22,635,000
Agency Debt Service During Construction <sup>(1)</sup>	(3,524,000)
<b>Total Funding Sources</b>	<b>\$70,647,000</b>
<b>Net Available Funding Sources <sup>(1)</sup></b>	<b>\$3,264,000</b>

(1) Estimated debt service through October 2022  
 (2) Used to pay Project costs pending reimbursement from State grant funds and potential unexpected cost overruns

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### Project History

- Assessment District approved - July 2013
- Design & environ plannin – began November 2013
- Start of assessment collection – October 2014
- Start of construction – initially planned for 2016
- Construction delayed by two lawsuits
  - Atherton Cove POA v. SJAFCA (Cost to defend: \$516,000)
  - Dominick Guill v. SJAFCA, et al (Cost to defend: \$1,067,927)

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### Project Milestones

- ✓ Design
- ✓ Encroachment Permit
- ✓ Consistency with Delta Stewardship Council
- ✓ Right-of-Way Acquisition/State Lands/US/City
- ✓ Construction Management Contract
- ✓ Constructability Review
- ✓ UFFWS/NMFS Biological Opinions
- ✓ Test Pile Project

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## Test Pile Pilot – October 2019




- Test "drivability" of sheet pile
- Refine final design and specification
- Refine construction cost estimate
- Share information with local, state and federal regulatory information
- Monitor turbidity, noise, vibration



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## Smith Canal Test Pile Project








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### SITE 2

**Date:** 10/29 – 10/30

1. H-Pile & Flat Sheet
  - Both piles driven to design depth using only vibration
  - Performed vibration monitoring
2. CPT Performed
  - Driven to -85.1 ft
  - Grouted




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### SITE 3

**Date:** 10/30

1. H-Pile
  - Pile driven with vibration to -42 ft, then impacted to -70 ft
  - Performed PDA and vibration monitoring
2. CPT Performed
  - Driven to -81.7 ft
  - Grouted 10/31




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**Environmental Considerations**

Monitoring and Strategies to Mitigate

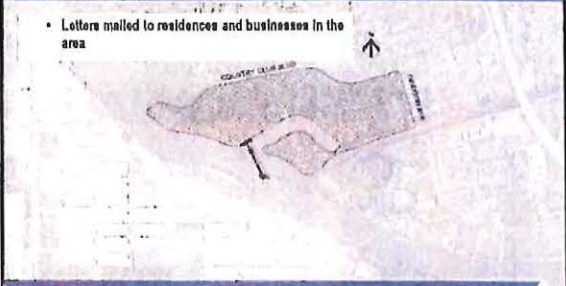
Monitoring:	Mitigation Strategy:
1. Turbidity	1. Turbidity Curtain
2. Hydroacoustic	2. Bubble Curtain
3. Ambient Noise	3. Hammer & Vibro from 8 a.m. to 4:30 p.m.
4. Endangered Species	4. Environmental Awareness Training given to everyone working on the jobsite



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**Public Outreach**

- Letters mailed to residences and businesses in the area



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**Compliance with State/Federal Regulations**

- Meets FEMA Requirements (Conditional Letter of Map Revision)
- Meets DWR Urban Levee Design Criteria
- Included in 2012 Central Valley Flood Protection Plan and the 2017 Update
- Included in San Joaquin River Basin-Wide Feasibility Study
- Included in Lower San Joaquin/Delta South Regional Flood Management Plan
- Part of Corps of Engineers' Lower San Joaquin River Project

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**Project Schedule**


- Construction Bid - Late Dec. 2019 to Early January 2020
- Construction Starts – Summer 2020
- Construction Completed – Summer 2021
- FEMA Remapping - 2022

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# QUESTIONS SMITH CANAL?

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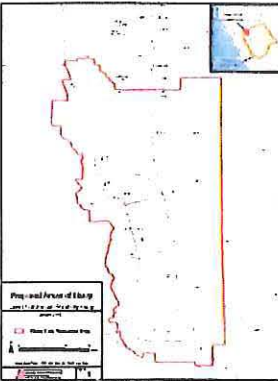
# LOWER SAN JOAQUIN RIVER STATUS OF LOWER SAN JOAQUIN RIVER PROJECT - PHASE 1



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## Lower San Joaquin River Project

- Feasibility Cost Share Agreement Signed on February 19, 2009 by SJAFCA and USACE. CVFPPB signed in 2010.
- USACE is NEPA lead, SJAFCA is CEQA lead
- Purpose - Flood Damage Reduction Study with Opportunities for Ecosystem Restoration
- Primary Sources of flooding - Delta Front & tributaries up to 10 ft.
- Study Cost approx. \$9.4 Million



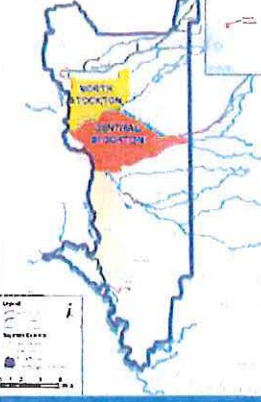
27

## Study Area

- Re-scoped to focus on high risk, high consequence separable areas:

