MEETING AGENDA FOR RECLAMATION DISTRICT NO. 1608 BOARD OF TRUSTEES MEETING 8:00 A.M. OCTOBER 2, 2024

NEUMILLER & BEARDSLEE 3121 WEST MARCH LANE, SUITE 100 STOCKTON, CALIFORNIA

Call to Order.

Roll Call.

Agenda Items.

- Public Comment. The public may comment on any matter within the District's jurisdiction that is
 not on the agenda. Matters on the agenda may be commented on by the public when the matter is
 taken up. All comments are limited to a maximum of 3 minutes for general public comments on
 items within the District's subject matter jurisdiction and 3 minutes before or during the Board's
 consideration of each agenda item, subject to the sole discretion of the Board President to allow
 additional time for a comment in accordance with Resolution 2019-04.
- 2. <u>Approval of Minutes</u>. Minutes of the special meeting of June 26, 2024 and regular meeting of September 4, 2024.
- 3. Financial Report. Review, discuss, and accept financial report.
- 4. <u>Conflict of Interest Code</u>. Adopt Resolution 2024-05 Reviewing the Conflict of Interest Code for 2024.
- 5. Engineer's Report. Discussion and Possible Action on Engineer's Report.
- 6. <u>Assessment</u>. Review and Discuss Public Draft Preliminary Engineer's Report for Maintenance and Services Assessment.
- 7. Newsletter. Discussion and direction.
- 8. Superintendent Report. Request for directions and approvals.
- Meetings. Report by Trustees on meetings attended and upcoming meetings. Request for direction.
- 10. Report and possible action on Progress of Tasks Assigned at Previous Board Meetings.
- 11. Discussion and direction on Short-Term and Long-Range Goals.
- 12. <u>District Calendar</u>. Discussion and direction.
 - a. Next Meeting is November 6, 2024.
- Correspondence.
- 14. Approval of Bills.

This agenda shall be made available upon request in alternative formats to persons with a disability, as required by the Americans with Disabilities Act of 1990 (42 U.S.C. § 12132) and the Ralph M. Brown Act (California Government Code §54954.2). Persons requesting a disability related modification or accommodation in order to participate in the meeting should contact Elvia Trujillo at 209/948-8200 during regular business hours, at least forty-eight hours prior to the time of the meeting.

Materials related to an item on this Agenda submitted to the Trustees after distribution of the agenda packet are available for public inspection in the office of the District Secretary at Neumiller & Beardslee, 3121 West March Lane, Suite 100, Stockton, California during normal business hours.

15. Staff Reports.

(a) Attorney. The Agenda for this meeting was posted on the window outside the meeting room at 3121 West March Lane, Stockton, California, at least seventy-two (72) hours preceding the meeting.

16. Adjournment.

This agenda shall be made available upon request in alternative formats to persons with a disability, as required by the Americans with Disabilities Act of 1990 (42 U.S.C. § 12132) and the Ralph M. Brown Act (California Government Code §54954.2). Persons requesting a disability related modification or accommodation in order to participate in the meeting should contact Elvia Trujillo at 209/948-8200 during regular business hours, at least forty-eight hours prior to the time of the meeting.

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AGENDA PACKET RECLAMATION DISTRICT 1608 October 2, 2024

COMMENTARY
Self-explanatory.
Please see attached.
Please see attached.
Please see attached.
Self-explanatory.
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Self-explanatory.
Self-explanatory.

ITEM 2

MINUTES OF THE SPECIAL MEETING OF BOARD OF TRUSTEES FOR RECLAMATION DISTRICT 1608 HELD ON WEDNESDAY, JUNE 26, 2024

A Special Meeting of the Board of Trustees of Reclamation District 1608 was called to order at 8:00 a.m. by President Panzer on June 26, 2024, at the law offices of Neumiller & Beardslee, 3121 W. March Lane, Suite 100, Stockton, California.

TRUSTEES PRESENT
MICHAEL PANZER
DAN MacDONNELL
DOTTIE LOFSTROM

OTHERS PRESENT ANDY PINASCO CHRIS NEUDECK

ABSENT ELVIA TRUJILLO

- 1. **Public Comment.** No public comment.
- 2. Closed Session.
 - a. CONFERENCE WITH LEGAL COUNSEL ANTICIPATED LITIGATION
 Significant exposure to litigation pursuant to paragraph (2) or (3) of subdivision (d) of
 Section 54956.9: One (1) case.
- 3. Adjourn from Closed Session. No reportable action.
- 4. **Adjournment**. The meeting adjourned at 8:42 a.m.

Respectfully submitted,

Elvia C. Trujillo District Secretary

MINUTES OF THE REGULAR MEETING OF BOARD OF TRUSTEES

FOR RECLAMATION DISTRICT 1608 HELD ON WEDNESDAY, SEPTEMBER 4, 2024

A Regular Meeting of the Board of Trustees of Reclamation District 1608 was called to order at 8:00 a.m. by President Panzer on September 4, 2024, at the law offices of Neumiller & Beardslee, 3121 W. March Lane, Suite 100, Stockton, California.

TRUSTEES PRESENT
MICHAEL PANZER
DAN MacDONNELL
DOTTIE LOFSTROM

OTHERS PRESENT
ANDY PINASCO
CHRIS NEUDECK
JOE BRYSON
ELVIA TRUJILLO
KIM FLOYD
DOMINICK GULLI
DREW MEYERS

1. **Public Comment.**

- President Panzer commented residents received the annual flood risk notice from the State.
- 2. **Approval of Minutes**. Minutes of special meeting of July 12, 2024 and regular meeting of August 7, 2024. The Trustees reviewed the draft minutes. After review,

It was moved, seconded (D. Lofstrom/D. MacDonnell) and unanimously carried by the Board Trustees of Reclamation District 1608, that the minutes of the Special Meeting of July 12, 2024 and the Regular Meeting of August 7, 2024, be approved as presented.

3. **Financial Report**. Review, discuss, and accept financial report. District Secretary Elvia Trujillo presented an oral and written report. She also gave an update on the registered warrants with the payoff amount to date. After review,

It was moved, seconded (D. MacDonnell/D. Lofstrom) and unanimously carried by the Board of Trustees of Reclamation District 1608 that the Financial Report presented at the September 4, 2024, meeting be approved.

- 4. **Accounting Software**. <u>Discussion and direction regarding upgrading QuickBooks</u>
 <u>software</u>. Andy Pinasco reported the basic program for QuickBooks does not include the budgeting feature that is needed. It is anticipated there will be an increase in price for the software upgrade that does include the budgeting feature. Staff will look into this and update the Board at the next meeting.
- 5. **Engineer's Report**. Discussion and Possible Action on Engineer's Report.
 - I. PLAN REVIEW.
 - A. Review status of Annual Levee Inspection of the District's Levee system for 2024.

EXHIBIT A: Violation and Remedy Tracking Spreadsheet for 2024.

Chris Neudeck reported there was a follow-up inspection of the levee where it was evident some of the violations had not been remedied. Mr. Neudeck indicated letters would be sent to homeowners that were not in compliance. He added that last year there was almost complete compliance.

- B. <u>Permit Requests from Homeowners</u>.
 - a) 3727 Hatchers Circle Pamela A. Frobus APN 098-020-51

Review of application for the reconstruction and remodel of deck off the back of Ms. Frobus' home. Seek Board of Trustees' approval for this application. KSN Inc. recommends approval.

EXHIBIT A: August 14, 2024, Remove and replace deck on rear of home site remodel.

EXHIBIT B: Plans of Deck replacement along with depiction of prior permitted deck structure.

EXHIBIT C: Original Plans September 1983.

ECHIBIT D: Site Photos of the lot.

District Engineer Chris Neudeck reported this application is for the home of Pam Forbus that is located along 5 Mile Slough. This project will involve reconstruction of the deck for a slight remodel. Mr. Neudeck explained the exhibits and the condition on this property. This application is only for the reconstruction of an existing deck and Mr. Neudeck recommends approval of application. After further discussion,

It was moved, seconded (Lofstrom/D. MacDonnell) and unanimously carried by the Board of Trustees of Reclamation District 1608 to approve the application for 3727 Hatchers Circle for the reconstruction and remodel of existing deck as recommended by the District's Engineer.

C. Review progress of revisions of Levee Encroachment Standards originally adopted in March 21, 1997 including policy for removal of levee slope vegetation and replacing it with gravel by the District.

Chris Neudeck reported he started the process of reviewing the Levee Encroachment Standards and will provide revisions and comments to Andy Pinasco for his review. The next step will be to provide the draft for the Board's review in the next couple of meetings. He indicated it is clear some areas need updating, particularly as to some of the language. However, for the most part, the District will be operating under the same procedures.

II. PROPOSITION 218 – NEW ASSESSMENT PROCEDURE.

A. Review status of planning efforts and development of the Engineers Report.

Attorney Andy Piansco reported KSN, LWA and Kim Floyd continue to work on the new assessment procedure. KSN and LWA are working on the draft engineer's report related to the basis for the assessment and the benefit area. Kim Floyd will be working on the next newsletter that will have information for the homeowners. Former RD 1608 Trustee, Drew Meyers, said it's important to note this assessment is replacing the prior Prop 218 assessment and that it is not a new assessment. There was also discussion related to the timeline of the project. The next step is for the working group to meet with Trustee Lofstrom to address any concerns prior to bringing the report before the Board at the November meeting.

III. LSRFS USACE FUNCTIONAL EQUIVALENT STUDY.

A. Review the status of the requested Functional Equivalent study evaluating the proposed improved levee alignment along RD 1608's levee vs. along RD 2119's levee.

Chris Neudeck provided an update on the proposed improved alternative levee alignment study done by SJAFCA on behalf of RD1608 and RD 2119. The preference is to build on RD 1608 property as this will be the least expensive alternative due to the excellent condition of the levee. There was no action taken on this item.

- 6. **Newsletter.** Discussion and Direction.
 - Andy Pinasco and Kim Floyd reported the goal is to get the next newsletter out the week of October 21st during Flood Awareness Week. They both shared having received positive comments from homeowners expressing the newsletters are very informative.
- 7. **Superintendent Report**. Request for directions and approvals. Levee Superintendent Joe Bryson gave an oral and written report. Mr. Bryson reported also having received positive feedback from the homeowners on the newsletters. There was discussion as to whether contractors should have access to the locks and it was decided District staff, particularly Mr. Bryson, should control access to the levees. Mr. Bryson gave an update on the use of District's utility vehicle and on the considerable amount of time it has saved him and his workers. For a complete list of items reported, please refer to the Levee Superintendent's Report.
- 8. **Meetings.** Report by Trustees on meetings attended and upcoming meetings. Request for direction. No report.
- 9. Report and Possible Action on Progress of Tasks Assigned at Previous Board Meetings. No Report.
- 10. **Discussion and direction on Short-Term and Long-Range Goals.** None
- 11. **District Calendar**. Discussion and direction.
 - a. Next Meeting is October 2, 2024.
 - i. Trustee Lofstrom may have a conflict on the date of the October meeting.
 - ii. Trustees reviewed the District's calendar for the month of October.
- 12. Correspondence.
 - a. Biennial Review and Update of Conflict of Interest Code. Andy Pinasco reported there will be a review of the Conflict of Interest Code to make sure it is up to standards. Any changes will be explained to the Board and, once finalized, it will be sent to the County as they are the custodians of the Conflict of Interest Code. Mr. Pinasco indicated he will have report at next month's meeting.
 - b. Andy Pinasco reported having received notification from DWR for the 2024 Preseason Flood Coordination Meetings. The meeting for San Joaquin County will be taking place on Tuesday, October 8, 2024, at the Robert Cabral Ag Center from 9:00 a.m. to 12:00 p.m. Due to a conflict, Mr. Neudeck will not be able to attend. Mr. Pinasco said all three trustees can attend the meeting and he will be attending provided he has no scheduling conflicts.

13. **Approval of Bills**. District Secretary Elvia Trujillo presented an oral and written report on District expenses. After discussion,

It was moved, seconded (D. Lofstrom/D. MacDonnell) and unanimously carried by the Board of Trustees of Reclamation District 1608 that the list of Bills for Approval provided at the September 4, 2024, Board Meeting be approved as presented and authorized payment of two registered warrants.

- 14. **Staff Reports**. None.
 - (a) Attorney. The agenda for this meeting was posted on the window outside the meeting room at 3121 West March Lane, Stockton, California, at least seventy-two (72) hours preceding the meeting.
- 15. **Adjournment**. The meeting adjourned at 9:21 a.m.

Respectfully submitted,

Elvia C. Trujillo District Secretary

Acronyms Frequently Used

AC Repairs = Asphalt Concrete Repairs

CEQA = California Environmental Quality Act

CVFPB = Central Valley Flood Protection Board

District= Reclamation District 1608

DWR = Department of Water Resources

KSN = Kjeldsen, Sinnock & Neudeck

LWA = Larsen Wurzel & Associates

N&B = Neumiller & Beardslee

Prop 218 = Proposition 218

RD 1608 = Reclamation District 1608

SJAFCA = San Joaquin Area Flood Control Agency

San Joaquin OES: San Joaquin County Office of Emergency Services

USACE = United States Army Corps of Engineers

NAME	Date	INVOICE #	AMOUNT	TOTAL \$	WARRANT#	CHECK #	RATIFICATION
Reclamation District 1608	7/12/2024		\$30,000.00				
(Transfer to Checking Account)				\$30,000.00	6834		X
Michael Panzer (7/12/24 Special Board Mtg)	7/12/2024	Trusteee Fee	\$299.92				
8/7/2024 Regular Board Meeting	8/7/2024		\$299.92				
9/4/2024 Regular Board Meetig	9/4/2024		\$299.92				
				\$899.76	6835		
Dan MacDonnell (7/12/24 Special Board Mtg)	7/12/2024	Trustee Fee	\$299.92				
8/7/2024 Regular Board Meeting	8/7/2024	Trustee ree	\$299.92				
9/4/2024 Regular Board Meetig	9/4/2024		\$299.92				
7/ 1/22 : Hegalai 200. a Heccig	57 17 202 1		720002	\$899.76	6836		
Dettie Lefetere (7/42/946 - 1-10 - 144)	7/2/2024		¢200.02				
Dottie Lofstrom (7/12/24 Special Board Mtg)	7/3/2024	Trustee Fee	\$299.92				
8/7/2024 Regular Board Meeting	8/7/2024		\$299.92				
9/4/2024 Regular Board Meetig	9/4/2024		\$299.92	¢000.7C	6837		
				\$899.76	6837		
Elvia Trujillo (July Services)	9/4/2024	Secretary Fee	\$1,211.65				
7/12/2024 Special Meeting	7/12/2024	Secretary Fee	\$250.00				
August Services	9/4/2024	Secretary Fee	\$633.10				
				\$2,094.75	6838		
PG&E (Stone River)	8/20/2024	2999432760-8	\$50.74				
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		70011	\$50.74	6839		
Neumiller & Beardslee	7/30/2024	349149	\$5,564.20				
Neurinier & Beardsiee	8/23/2024	349894	\$2,119.00				
	8/23/2024	343034	\$2,115.00	\$7,683.20	6840		
W. I.I. 61			40.4=0.1=				
Kjeldsen Sinnock & Neudeck, Inc.	6/30/2024	37954	\$2,153.45				
	6/30/2024	37955	\$1,187.50				
	6/30/2024	37956	\$1,847.50				
	6/30/2024	37957	\$771.78				
	6/30/2024	37958	\$8,413.17				

	6/30/2024	37959	\$4,785.33				
	7/29/2024	38115	\$297.00				
	7/29/2024	38116	\$2,119.75				
	7/29/2024	38117	\$2,102.83				
	7/29/2024	38118	\$1,549.26				
	7/29/2024	38119	\$312.50				
	7/29/2024	38120	\$1,610.75				
	8/26/2024	38357	\$1,456.50				
	8/26/2024	38358	\$625.25				
	8/26/2024	38359	\$176.25				
	8/26/2024	38360	\$222.75				
	8/26/2024	38361	\$410.25				
				\$30,041.82	6841		
Custom Spraying, Inc.	8/23/2024	Nov-90	\$7,000.00				
				\$7,000.00	6842		
Reclamation District 1608	9/4/2024		\$40,000.00				
(Transfer of Funds)				\$40,000.00	6842		
Transfer to Sediment Removal Proj Fund	9/4/2024	For Registered Warrant #6411	\$28,129.71				
				\$28,129.71			
Transfer to Sediment Removal Proj Fund	7/15/2024	For Registered Warrant #6410	\$28,016.27				
				\$28,016.27			
Transfer to Sediment Removal Proj Fund	7/15/2024	For Registered Warrant #6409	\$28,016.27				
				\$28,016.27			
Bank of Stockton	7/22/2024	Registered Warrant No. 6409	\$28,016.27				
(Payment of Registered Warrant 6409)				\$28,016.27	RW6409		
Bank of Stockton	7/22/2024	Registered Warrant No. 6410	\$28,016.27				
(Payment of Registered Warrant 6410)				\$28,016.27	RW6410		
Bank of Stockton	7/22/2024	Registered Warrant No. 6411	\$28,129.79				
(Payment of Registered Warrant 6411)				\$28,129.79	RW6411		
Ctata Campanation Inc.	c /20 /202 4	4002202500	ć1 107 F0	64 407 50		a Charl	
State Compensation Insurance Fund	6/30/2024	1002202590	\$1,197.58	\$1,197.58		e-Check	
State Compensation Insurance Fund	7/30/2024	1002202591	\$2,499.56	\$2,499.56		e-Check	