North Stockton	Highly Urbanized
Central Stockton	Highly Urbanized
RD-17	40% Urbanized

- Screened out ~15,000 acres.
- Deferred to Phase 2 Study for RD-17 urban, urbanizing and agricultural lands for alignment with EO 11988



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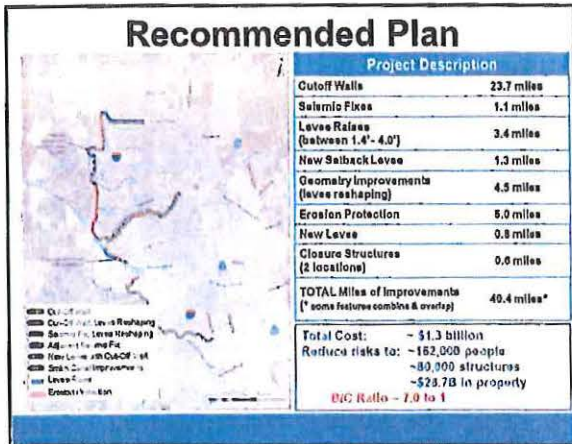


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### Benefits Sought by Locals in Sponsoring USACE Study

- Develop a 200-yr plan for urban protection
- Improves conditions for 162,000 people and 486 critical infrastructure sites
- 83% reduction in expected annual damages
- Spin off early implementation projects (EIPs) which could utilize state bond funding
- Provide nexus for Federal funding or crediting (requirement of State for bond funding)
- Provide nexus for Federal permitting (NEPA, 408, 404, 106, ESA, etc.)

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### History & Milestones

Date	Activity	Date	Activity
2009	Study Began	Feb 2019	Record of Decision Issued
Jan 2010	Public Scoping		
Jan 2013	Re-Scoping	October 2018	Authorization In WRDA
Mar 2013	Alternatives Milestone		Preconstruction Engineering and Design (PED)
Aug 2014	Tentatively Selected Plan Milestone	2019-2021	<ul style="list-style-type: none"> <li>• First planned reach to be designed in PED phase</li> <li>• Remaining reaches are anticipated to be designed in Construction phase</li> </ul>
Feb 2015	Draft FR/EIS/EIR Released for Public Review		
Jan 2018	Final FR/EIS/EIR Public Released	2021-2033	Appropriation for Construction (Energy and Water Appropriations Bills)
July 2018	Chief's Report Signed		

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## Timeline Drivers

- Estimated Completion 2033
  - Aggressive yet realistic
- Drivers –
  - Fiscal Year Appropriations (Federal/State)
    - Total federal cost ~ \$850M
    - Design Agreement
    - Pre-Construction Engineering & Design Underway
    - Scheduled to initiate construction in 2021, pending New Start decision
    - Construction season

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## Lower San Joaquin River Flood Risk Reduction Federal Advocacy Request

Phase I

(a) \$20 million for initial construction activities  
(b) New Start Construction Designation

Phase II

\$1.5 million be included in the FY 2020 Work Plan to advance the continuation of Phase II of the LSJRFS as set forth in the Chief's Report for Phase 1.

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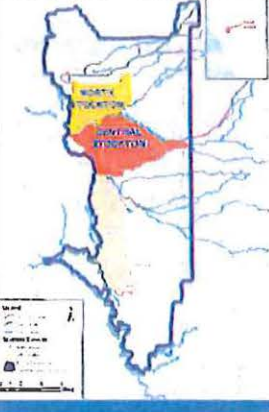
## LOWER SAN JOAQUIN RIVER

STATUS  
OF  
LOWER SAN JOAQUIN RIVER PROJECT  
– PHASE 2



35

## Study Area



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## STATE-FUNDED STUDY

- Study almost complete
- Initial Report Submitted for Review
- Negotiations With State for Acceptance
- Engage the Army Corps for Federal Participation
- Create Pathway for Wise Use of Floodplain
  - Emergency Response Exercise scheduled for 12/11
- Create Pathway for Federal Investment

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## QUESTIONS

Lower San Joaquin  
River Projects?

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# SMITH CANAL GATE PROJECT

NOVEMBER 2019



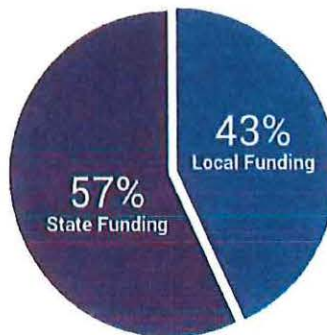
## About the Project

The Smith Canal Gate Project will meet State and Federal standards for flood protection by isolating Smith Canal from the San Joaquin River during high water and tide events. It includes a floodwall along the San Joaquin River between Dad's Point and the eastern boundary of the Stockton Golf & Country Club, tying into the existing Federal Emergency Management Agency (FEMA) accredited levee. The floodwall will feature a gate for boat access to Atherton Cove and Smith Canal. The gate will remain open, except during high water and tide events and for periodic testing. Dad's Point will be raised and strengthened to allow certification as a levee. The project is part of the US Army Corps of Engineers (USACE) Lower San Joaquin River Project and will be part of the State Plan of Flood Control.