Bank of Stockton Visa	7/20/2024	5/28/24 - 6/26/24	\$2,847.30	\$2,847.30		Online	
Bank of Stockton Visa	8/20/2024	6/27/24 - 7/26/24	\$2,041.05	\$2,041.05		Online	
on the first transfer of the first			6707.07	4707.07		0 1:	
State of California Payroll Taxes		6/31/24 and 7/15/24 Payroll	\$707.87	\$707.87		Online	
Federal Government Payroll Taxes		6/31/24 and 7/15/24 Payroll	\$3,417.44	\$3,417.44		Online	
State of California Payroll Taxes		7/31/24 and 8/15/24 Payroll	\$868.45	\$868.45		Online	
ederal Government Payroll Taxes		7/31/24 and 8/15/24 Payroll	\$3,988.16	\$3,988.16		Online	
Belkorp Ag	7/12/2024	Receipt #715196	\$17,991.24	\$17,991.24	1628		X
Purchase of Utility Vehicle)	7, ==, === :	11636.pt 117 25 25 0	+ = 7 0 0 = 1 = 1				
loe L. Bryson (Payroll)	7/1/2024	6/1/24-6/30/24	\$5,705.55	\$5,705.55		Direct Deposit	
loe L. Bryson (Payroll)	8/1/2024	7/1/24-7/31/24	\$6,163.90	\$6,163.90		Direct Deposit	
Roger Lamarra (Payroll)	7/1/2024	6/16/24-6/30/24	\$683.16	\$683.16		Direct Deposit	
Roger Lamarra (Payroll)	7/15/2024	7/1/24-7/15/24	\$621.45	\$621.45		Direct Deposit	
Roger Lamarra (Payroll)	8/1/2024	7/16/24-7/31/24	\$801.74	\$801.74		Direct Deposit	
Roger Lamarra (Payroll)	8/15/2024	8/1/24-8/15/24	\$762.20	\$762.20		Direct Deposit	
loe C. Godinez Sr. (Payroll)	7/1/2024	6/16/24-6/30/24	\$672.51	\$672.51		1626	
California State Disbursement Unit	7/1/2024	Child Support	\$330.00	\$330.00		ADP Processed	
(J Godinez Sr. Income Withholding)			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,			
loe C. Godinez Sr. (Payroll)	7/15/2024	7/1/24-7/15/24	\$565.61	\$565.61		1629	
California State Disbursement Unit	7/15/2024	Child Support	\$330.00	\$330.00		ADP Processed	
(J Godinez Sr. Income Withholding)	7/13/2024	сппа зарроге	7550.00	7330.00		ADI TTOCCSSCO	
In C. Codings Cr. (Downell)	0/4/2024	7/45/24 7/24/24	ć77C 00	¢776.00		4.624	
loe C. Godinez Sr. (Payroll) California State Disbursement Unit	8/1/2024 8/1/2024	7/16/24-7/31/24	\$776.99 \$330.00	\$776.99 \$330.00		1631	
Lamornia State Dispursement Unit	8/1/2024	Child Support	\$330.00	\$530.00		ADP Processed	
loe C. Godinez Sr. (Payroll)	8/15/2024	8/1/24-8/15/24	\$496.44	\$496.44		1632	
California State Disbursement Unit	8/15/2024	Child Support	\$330.00	\$330.00			
Cash V. Lucero	7/1/2024	6/16/24-6/30/24	\$301.12	\$301.12		1627	
Cash V. Lucero	7/15/2024	7/1/24-7/15/24	\$691.06	\$691.06		1630	

Cash V. Lucero	8/1/2024	7/1/24-7/31/24	\$684.31	\$684.31	Direct Deposit	
Cash V. Lucero	8/15/2024	8/1/24-8/15/24	\$618.01	\$618.01	Direct Deposit	
		WARRANT TOTAL:		\$117,699.50		
		CHECKING TOTAL:		\$56,422.70		
		TOTAL BILLS PAID		\$174,122.20		

ITEM 3

${\it RECLAMATION~DISTRICT~1608} \\ {\it FINANCIAL~REPORT~-~OCTOBER~2,~2024} \\ {\it \%~OF~FISCAL~YEAR~ELAPSED~THROUGH~END~OF~SEPTEMBER,~2024~-25\%}$

Budget Item	Budget Amount	Expended MTD	Expended YTD	% YTD
Operations & Maintenance Expenses				
O1 Levee Superintendent	\$80,000.00	\$8,574.72	\$25,724.16	32.16%
O2 Part Time Employees	55,000.00	5,735.75	16,215.06	29.48%
O3 Payroll Taxes and Expenses	10,000.00	671.41	1,926.70	19.27%
O4 Fences & Gates	25,000.00	0.00	0.00	0.00%
O5 Locks & Signs	1,000.00	0.00	0.00	0.00%
O6 Weed and Rodent Control & Clean up	10,000.00	0.00	7.000.00	70.00%
O7 Levee Repair Fund (General Operations & Maintenance)	30,000.00	2,213.76	3,894.09	12.98%
O8 Levee Repair Fund (Levee Capital Improvement Projects)	50,000.00	0.00	0.00	0.00%
O9 Pump System Maintenance	1.000.00	24.77	75.51	7.55%
O10 Wireless Services (Cell and Mobile Computer)	1,000.00	719.04	1,598.42	159.84%
O11 Garbage Service	5,000.00	490.59	1,048.49	20.97%
O12 District Vehicle (Fuel, Maintenance and Repairs)	5,000.00	864.49	19,030.56	380.61%
TOTAL	\$273,000.00	\$19,294.53	\$76,512.99	28.03%
General Expenses	Ψ210,000.00	ψ10,204.00	Ψ10,012.00	20.00 /0
G1 Trustee Fees	\$13,000.00	\$899.76	\$3,599.04	27.68%
G2 Secretary Fees	12,500.00	1,363.90	3,458.65	27.67%
G3 Office Expenses (incudes storage facility)	1,000.00	1,000.00	1,000.00	100.00%
G4 General Legal	30,000.00	2,228.64	9,911.84	33.04%
G5 Audit	5.500.00	0.00	0.00	0.00%
G6 County Administration Costs	6,000.00	0.00	0.00	0.00%
G7 Property and Liability Insurance	24,000.00	0.00	0.00	0.00%
G8 Workers Compensation Insurance	10,000.00	1,197.58	4,894.72	48.95%
G9 Election Costs	0.00	0.00	0.00	0.00%
G10 Newsletters & Public Communications	0.00	0.00	0.00	0.00%
TOTAL	\$102,000.00	\$6,689.88	\$22,864.25	22.42%
Deby Service				
D1 Registered Warrant Expense	\$112,000.00	\$0.00	\$56,032.54	50.03%
Σ	\$112,000.00	\$0.00	\$56,032.54	50.03%
Engineering Expenses				
E1 General Engineering	\$20,000.00	\$1,882.25	\$12,908.03	64.54%
E2 Plan Review Engineering	25,000.00	3,961.85	4,184.60	16.74%
E3 Administration of Delta Levee Subventions Program	20,000.00	4,763.96	10,543.96	52.72%
E4 Periodic Levee Property Inspections and Surveys	7,500.00	0.00	0.00	0.00%
E5 Routine Levee Maintenance Consultation	3,500.00	307.25	307.25	8.78%
E6 Engineering, Mgmnt & Inspection of Capital Imp. Projects	10,000.00	0.00	0.00	0.00%
E8 Assessment Engineering	4,000.00	0.00	3,050.86	76.27%
E9 Assessent Development	250,000.00	445.50	10,407.93	<u>4.16%</u>
TOTAL	\$340,000.00	\$11,360.81	\$41,402.63	12.18%
TOTAL EXPENDITURES	\$827,000.00	\$37,345.22	\$140,779.87	17.02%

Budget Item	Anticipated Income	Income MTD	Income YTD	% YTD
-		2		70 1 1 2
Income	4000 000 00	A- 040 4-	4-0404-	o
Property Taxes	\$260,000.00	\$5,648.47	\$5,648.47	2.17%
Interest Income	4,000.00	0.00	6,018.00	150.45%
Assessments	298,000.00	0.00	0.00	0.00%
Subvention Reimbursement	306,000.00	0.00	0.00	0.00%
Other	0.00	0.00	0.00	0.00%
Totals	\$868,000.00	\$5,648.47	\$11,666.47	1.34%
Cash On Hand Cash Balance as of July 1, 2024 Revenues (YTD), as of August 31, 2024 Expenses (YTD), as of August 31, 2024			\$625,605.58 11,666.47 97,785.62	
Fund Balance as of September 24, 2024			\$430,586.37	
Proposed Warrants for 10/2/2024 Board Meeting			\$44,802.88	
TOTAL CASH			\$385,783.49	
Checking Account Balance as of September 22, 2024			\$36,835.18	
TOTAL CASH ON HAND			\$422,618.67	
Reserves Board-Designated Reserve (For District Operations Only)			100,000.00	

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SEDIMENT REMOVAL PROJECT 2020 - REGISTERED WARRANTS PAYMENT INFORMATION