## Project Funding

The estimated project cost is \$67,383,000. The State has committed to pay up to \$38,284,000 (57%) of project costs (design, environmental, and construction). The remaining costs are funded by property assessment revenues and bonds. In June 2013, property owners approved an assessment to pay the local cost share with 59% of the weighted vote. Assessment revenues will also fund ongoing operations and maintenance of the project.



## Project Oversight

The project has significant oversight and involvement from third-party, professional engineering experts at the local, state and federal levels. As a condition of funding, the State assigned an Independent Panel of Experts (engineers) to provide review of design and construction plans. Additionally, the project required review and/or permitting by FEMA, the USACE, the CA Department of Water Resources, the Central Valley Flood Protection Board, the Delta Stewardship Council, San Joaquin County, the City of Stockton, and other state and federal agencies.

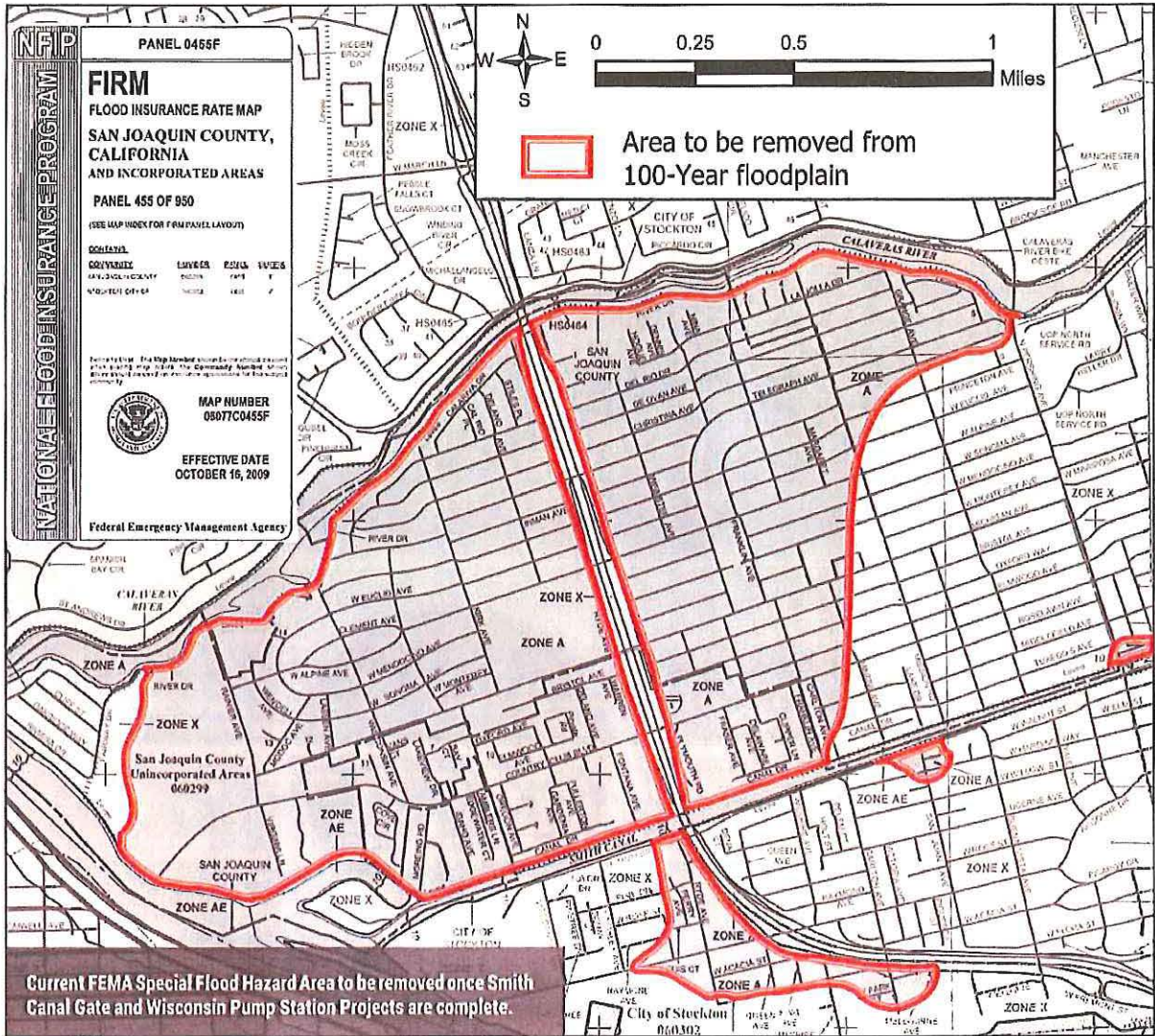
## Project Schedule: Construction to Begin in 2020

- ✓ Design
- ✓ Encroachment Permit
- ✓ Consistency with Delta Stewardship Council
- ✓ Real Estate for Project Access
- Construction Management
- ✓ Contract
- Constructability Review
- ✓ USFWS/NMFS Biological
- ✓ Opinions
- Release of Project Bid - Estimated January 2019
- Final Right-of-Way - Complete by February 2020
- Construction - 2020-2022
- FEMA Accreditation - 2022-23

Project construction was originally scheduled to begin in 2016, but it was delayed significantly by two lawsuits, one filed by Dominick Guilli and another by the Atherton Cove Property Owners Association. Both trials were decided in SJAFCA's favor. The Association's lawsuit was appealed and is now final. The Guilli lawsuit was appealed and is pending. Lawsuit defense costs total more than \$1.57 million.

## Project will End Mandatory Flood Insurance and Building Restrictions

Once SJAFCA completes construction of the Smith Canal Gate and Reclamation District 1614 completes upgrades to the Wisconsin storm water pump station, FEMA will "remap" the Smith Canal area to remove the "high risk" flood zone designation (see map below). This will eliminate mandatory flood insurance requirements and building restrictions for approximately 5,000 properties, and prevent approximately 3,000 additional properties from being mapped into a high-risk zone. Property owners will be able to purchase flood insurance at low-risk rates. FEMA recently reissued a Conditional Letter of Map Revision, or CLOMR, confirming that the project will provide the required 100-year flood protection, if constructed as designed. Until both the gate and pump station projects are completed, properties in a Special Flood Hazard Area (high-risk flood zone) will remain subject to mandatory flood insurance (properties with federally-backed mortgages) and building restrictions (all properties). If you have flood insurance, please check with your insurance provider on costs for policy renewals.



## Property Owners will Save Money, Once Project is Complete

Once the gate and pump station projects are complete and FEMA has remapped the community into a low- to moderate-risk flood zone, property owners will no longer be subject to mandatory, higher-cost flood insurance. How much is the savings? Here's an example from a two bedroom, one bath, 1,254 square foot home on W. Alpine (close to Michael's Pizza):

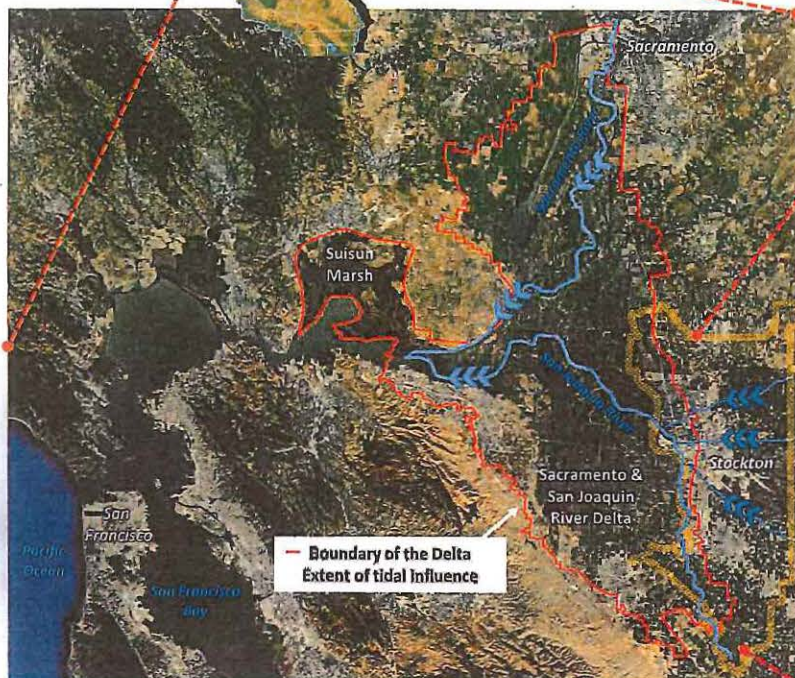
SJAFCA Assessment for Smith Canal (2019-20)	\$244.10
FEMA Mandatory Flood Insurance Per Year (2019)*	\$1,187

Additional project background is available online at [www.sjafca.com](http://www.sjafca.com).