Date	Check No.	Description	Deposit	Withdrawal	Balance
		Bank of Stockton Check Payable to RD 1608 (For registered warrants: 6392, 6393, 6394, 6395,			
		6396, 6397, 6398, 6399, 6400, 6401, 6402, 6403, 6404, 6405, 6406, 6407, 6408, 6409, 6410, 6411			
11/5/2020		at \$25,000.00 each)	\$500,000.00		\$500,000.00
11/9/2020		Dixon Marine Services Progress Pay #4	ć02.00	\$489,751.63	\$10,248.37
1/21/2021		Interest	\$83.00		\$10,331.37
		Bank of Stockton Check Payable to RD 1608 (For registered warrants: 6455, 6456, 6457, 6458,			
3/3/2021	2138247	6459, 6460, 6461, 6462, 6463, 6464, 6465, 6466, 6467, 6468, 6469 at \$25,000.00 each)	\$375,000.00		\$385,331.37
3/8/2021		Port of Stockton Invoice Invoice 01-9012-2021 for Dredge Disposal		\$375,444.40	\$9,886.97
4/30/2021		Interest	\$121.00		\$10,007.97
7/31/2021		Interest Transfer from General Fund to Sediment Removal Fund	\$31.00 \$16,000.00		\$10,038.97 \$26,038.97
11/5/2021		Payment of Registered Warrant #6392 for \$25,812.50	\$10,000.00	\$25,812.50	\$20,038.97
10/31/2021		Interest	\$8.00	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$234.47
1/5/2022		Transfer from General Fund to Sediment Removal Fund	\$25,950.00		\$26,184.47
1/7/2022		Payment of Registered Warrant #6393		\$25,952.74	\$231.73
2/2/2022		Transfer from General Fund to Sediment Removal Fund	\$26,015.07	¢26,024,75	\$26,246.80
2/7/2022 1/31/2022		Payment of Regisered Warrant #6394 Interest	\$6.00	\$26,021.75	\$225.05 \$231.05
3/2/2022		Transfer from General Fund to Sediment Removal Fund	\$26,077.40		\$26,308.45
3/7/2022		Payment of Registered Warrant #6395	7=0,00000	\$26,084.08	\$224.37
4/6/2022		Transfer from General Fund to Sediment Removal Fund	\$26,155.31		\$26,379.68
4/11/2022		Payment of Registered Warrant #6396		\$26,161.99	\$217.69
4/30/2022		Interest	\$4.00		\$221.69
5/11/2022 5/16/2022		Transfer from General Fund to Sediment Removal Fund	\$26,239.90	¢26,220,00	\$26,461.59 \$221.69
6/1/2022		Payment of Registered Warrant #6397 Transfer from General Fund to Sediment Removal Fund	\$26,286.64	\$26,239.90	\$26,508.33
6/6/2022		Payment of Registered Warrant #6398	720,200.01	\$26,286.64	\$221.69
7/6/2022		Transfer from General Fund to Sediment Removal Fund	\$26,364.55	, ,	\$26,586.24
7/11/2022		Payment of Registered Warrant #6399		\$26,364.55	\$221.69
7/31/2022		Interest	\$15.00		\$236.69
8/3/2022		Transfer from General Fund to Sediment Removal Fund	\$26,426.88	¢26,424,24	\$26,663.57
8/10/2022 9/7/2022		Payment of Registered Warrant #6400 Transfer from General Fund to Sediment Removal Fund	\$26,504.79	\$26,431.34	\$232.23 \$26,737.02
9/12/2022		Payment of Registered Warrant #6401	720,304.73	\$26,498.12	\$238.90
10/5/2022		Transfer from General Fund to Sediment Removal Fund	\$26,560.45	, ,, ,,	\$26,799.35
10/10/2022		Payment of Registered Warrant #6402		\$26,567.12	\$232.23
10/31/2022		Interest	\$32.00		\$264.23
11/2/2022		Transfer from General Fund to Sediment Removal Fund	\$26,629.45	¢20 020 42	\$26,893.68
11/10/2022		Payment of Registered Warrant #6403 Transfer from General Fund to Sediment Removal Fund	\$26,707.36	\$26,636.13	\$257.55 \$26,964.91
12/14/2022		Payment of Registered Warrant #6404	720,707.30	\$26,711.82	\$253.09
1/4/2023		Transfer from General Fund to Sediment Removal Fund	\$26,769.69	, ,,	\$27,022.78
1/9/2023		Payment of Registered Warrant #6405		\$26,774.14	\$248.64
1/31/2023		Interest	\$81.00		\$329.64
2/1/2023		Transfer from General Fund to Sediment Removal Fund	\$26,832.02	¢26.025.24	\$27,161.66
2/3/2023 2/28/2023		Payment of Registered Warrant #6406 Auditor A/P Charges		\$26,825.34 \$192.00	\$336.32 \$144.32
3/1/2023		Transfer from General Fund to Sediment Removal Fund	\$26,894.35	7152.00	\$27,038.67
3/6/2023		Payment of Registered Warrant #6407	, 1,2233	\$26,894.35	\$144.32
4/30/2023		Interest	\$76.00	\$0.00	\$220.32
7/31/2023		Interest	\$1.00		\$221.32
9/6/2023		Transfer from General Fund to Sediment Removal Fund	\$27,315.07	627.245.65	\$27,536.39
9/11/2023		Payment of Registered Warrant #6408 Interest	\$21.00	\$27,315.07	\$221.32 \$242.32
1/31/2024		Interest	\$3.00		\$245.32
2/29/2024		Auditor A/P Charges	75.50	\$211.00	\$34.32
4/30/2024		Interest	\$2.00		\$36.32
7/15/2024		Transfer from General Fund to Sediment Removal Fund	\$28,009.59		\$28,045.91
7/22/2024		Payment of Registered Warrant #6409	400	\$28,016.27	\$29.64
7/15/2004		Transfer from General Fund to Sediment Removal Fund	\$28,009.59	20016.27	\$28,039.23
7/22/2024 9/4/2024		Payment of Registered Warrant #6410 Transfer from General Fund to Sediment Removal Fund	\$28,129.79	28016.27	\$22.96 \$28,152.75
9/11/2024		Payment for Registered Warrant #6411	720,123.73	\$28,134.25	\$28,132.73
10/2/2024		Transfer from General Fund to Sediment Removal Fund	\$27,925.00		\$27,943.50
10/7/2024		Payment of Registered Warrant #6455		\$27,925.00	\$18.50

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SEDIMENT REMOVAL PROJECT 2020 REGISTERED WARRANTS - 10/02/2024 BOARD MEETING

WARRANT DATED	REGISTERED WARRANT #	DATE REGISTERED	FOR PAYMENT OF	PRINCIPAL AMOUNT	INTEREST RATE	TOTAL INTEREST TO DATE	TOTAL PAYOFF AMOUNT	DATE CALLED
11/04/20	6392	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$812.50	\$25,812.50	11/5/2021
11/04/20	6393	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$952.74	\$25,952.74	1/7/2022
11/04/20	6394	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,021.75	\$26,021.75	2/7/2022
11/04/20	6395	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,084.08	\$26,084.08	3/7/2022
11/04/20	6396	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,161.99	\$26,161.99	4/11/2022
11/04/20	6397	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,239.90	\$26,239.90	5/16/2022
11/04/20	6398	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,286.64	\$26,286.64	6/6/2022
11/04/20	6399	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,364.55	\$26,364.55	7/11/2022
11/04/20	6400	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,431.34	\$26,431.34	8/10/2022
11/04/20	6401	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,498.12	\$26,498.12	9/12/2022
11/04/20	6402	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,567.12	\$26,567.12	10/10/2022
11/04/20	6403	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,636.13	\$26,636.13	11/10/2022
11/04/20	6404	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,711.81	\$26,711.81	12/14/2022
11/04/20	6405	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,774.14	\$26,774.14	1/11/2023
11/04/20	6406	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,825.34	\$26,825.34	2/3/2023
11/04/20	6407	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$1,894.35	\$26,894.35	3/6/2023
11/04/20	6408	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$2,315.07	\$27,315.07	9/11/2023
11/04/20	6409	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$3,016.27	\$28,016.27	7/22/2024
11/04/20	6410	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$3,016.27	\$28,016.27	7/22/2024
11/04/20	6411	11/05/20	Dixon Marine Progress Pay #4	\$25,000.00	3.25%	\$3,134.25	\$28,134.25	9/13/2024
				\$500,000.00		\$33,744.35	\$533,744.35	
03/03/21	6455	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	10/7/2024
03/03/21	6456	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6457	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6458	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6459	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6460	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6461	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6462	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6463	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6464	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6465	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6466	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6467	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6468	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
03/03/21	6469	03/03/21	Port of Stockton	\$25,000.00	3.25%	\$2,925.00	\$27,925.00	
	LEGEND			\$375,000.00		\$43,875.00	\$418,875.00	
	PAID			Registered Warrants		Interest	Principal + Interest	
	PROPOSED		Subtotals	\$875,000.00		\$77,619.35	\$952,619.35	
			Total Amount Paid to Date	\$500,000.00		\$33,744.35	\$533,744.35	
			Total Remaining Due as of 10/2/24	375,000.00		\$43,875.00	\$418,875.00	

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ITEM 4

RECLAMATION DISTRICT NO. 1608 RESOLUTION 2024-05

RESOLUTION REVIEWING THE CONFLICT OF INTEREST CODE FOR 2024

WHEREAS, the Political Reform Act of 1974, Government Code Section 81000 et seq., and Government Code Section 87311 requires state and local government agencies to adopt and amend a Conflict of Interest Code as necessary; and

WHEREAS, the Fair Political Practices Commission has adopted a regulation found at California Code of Regulations, Title 2, Section 18730, which contains the terms of a standard Conflict of Interest Code which may be adopted by reference; and

WHEREAS, it is necessary to review the Conflict of Interest Code to reflect the current biennial adjustment to the gift reporting limit.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors reviewed the Conflict of Interest Code as set forth in the attached Conflict of Interest Code.

PASSED AND ADOPTED by the Board of Trustees of Reclamation District No. 1608 at a meeting thereof held on this 2nd day of October 2024, by the following vote, TO WIT:

AYES:	
NOES:	
ABSTENTION:	
ABSENT:	- <u></u> -
	[Signatures on next page]

RECLAMATION DISTRICT NO. 1608 A Political Subdivision of the State of California

	D
	By: MICHAEL PANZER, President
ATTEST:	
ELVIA TRUJILLO, Secretary	
	CERTIFICATION
the foregoing is a full, true and correct of	of Reclamation District No. 1608, do hereby certify that copy of a resolution of Reclamation District No. 1608 teting of the Board of Trustees thereof held on the 2 nd day
Dated:, 2024.	
	ELVIA TRUJILLO, Secretary Reclamation District No. 1608

APPENDIX A DESIGNATED POSITIONS

Designated Positions	Disclosure Categories
-	_
Trustees	ALL
Secretary of the Board	ALL
Attorney	ALL
Engineers	ALL
Consultants*	ALL

*Consultants shall be included in the list of designated employees and shall disclose pursuant to the broadest disclosure category in the code, subject to the following limitation: The President of the Board may determine in writing that a particular consultant, although a "designated position," is hired to perform a range of duties that is limited in scope and this is not required to fully comply with the disclosure requirements described in this section. Such a written determination shall include a description of the consultant's duties and based upon that description, a statement of the extent of disclosure requirements. The President'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.

DISCLOSURE CATEGORIES

All investments and business positions in business entities, and all sources of income and interests in real property as set forth below. This category is known as full disclosure.

- 1. Investments in or income from persons or businesses engaged in the business of providing service or supplies, including, but not limited to, equipment; machinery, or office supplies, to Reclamation District 1608, or could foreseeably provide services or supplies to Reclamation District 1608.
- 2. Interests in real property located in whole or in part within the boundaries of Reclamation District 1608, or within a two-mile radius of Reclamation District 1608, including any leasehold, beneficial or ownership interest or option to acquire such interest in real property if the fair market value of the interest is greater than \$2,000.00.
- 3. Business positions, including, but not limited to, status as a director, officer, sole owner, partner, trustee, employee, or holder of a position of management in any business entity which, in the prior two years had contracted with, or in the future may contract with Reclamation District 1608 to provide services or supplies to Reclamation District 1608.
- 4. Gifts received from any single source or person with a single gift value more than \$50 as well as gifts with a cumulative total of \$500 or more received in a 12 month period, as well as gifts required to be disclosed in the annual statement required in Government Code Section 87302.

ITEM 6





LARSEN WURZEL & Associates, Inc.

Reclamation District 1608

Maintenance and Capital Services Assessment

PUBLIC DRAFT PRELIMINARY ENGINEER'S REPORT

Prepared for: RD 1608

Submission Date: September 26, 2024

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1. INTRODUCTION

Background

Reclamation District 1608 (RD 1608 or District) was formed in 1914 and is an independent reclamation district which, in general, covers the area of Lincoln Village West in the northwest portion of Stockton, California. RD 1608 is bordered by waterways on three sides. To reduce the chance of flooding, RD 1608 operates and maintains (O&M) three and a half miles of levees along Fourteen Mile and Five Mile Sloughs and various drainage facilities to maintain flood control in Lincoln Village West (**Figure 1**). The District is governed by a three-member Board of Trustees comprised of property owners from within the District.

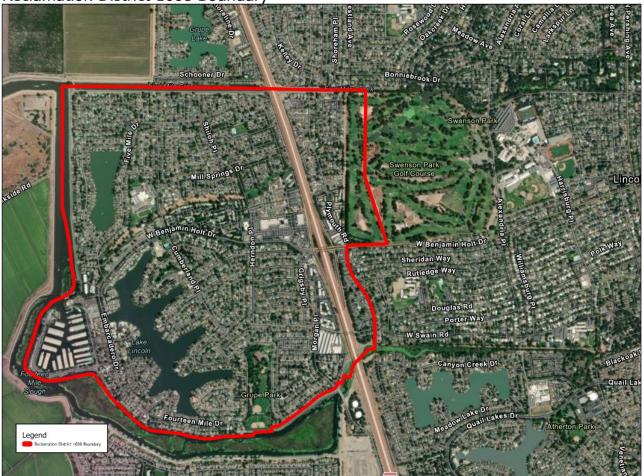
After a successful Proposition 218 ballot proceeding in 2010, RD 1608 approved a fifteen-year assessment to fund a portion of ongoing operations, maintenance, capital projects, and assessment administration costs (the "2010 Assessment"). The 2010 Assessment totaled \$298,830.64 per year for each of the fifteen years, ending with the final year's levy being fiscal year (FY) 24/25. Property assessments represent a critical revenue source to the District, representing approximately 45% of its total revenue sources (estimated FY24/25). RD 1608 also receives a portion of ad valorem property taxes collected by the County ("Property Taxes") as well as funding from the State of California through its Delta Levees Maintenance Subventions Program ("Subventions Funding").

The purpose of this Engineer's Report is to authorize the levy of a new assessment to replace the sunsetting 2010 Assessment. RD 1608 proposes to levy a new assessment, the RD 1608 Maintenance and Capital Services Assessment, in perpetuity, to fund maintenance and additional capital improvements to the levee system over time (the "MCSA" or "Proposed Assessment").



Figure 1 Reclamation District 1608 Map

Reclamation District 1608 Boundary







Purpose of this Engineer's Report

Because the 2010 Assessment sunsets in 2025, RD 1608 must approve a new assessment to collect revenue from property owners within the District for continued operations, maintenance, and capital project services. The 2010 Assessment and the Proposed Assessment represent a significant portion of its annual budget, without which RD 1608 would be unable to provide the same level of flood risk reduction benefits to properties within the District.

This Engineer's Report describes, in detail, the methodology for levying the Proposed Assessment upon parcels that receive special benefit from the services as defined within this Engineer's Report. In combination with its other sources of revenue, Property Taxes and Subventions Funding, the MCSA is intended to provide sufficient funding for annual O&M services necessary to maintain levees and drainage facilities, establish a reserve fund to support routine repairs, rehabilitation, and replacement of the infrastructure, capital improvement projects (Services) within and associated with the District's facilities.

Report Organization

This report is divided into six sections with tables and a section for figures as well as four appendices, all described further below.

Section1 provides the background, purpose of this Engineer's Report, and describes the report's organization.

Section 2 outlines the authorization and process for levying the Proposed Assessment.

Section 3 details the Services provided and funding plan for those Services.

Section 4 details the methodology for levying an assessment that is proportional to the special benefits received by each parcel assessed.

Section 5 describes the annual assessment administration process.

Section 6 Provides the special benefit findings and certification by the Assessment Engineer as required by Article XIIID Section 4 (b) of California Constitution.

Appendix A provides a cash flow model for RD 1608 prepared by Larsen Wurzel & Associates.

Appendix B provides the reference to San Joaquin River Delta Base Flood Elevation Refinement Stage Frequency Analysis, Peterson Brustad, Inc, September 2, 2010.

Appendix C provides the proposed assessment district boundary.

Appendix D provides the list of the County Assessor's use codes and identifies the assignment of Land Use Categories for use as part of the assessment methodology described herein.



Reclamation District 1608 Maintenance and Capital Services Assessment Public Draft Preliminary Engineer's Report September 26, 2024

Appendix E provides the list of parcels by reference to assessor parcel number (APN) subject to the Proposed Assessment as well as a schedule of the proposed assessment amounts for FY 2025/2026 (the initial maximum annual assessment roll for assessment balloting purposes).¹



¹ The proposed Assessment Roll included with **Appendix E** is reflective of the Record Owners of parcels as defined by Government Code 53753 (j) which is based upon the last equalized secured property tax assessment roll. The last equalized secured property tax assessment roll of San Joaquin County prior to the mailing of the notice is the 2024 roll (as of lien date July 1, 2024). The 1st year of the assessments collection will be fiscal year 2025/26 and thus reflective of July 1, 2025 equalized secured property tax assessment roll. RD 1608 will be responsible for applying the assessment methodology described in this Engineer's Report to the 2025 roll and updating the roll presented in **Appendix E** for the levy of the assessment in fiscal year 2025/26.