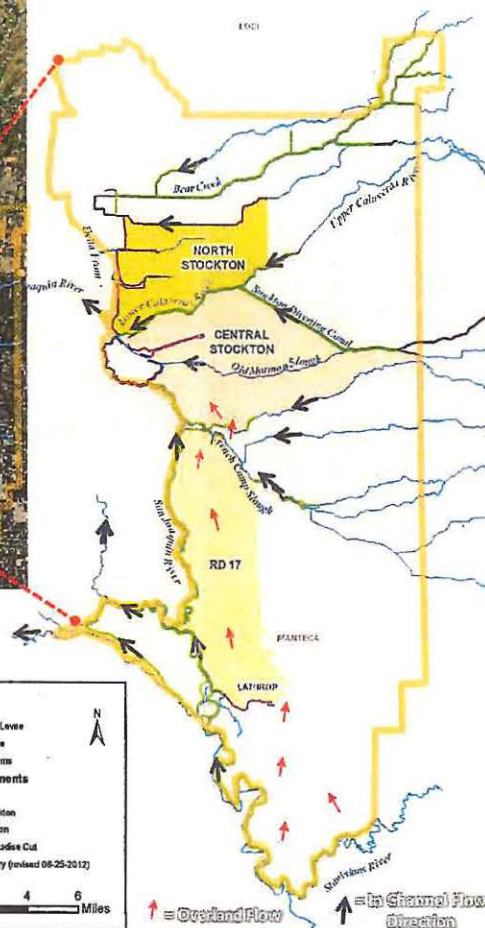
\*Flood insurance rates are projected to increase in October 2021 as part of FEMA Risk Rating 2.0



# San Joaquin River Basin Lower San Joaquin River, California



## Study Area



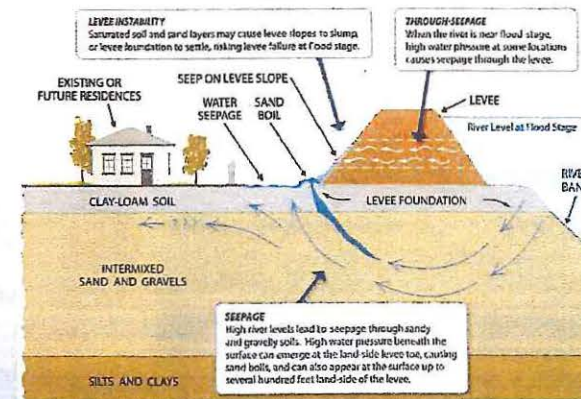
Stockton Floods 1955

## Problems

- The City of Stockton and surrounding areas are at risk of flooding from multiple sources, including comingled flows from the San Joaquin and Sacramento Rivers combined with Delta high tides and flow from Sierra Nevada streams
- Significant flood risk to public safety and property in the study area



Stockton is a major commercial and industrial center (Port of Stockton), and an important gateway to the Central Valley.



Residential development adjacent to levees

Typical levee seepage and stability problems



# San Joaquin River Basin Lower San Joaquin River, California

**SJAFCA**  
San Joaquin Area FLOOD CONTROL Agency



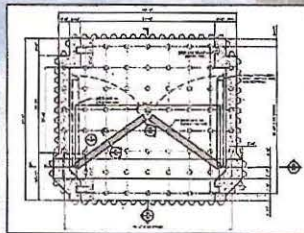
Recommended Plan (NED)	
Cutoff Walls	23.7 miles
Seismic Fixes	1.1 miles
Levee Raises (between 1.4' - 4.0')	3.4 miles
New Setback Levee	1.3 miles
Geometry Improvements (levee reshaping)	4.5 miles
Erosion Protection	5.0 miles
New Levee	0.8 miles
Closure Structures (2 locations)	0.6 miles
<b>TOTAL Miles of Improvements</b> (* some features combine and overlap)	<b>40.4* miles</b>