2. AUTHORITY AND PROCESS

RD 1608 would impose the MCSA pursuant to the authority of Government Code §54703 – 54719, the Benefit Assessment Act of 1982 (1982 Act), and consistent with the requirements of Article XIIID of the California Constitution² (Proposition 218), Government Code §53750 et. seq. (Proposition 218 Omnibus Implementation Act). Specifically, Government Code §54710(a) of the 1982 Act authorizes RD 1608 to levy an assessment to fund the Operations & Maintenance (O&M) costs for levees. Furthermore, under Government Code §54710.5, the assessment may include the cost of installation and improvement of the levees. As further detailed herein, the Proposed Assessment will fund portions of annual O&M services, establish a reserve fund to support routine repairs, rehabilitation, and replacement of the infrastructure, and capital improvement projects.

Government Code §54711, requires that:

- 1. The amount of the assessment imposed on any parcel be related to the benefit received by the parcel;
- 2. The aggregate amount of the annual assessment not exceed the estimated annual cost of providing the service; and
- 3. The revenue derived from the assessment be used only for the services identified as the basis for assessment.

In addition, all special benefit assessments must also comply with Proposition 218 and the Proposition 218 Omnibus Implementation Act. These requirements outline the process for imposing the Proposed Assessment, including the requirement that this Engineer's Report document the special benefits conferred by the service provided, the process for imposing the Assessment, and property owner approval through a balloting process.

This Engineer's Report has been prepared to:

- 1. Contain the information required pursuant to Government Code §54716(a), including;
 - a. a description of the services proposed to be financed through the revenue derived from the Proposed Assessment;
 - b. a description of each lot or parcel of property to be subject to the Proposed Assessment;
 - c. the amount of the Proposed Assessment for each lot or parcel;
 - d. the basis of the Proposed Assessment; and,
 - e. the schedule of the Proposed Assessment;
- 2. Determine the special benefits from the services received by benefiting properties; and,
- 3. Assign a method of apportioning the Proposed Assessment to benefiting parcels.

² Article XIIID of the California Constitution is a portion of the California constitution added by Proposition 218 that addresses the requirements of benefit assessments and is applicable here.



Reclamation District 1608 Maintenance and Capital Services Assessment Public Draft Preliminary Engineer's Report September 26, 2024

Following submittal of this report to the RD 1608 Board of Trustees (Board) for preliminary approval, the Board may, by resolution, call for an assessment ballot proceeding and public hearing on the establishment of the Proposed Assessment.

If the Board approves such a resolution, the RD 1608 staff will initiate the notice, protest, and hearing procedure required by Government Code §54716 and Article XIIID. A notice, voting guide, and assessment ballot will be mailed to all property owners within the Proposed Assessment Boundary. Such notice will include a description of the services to be funded, the total Proposed Assessment amount, the Proposed Assessment amount for each parcel owned, the duration of the Proposed Assessment, an explanation of the method of voting, and the name and telephone number of the person designated by the Board to answer inquiries regarding the Proposed Assessment and ballot proceeding process. Each notice will specify the date, time, and place of the public hearing and a summary of the ballot return procedures. Each notice will include a ballot upon which the property owner can vote for approval or disapproval of the Proposed Assessment and affix his or her signature. Finally, each notice will include an official postage prepaid security envelope in which the ballot must be returned.

The balloting and notice period will extend for a minimum of 45 days. Government Code 53750 (i) deems that notice is given and the 45-day period commences upon the deposit of the notice and ballot with the United States Postal Service. On the last day of the balloting period, the public hearing will be held for the purpose of receiving public testimony from property owners regarding the Proposed Assessment. Property owners will have the opportunity to provide testimony to the Board and submit their ballots at the public hearing, however, in order to be included within the tabulation, all ballots must be submitted prior to the close of the public hearing. At the public hearing, and at any time prior to the close of the public hearing, property owners may also revise previously submitted ballots.

If the votes received in favor of the Proposed Assessment, weighted by the proportional financial obligation of the properties for which the ballots are submitted, outweigh the votes received opposing the Proposed Assessment, then the Board may continue with the formation of the Proposed Assessment district, the process of imposing the Proposed Assessment and its future levy. If the assessments are so confirmed and approved by the Board, the assessment roll will be submitted to the San Joaquin County Auditor Controller for inclusion on the secured property tax rolls or may be directly billed by RD 1608 to the property owner for the assessment pursuant to Government Code §54718. As outlined in Government Code §53739, the Board may levy the Proposed Assessment in future years without conducting a new ballot proceeding so long as the assessment is within the stated inflation-adjusted assessment rate authorized by the original balloting proceeding.



3. PROPOSED SERVICES AND FUNDING PLAN

Services Funded by the Proposed Assessment

The services to be funded by the Proposed Assessment include operation, maintenance, and capital project services that are required to ensure that the design level of flood protection is maintained over time. Collectively these services are herein referred to as "Services."

The specific O&M activities may include, but are not limited to levee inspections and evaluations, debris cleanup, spraying for weed control, rodent control, levee patrols during warning and flood stages, encroachment permitting and compliance monitoring, resurfacing of levee roads when required to keep them passable for patrolling and maintenance purposes, replacing erosion protection materials as needed, in-channel vegetation and capacity management, repair of the embankment to ensure levee integrity, and general operations and administration of the agency required to provide flood protection services.

Additionally, Services include capital projects to ensure continued flood risk reduction levels are achieved. The Proposed Assessment, in combination with the District's other revenue sources, will also provide for reserves to support capital projects, for emergency response and preparedness services, routine repair, rehabilitation, and replacement of facilities in order to ensure an adequate level of services over the duration of the Proposed Assessment. The Proposed Assessment would be levied in perpetuity so long as Services are provided.

Annual Expenditures for Services

RD 1608 has prepared a summary of costs for the operations, maintenance, repair, capital replacement, rehabilitation, emergency response/repair, and associated reserves of the flood risk reduction system. The estimated annual cost to provide these Services is approximately \$676,000. The RD 1608 annual expenditures are shown for FY 25/26 in **Table 1**. These costs were determined based on historical expenses, previously used financing approaches (i.e. bank warrants), and reserve requirements over the long term, and anticipated changes over time.

General and Administrative, Engineering, Operations and Maintenance, Capital Improvement Projects for repairs, replacements and rehabilitation are anticipated to remain similar over time, adjusted for inflation.

The warrant expenses shown will service new warrant debt issued in FY24/25 and due no later than FY28/29. This expenditure line-item will change over time as debt is retired and new debt is issued.

Similarly, the emergency reserve set-aside expense is a function of available cash and anticipated future expenses. RD 1608 targets a reserve balance of two times annual expenditures, with annual reserves set-aside subject to available cash and anticipated near-term cash flow. Although the FY25/26 budget reflects a contribution of \$15,000, the RD ideally would contribute \$100,000 annually, escalated over time.

Future annual expenses and the approved RD 1608 budget may vary from year to year according to actual anticipated expenses and revenues.



Proposed Budget and Assessment Revenue

Aside from the Proposed Assessment, RD 1608's primary sources of revenues are used to offset its expenses are: 1) subventions reimbursements from the State of California and 2) San Joaquin County Property Tax revenues apportioned to RD 1608.

The State of California subventions reimbursements are estimated to be \$150,000 annually and are provided based on costs incurred to operate and maintain the levee system. Property tax apportionments are budgeted at \$191,000 (FY25/26 estimates), after reserving funds for general benefits and special benefit services received by those properties outside of the RD 1608 jurisdictional boundary.

Net revenues from the two sources discussed above can be used for a variety of costs incurred by the District, such as financing capital works, costs associated with the Services under this Proposed Assessment, or for other uses deemed necessary by and within the authority of RD 1608. **Table 2** shows that a Proposed Assessment of \$330,000 is required to provide Services defined in this report. For the purpose of ensuring sufficient revenues to cover costs over time, the Assessment Engineer prepared a cash flow model, which is made available in **Appendix A** for reference.



Table 1 RD 1608 FY 25/26 Expenditure Estimate

Budget Item/Category		FY 2025/26 Expenditures [1]	
Expenditures			
General & Administrative		\$150,000	
Operations and Maintenance	[2]	\$318,000	
Capital Projects	[3]	\$57,000	
Debt Service Expense	[4]	\$136,000	
Emergency Reserve Expense	[5]	\$15,000	
Total Expenditures		\$676,000	

- [1] Expected budget for FY 25/26; Future years may differ; RD will balance cash flow and budget projections into future by: 1) using annual fund balance, 2) accruing/expending emergency reserve balance, 3) making payment on financing (warrant or capital debt service).
- [2] Operations, maintenance, inspections, engineering, environmental compliance, planning, subventions administration, small repairs/replacements, emergency operations planning, etc.
- [3] Capital requirements for repair, replacement and rehabilitation.
- [4] RD historically has utilized bank warrants to cover short term cash flow requirements. RD anticipates utilizing a \$450k warrant in FY 24/25 for this same reason and a payback set-aside budget is shown here over a four year period (assume balloon payment at end of year 4 and no interest savings benefit to early pay-off). Upon retiring debt, budget expense will go to increase emergency reserve set aside or paygo or future debt needs.
- [5] Target fund is two times annual expenditures with an annual set aside based on annual cash-flow availability. As debt is retired, emergency reserve set-aside expense will increase.