### BENEFITS OF RECOMMENDED PLAN

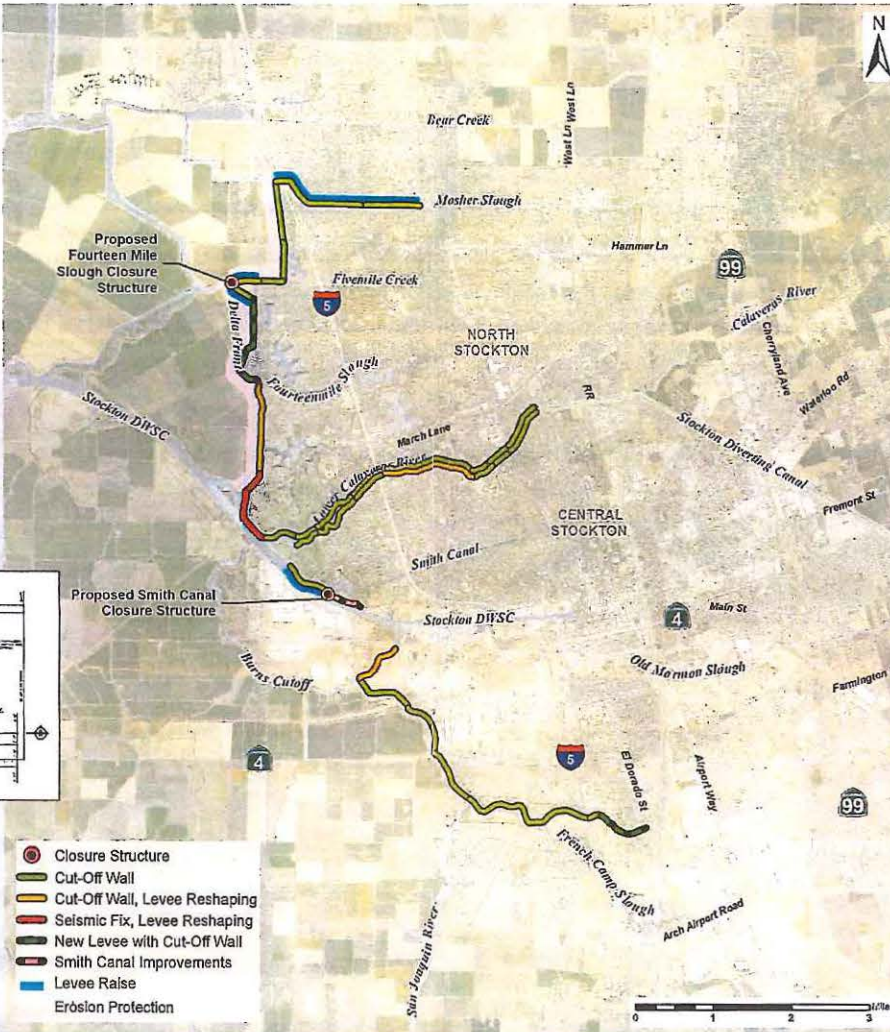
- Reduces flood risk to people, property, and critical infrastructure in the city of Stockton
- Provides benefits to 162,000 residents

### ENVIRONMENTAL COMMITMENTS:

- Section 7 Consultation (ESA)**
- ✓ USFWS – Final Biological Opinion (BO) (June 2016)
  - ✓ NMFS – Final BO (June 2016)
- USFWS Coordination Act (CAR)**
- ✓ Final Coordination Act Report (July 2016)
- Section 106 Compliance**
- ✓ Programmatic Agreement (May 2016)
- Water Quality Certification**
- ✓ Support Letter from State Regional Water Quality Control Board (April 2016)



Example drawing of closure structure (Source: SJAFCA, Smith Canal Final EIR)



Economic Summary (\$1,000)	
First Costs	\$1,070,309
Interest During Construction	\$231,829
<b>TOTAL Investment Cost</b>	<b>\$1,302,138</b>
Annual Interest and Amortization	\$48,232
OMRR&R	\$1,062
<b>TOTAL Annual Cost</b>	<b>\$49,294</b>
Total Annual Benefits	\$345,024
Net Annual Benefits	\$295,730
<b>Benefit to Cost Ratio</b>	<b>7.0 to 1.0</b>

### STUDY ACCOMPLISHMENTS:

- ✓ Public Review of Draft Report: Feb – April 2015
- ✓ Independent External Peer Review: May 2015
- ✓ Agency Technical Review Certification: July 2016
- ✓ MSC Legal Sufficiency: August 2017
- ✓ Division Engineer Transmittal: Sept 2017
- ✓ Cost Engineering Cert: Dec 2017

Delta Smelt

Green Sturgeon

U.S. Army Corps of Engineers, Sacramento District







**SAN JOAQUIN COUNTY  
FLOOD CONTROL & WATER  
CONSERVATION DISTRICT**

**ADVISORY WATER COMMISSION  
MEETING OF NOVEMBER 20, 2019**

**ATTENDANCE SHEET**

INITIAL	NAME	AFFILIATION	E-MAIL ADDRESS	PHONE
<i>DN</i>	Nomellini, Dante J	CDWA		
	Nomellini, John Dante Jr	CDWA		
<i>RL</i>	Roberts, Reid *	CSJWCD		
	Thompson, Grant *	CSJWCD		
	Murken, Walter	City of Escalon		
	Alves, Edward B	City of Escalon		
<i>JOC</i>	Torres-O'Callaghan, Jennifer	City of Lathrop		
<i>JL</i>	Lazard, Diane	City of Lathrop	<i>Jtorres@cityoflathrop.ca.gov</i>	
<i>CS</i>	Swimley, Charlie Jr	City of Lodi		
	Richle, Andrew	City of Lodi		
<i>DB</i>	Breitenbucher, David	City of Manteca	<i>dbreitenbucher@ci.manteca.ca.us</i>	
		City of Manteca		
<i>DG</i>	De Graff, Daniel	City of Ripon		
	Uecker, Dean	City of Ripon		

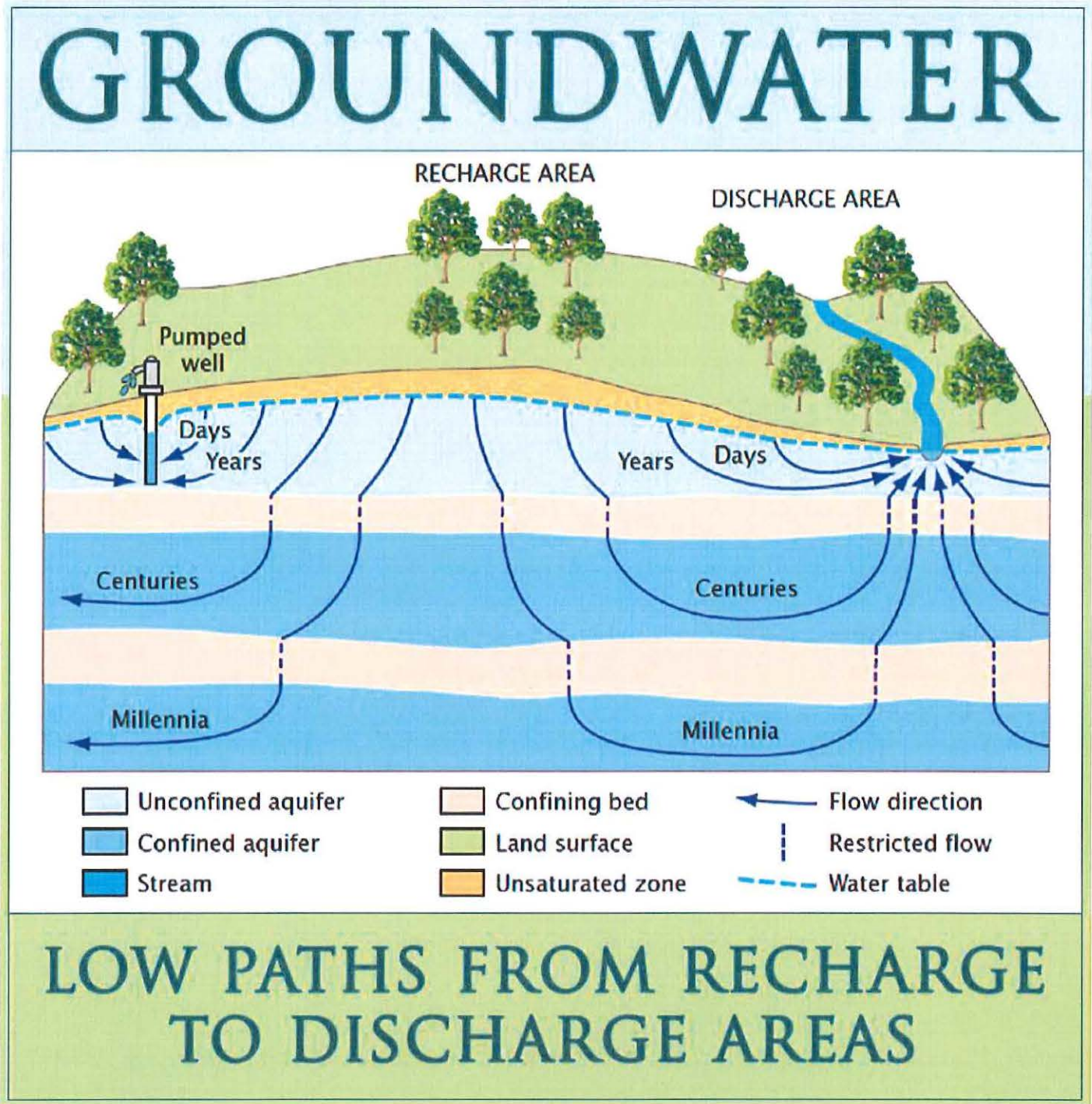
JPW	Wright, Dan *	City of Stockton		
	Canepa, Paul *	City of Stockton		
	Sharma, Kuldeep	City of Tracy		
SW	Reyna-Hiestand, Stephanie	City of Tracy		
	Starr, Charlie	NSJWCD		
	Valente, Joe	NSJWCD		
	Doornenbal, Herman	OID		
C	Sup. Winn, Chuck	BOS		
	Sup. Miller, Kathy	BOS		
JH	Herrick, John	SDWA		
JPW	Holbrook, John	SSJID		
	Weststeyn, Mike *	SSJID		
	Weisenberger, David *	SW County		
	Christensen, Anders	WID		
		WID		
		Enviro/Fish/Wildlife Org		
Present	Hartmann, George *	Urban Flood Control RD		
		Urban Flood Control RD		
Present	Price, Willard	General Bus Com		
GAN	Neudeck, Christopher	Building & Construction Industry		
✓ Present	Zidar, Matt	Secretary		
	Wells-Brown, Terry	At Large Rep		
MAH	Henneberry-Schermesser, Annette	At Large Alternate		







ATTACHMENT  
V. A



*The state-required plans must determine if groundwater pumping is resulting in the loss of water in streams that support endangered and threatened fish and other species.*

### Groundwater Monitoring Wells A 'Picture' of Underground

# Water Connections for Groundwater Sustainability Plans

Dec 2, 2019

Share:

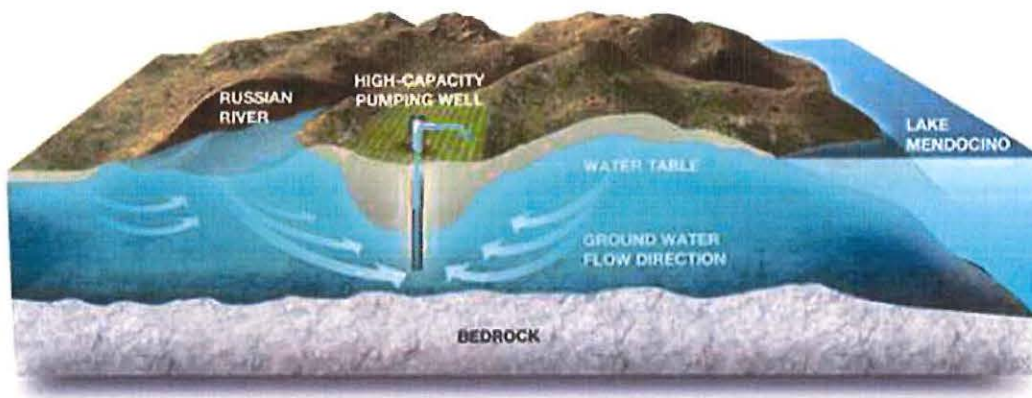
Ann DuBay

By Ann DuBay

During the months of October and November, up to **21 groundwater monitoring wells will be drilled near Sonoma County creeks** to provide new information to managers and the public on the link between groundwater and stream flows. Coordination and construction of the wells are a technical service provided by the **California Department of Water Resources** (<https://water.ca.gov/>) (DWR) to **Sonoma County's three Groundwater Sustainability Agencies (GSAs)**.

**Each well will be about 50 feet deep**, and will be designed specifically for measuring water levels throughout the year. These measurements, when paired with information about the water flowing in nearby streams, help paint a picture of the link between groundwater aquifers and the surface water in creeks, streams and rivers.

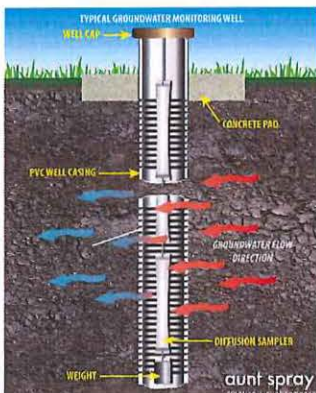
"We can't see what's beneath the surface, so these monitoring wells act like underground telescopes. They can help us see how much and when water is available," said **Sonoma County Supervisor Susan Gorin**, who serves as the chair of the Sonoma Valley GSA.



Successful Groundwater Sustainability Planning. Image: [mavensnotebook.com/groundwater/](http://mavensnotebook.com/groundwater/)

The connection between groundwater and surface water is an important component of the **Groundwater Sustainability Plans (GSA)** are being prepared by **Petaluma Valley, Santa Rosa Plain and Sonoma Valley GSAs**. The state-required plans must determine if groundwater pumping is resulting in the loss of water in streams that support endangered and threatened fish and other species.

"These wells will help us better understand the link between specific streams and aquifers so we can make informed decisions about how to protect fish, other wildlife and plants during future droughts and in our changing climate," said **Sonoma County Supervisor Lynda Hopkins**, who is Chair of the Santa Rosa Plain GSA.



**Typical Groundwater Monitoring Well.** The subsurface system for monitoring the quality of groundwater and analytical examination of natural and man-made contaminants. Image: AuntSpray - (CC BY-SA 3.0)

The monitoring wells are installed by drilling holes that are about **eight-inches in diameter**, until water is reached (around 50 feet). A narrow (2 ½ inch) slotted PVC pipe is fitted into the hole, which is then capped. The wells will then be monitored by GSA staff using instrumentation provided by **Department of Water Resources** (<https://water.ca.gov/>) (DWR) to track water levels and temperature throughout the year and compared with data from nearby surface water gauges. **Each well costs approximately \$15,000 to construct and develop**. These costs are being paid for by DWR through its **Technical Support Services program**. DWR has also provided financial assistance in the form of planning grants to help these local agencies develop their GSPs.

"The well drilling will cost DWR more than \$300,000 that otherwise would have been paid by local agencies. This is big boon to our community, and the information provided will be invaluable," said **Sonoma County Supervisor David Rabbitt**, who chairs the Petaluma Valley GSA.

DWR Deputy Director **Taryn Ravazzini** said, "DWR is committed to helping local water managers succeed in their efforts to sustainably manage the state's groundwater basins. Through DWR technical support services such as those pursued by Sonoma County's GSAs, tangible progress can be made toward ensuring a resilient water supply future."

The wells will be constructed in various locations, including parking lots, vineyards, on road shoulders, creek paths, and other publicly owned land. Each well is slated to take less than one day to construct, and disruption from construction activities will be minimal.