Source: RD 1608 and LWA



Table 2 RD 1608 FY 25/26 Estimated Budget

Budget Item/Category	FY 2	2025/26 Budget
Total Expenditures		\$676,000
Revenue		
Property Tax Apportionment Interest Income	[1]	\$191,000 \$5,000
Subvensions Reimbursements	[2]	\$150,000
Proposed Assessment	[3]	\$330,000
Total Revenue Sources		\$676,000

^[1] Net tax apportionment used, after accounting for the general benefit and special benefit services outside of the RD.

Source: RD 1608 and LWA



^[2] The Delta Levee Subventions Program, AB 360, assumes that the program will continue to be funded well into the future for reimbursement of certain portions of Levee related expenses.

^[3] Proposed Assessment amount determined based on revenue required to cover expenses.

4. ASSESSMENT METHODOLOGY

General Discussion

Requirements of Proposition 218

To levy an assessment for a service that provide a property related benefit such as flood control, Proposition 218 has certain substantive requirements that the local agency must comply with. The local agency must:

- Separate the general benefits provided by service(s) from the special benefits conferred on a parcel;
- Identify the parcels that have special benefits conferred on them by the facility and/or service;
- Calculate the proportionate special benefit for each parcel in relation to the entirety of the benefits provided by services being funded;
- Apportion the costs of services to each parcel that receives special benefit in relation to that proportion; and
- Ensure that the total assessment levied does not exceed the reasonable cost of the proportionate special benefit conferred on each parcel.

Special Benefits vs. General Benefits

Proposition 218 requires any local agency proposing to increase or impose a special assessment to "separate the general benefits from the special benefits conferred on a parcel." (Cal. Const. art. XIIID §4). The rationale for separating special and general benefits is to ensure that property owners are not charged a special benefit assessment in order to pay for general benefits provided to the properties or general public at large. Thus, a local agency carrying out a project that provides both special and general benefits may levy an assessment to pay for the special benefits but must acquire separate funding to pay for the general benefits.³

A special benefit is a particular and distinct benefit over and above the general benefits conferred on real property located within the agency's boundary or to the public at large. The total cost of the services must be apportioned among the properties being assessed based on the proportionate special benefit the properties will receive. Moreover, the governmental agency must demonstrate through a balloting process that the ballots submitted in opposition to the assessment do not exceed the ballots submitted in favor of the assessment, weighted according to the proportional special benefit and financial obligation of the affected properties.

Because flood control work has an obvious indirect relationship to the provision of general benefits and may, upon first blush, appear to be general benefits, the issue of general benefits merits further discussion. For example, the facilities to be funded by the assessment will protect parks that are used by people regardless of whether they own property within the floodplain or not (the general public). But this indirect relationship does not mean that these facilities or services will themselves provide any general

³ Silicon Valley Taxpayers' Assn., Inc. v. Santa Clara County Open Space Authority, (2008) 44 Cal. 4th 431, 450.



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benefits. Rather, they will provide special benefits to all parcels within the floodplain, including special benefits to public parcels (such as parks) that are themselves used in the provision of general benefits.

More to the point, the public at large will be paying for the special benefits provided to public property, and specially benefited property owners' assessments will not be used to subsidize general benefits provided to the public at large or to property outside the district. All property that is specially benefited will be assessed, including schools, parks and other parcels used in the provision of general benefits. Assessing agencies are required to assess and levy the assessment on all specially benefited property, including publicly owned property, within the assessment district. Thus, the general public will pay for the provision of flood control services because the assessed public agencies within the assessment district will use general taxes or other revenues to pay their assessments.

In this instance, the Services provide both a general benefit to the public at large and a special benefit to those properties located within the boundaries of the inundation area by virtue of preventing flood waters due to uncontrolled flood from collecting on or flowing over a parcel and causing damages. The special benefits provided by the services have been calculated for all parcels within the boundaries of the benefit area. The boundaries of the benefit area consist of only those parcels within the levee protected area and inundated by floodwaters as modeled herein.

The special benefit provided to each parcel varies based on the relative avoided damage from flooding. The relative avoided flood damages are based on an uncontrolled flood resulting from a breach along the levee system. The avoided flood damages are a function of parcel size, land use and the depth of flooding from the modeled breach scenario.

As noted above, special benefits are those "particular and distinct over and above general benefits conferred on real property located in the district or to the public at large." Cal. Const. art. XIIID §2(i). By contrast, general benefits provided to the public at large could be discussed in terms of general enhanced property values, provision of general public services such as police and fire protection and recreational opportunities that are available to people regardless of the location of their property. See e.g., Cal. Const. art. XIIID §§2(i), 6(2)(b)(5); Silicon Valley Taxpayers, 44 Cal. 4th 431. 450–56. In this case, general benefits can be identified as the ability to move through and across the benefited area. The following considerations were evaluated to distinguish the general benefits by the Services.

Public Property

The Services will protect certain public properties (e.g., government buildings, schools, and parks). While the use of these public properties is a general benefit, the public properties themselves are protected by the flood protection system and receive a special benefit from the Services in the same manner as private property. All public properties have been included in the determination of special benefit, as described in more detail under the Assessment Apportionment Methodology below. With the exception of Federal Properties, there is no general benefit for Non-Federal public properties to be funded by the Proposed

⁴ Reference Cal. Const. art. XIIID §4(a) with respect to the requirement to assess and *Manteca Unified School District v. Reclamation District No. 17 (2017) 10 Cal.App.5th 730* with respect to the requirement to levy.



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Assessment because the public properties will be assessed based on the special benefit received. Federal properties are exempt from paying an assessment levied by a local agency, but no Federal Properties were found within this benefit area.

Local Streets and Collectors

The Services will protect certain local streets and collectors. These roads are primarily used to access properties, as opposed to thoroughfares discussed separately below. The boundary of the Proposed Assessment has been narrowly drawn to include only those properties receiving special benefit from Services. Therefore, the benefit from Services to local streets and collectors is captured by assessing the properties they serve – as these roads have no value but in providing access to the specially benefitted parcels, and protecting these roads is a means to provide special benefit to these parcels.

Thoroughfares

The Services will also protect certain thoroughfares within the boundary of the Proposed Assessment. These roads are distinct from local streets and collectors in that these roads serve as primary transit routes within, through and across the community. These roads are used by the public at large regardless of residency, destination, or purpose. Therefore, the protection of these thoroughfares provides a general benefit that must be separated from the special benefit conferred on parcels by the Proposed Assessment and cannot be funded by the Proposed Assessment. Further discussion supporting the quantification and separation of this general benefit from the special benefit is provided below.

Assessment Boundary

Benefit Area

The Benefit Area encompasses all properties that receive a special benefit from Services. All of the properties receiving special benefit from the Services were identified through the floodplain analysis results provided by Kjeldsen Sinnock & Neudeck, Inc. (KSN) as discussed below.

Hydraulic Analyses Performed to Support the Assessment Methodology

To determine the avoided flood damages as a result of the Services on the RD 1608 levees, KSN utilized an existing stage frequency analysis (San Joaquin River Delta Base Flood Elevation Refinement Stage Frequency Analysis, Peterson Brustad, Inc, September 2, 2010, Appendix B) that evaluated base flood elevations developed from Delta gage data to determine flood depths for the 100-year event along the RD 1608 levee system. Utilizing the referenced report and the hydraulics of the system that results in a pooled floodplain should any of the levees serviced by RD 1608 fail, KSN provided flood depth data based on a floodplain elevation of 9.4' (NAVD '88). This floodplain was overlaid on the San Joaquin County Geographic Information System (GIS) parcel shapefile to determine the average flood depth and area of flooding. The resulting average flood depth was used as one of the inputs to the USACE Depth-Damage functions to calculate avoided flood damage.

The Assessment Engineer considered this floodplain mapping to develop and designate the area receiving benefit from the Services. **Figure 2** superimposes the floodplain mapping and identifies the Benefit Area from the Services.



Proposed Assessment Boundary

The Benefit Area extends beyond the RD's legal boundary. So, although benefits are calculated for and apportioned to the entire Benefit Area as presented in this report, the RD can only legally impose and collect an assessment from parcels within its jurisdictional area. Because of this, the RD has determined that other revenue sources are sufficient to cover the cost of services apportioned to the General and Special Benefits identified and assessed to those parcels outside of the RD 1608 jurisdictional boundary, as presented in this report. Therefore, the Proposed Assessment Boundary encompasses all properties that 1) receive a Special Benefit from Services *and* 2) are within the RD 1608 jurisdictional boundary.

The Benefit Area from this floodplain mapping and the RD 1608 legal boundary have been combined to identify the overall area of Proposed Assessment, shown in **Figure 3** and in **Appendix C**.

Because parcel boundaries can change over time, a process for regularly determining those parcels within the Proposed Boundary subject to the assessment is warranted. This is discussed further in a subsequent section of this report.

Assessment Apportionment Methodology

The methodology for apportioning the Proposed Assessment to each parcel in the overall benefit area is based first on quantifying the total benefits received, in terms of benefit units, from the Services. Then, second, separating the General Benefits from the Special Benefits by each parcel, and then third, determining each parcel's proportionate share of total benefits received, again in terms of benefits units, and finally allocating the Proposed Assessment, in terms of dollars to each parcel based upon its proportionate share of total benefit units. Through this approach, each parcel's share of the total Proposed Assessment would be equivalent to its proportionate share of benefit received from the Services. Because the General Benefits have been separated from the Special Benefits and only the Special Benefits are assessed to parcels the requirement of Proposition 218 has been met.



Figure 2 Floodplain Map and Benefit Area

Floor Map and Benefit Area

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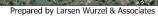
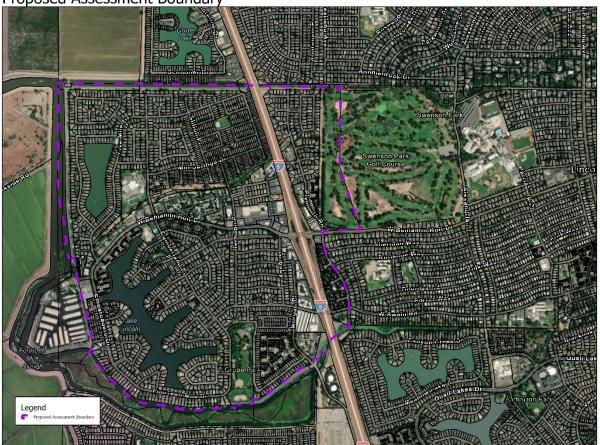
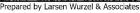




Figure 3 Proposed Assessment Boundary

Proposed Assessment Boundary







The special benefit conveyed to a parcel from the Services (in terms of Equivalent Benefit Units [EBU]) is based on the flood damage reduction received by the parcel due to the decreased likelihood of flooding caused by a levee failure.

The methodology for calculating Equivalent Benefit Units for each parcel utilizes the following property characteristics:

- 1. The size (acreage) of each parcel;
- 2. The Land Use Category assigned to each parcel;
- 3. The structure size (square footage) from the County Parcel Data;
- 4. The depth of flooding affecting the parcel;
- 5. The Relative Land Damage Rate per acre; and
- 6. The Structure Damage Rate per square foot.

A minimum flood damage reduction benefit was determined for all parcels with more than 50% of their area included within the Boundary. The minimum benefit was applied in the event a parcel's calculated flood damages was less than the minimum calculated benefit. This approach accounts for uncertainty in the model where a parcel's resulting inundation was nominal. This minimum benefit calculation is described further below.

Property Characteristics

The following property characteristics were developed for apportioning benefit. A summary of the property characteristics data is provided in **Table 3**.

Land Use Categories

Multiple land use codes are used by the San Joaquin County Assessor to categorize the properties within the boundaries. Each land use code was evaluated and assigned to a generalized Land Use Category (e.g.: Agricultural, Single-Family Residential, Commercial, etc.) by the Assessment Engineer for the purpose of identifying characteristics of each category for use in apportioning special benefit (**Appendix D**). A random sample of parcels for each County land use code was analyzed by reviewing aerial photographs to ensure that it had been assigned to the appropriate Land Use Category. The generalized Land Use Categories are described as follows:

Agricultural land was characterized as large productive or unproductive land outside the urban area. No differentiation was made to differentiate between the crop types or use for livestock grazing.

Commercial is characterized by properties with office, retail or public service buildings. This Land Use Category includes hotels, shopping centers, restaurants, offices, hospitals, etc. Some parcels within this Land Use Category have been assigned to a sub-category of Commercial Building Only. Parcels in this sub-category are commercial parcels with minimal acreage dedicated to parking and common areas within a larger commercial development. Parcels in this sub-category have adjacent parcels dedicated to supporting parking and other common areas associated with commercial uses.



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Industrial is characterized by manufacturing, storage and processing facilities. This Land Use Category includes warehouses, manufacturing, processing, distribution, and public utilities.

Mobile Home Park is exclusively properties designed specifically for multiple mobile home structures. This category also includes individual parcels with Mobile Home Residential structures.

Multi-Family Residential is characterized as four or more dwelling units on a parcel. This Land Use Category includes apartments, condominiums, and townhouses.

Open Space is characterized by properties with limited hardscape, without structures, that have been developed for their ultimate use. This Land Use Category includes parks, sports fields, bike paths, common areas, etc.

Open Space Developed is characterized by properties that do not have a structure, however, are generally ready to be built on. This Land Use Category includes parcels in developed areas that have been prepared for construction, parcels that are generically described as "vacant", and parcels that are entirely used as a parking lot.

Rural Residential are large lots with a Single-Family Residential structure outside the urban areas with limited amount of hardscape.

School properties are characterized as educational campuses, but do not include conversion of other land use categories for education activities (i.e. a commercial parcel utilized by a trade school). School properties can be public or private.

Single-Family Residential properties are characterized by three or fewer single-family dwelling structures on a parcel. This Land Use Category includes land with duplex and triplex buildings as they generally have the same physical characteristics as other single-family residences.



Table 3
Summary of Assessed Property Characteristics

Land Use Category	Total Number of Parcels	Total Parcel Acreage	Total Structure Square Footage [1]
Agriculture	0	0	0
Commercial	26	68	203,716
Industrial	2	6	119,730
Multi-Family Residential	935	95	1,982,813
Mobile Home Parks	0	0	0
Rural Residential	0	0	0
Single-Family Residential	2,618	493	4,729,670
School	2	22	110,051
Open Space	16	203	0
Open Space - Developed	92	145	0
Totals	3,691	1,032	7,145,980

^{1]} Determined using San Joaquin County Assessor's data via Parcelquest.



Parcel Size

The size of the parcel is used to appropriately apportion the special benefit from the Services. Parcel attribute data including parcel size was obtained from San Joaquin County Assessor's data acquired through ParcelQuest. Parcel attribute data was also obtained from the San Joaquin County Community Development Department GIS group shapefiles. Where any significant discrepancy existed between the two sources, satellite imagery was used to measure and identify the more reliable source.

Flooded Acres and Average Flood Depth

The hydraulic analysis applied to delineate the Benefit Area was utilized to determine the extent of flooding or flooded acres, and the average flood depth for each parcel within the boundary of the assessment district.

The hydraulic analysis is assumed to have some level of uncertainty in the reporting of the average flood depths due to the accuracy of the ground elevation data and model. To eliminate this uncertainty, the average flood depths were rounded down to the nearest foot prior to the calculation of avoided damages. The average flood depth was only calculated for the flooded acreage and was used to determine structure damages which vary based on the depth of flooding.

The following thresholds were applied to the flooded acres to determine when to calculate damages for parcels located along the edge of the floodplain:

- If less than 50% of the property is flooded, land damages are not calculated. This condition typically exists where the delineated street flooding partially encroaches along the front of the parcel and damages are expected to be de minimis.
- If less than 50% of the property is flooded, structure damages are not calculated. This condition is typical of properties along the fringe of the floodplain with flooding in the front of the property, but the structure footprint does not encroach into the floodplain.

Structure Footprint

The assessment methodology uses the structure size (square-footage) to assess the special benefit. Structure sizes were obtained from San Joaquin County Assessor's data acquired through ParcelQuest. Additionally, aerial photographs were analyzed to verify the existence of structures and determine the size of any structures with no available San Joaquin County Assessor's data.

Equivalent Benefit Units Calculation

Equivalent Benefit Units are the measure of special benefit received by the properties from the RD 1608 Services. Avoided flood damages to land and structures were based on the flooded areas and average flood depth from the hydraulic analysis.

The EBU for each property is calculated using the following equations:

Equivalent Benefit Units are the measure of special benefit received by properties from the RD 1608 Services. Avoided flood damages to land and structures were based on the flooded acres and average flood depth from the hydraulic analysis.



The EBU for each property is calculated using the following equation:

$$Equivalent \\ Benefit Unit \\ (EBU) = \begin{bmatrix} Avoided \\ Land \\ Damages \end{bmatrix} + \begin{bmatrix} Avoided \\ Structure + Content \\ Damages \end{bmatrix}$$

$$Where:$$

$$Avoided \\ Land \\ Damages = \begin{bmatrix} Flooded \\ Acreage \end{bmatrix} \times \begin{bmatrix} Land \\ Damage Rate \end{bmatrix}$$

$$Avoided \\ Structure \\ Damages = \begin{bmatrix} Structure \\ Footprint \end{bmatrix} \times \begin{bmatrix} Replacement \\ Value \end{bmatrix} \times \begin{bmatrix} Structure \\ Damage Rate \end{bmatrix}$$

$$Avoided \\ Content \\ Damages = \begin{bmatrix} Structure \\ Footprint \end{bmatrix} \times \begin{bmatrix} Structure \\ Value \end{bmatrix} \times \begin{bmatrix} Structure \\ Nalue \end{bmatrix}$$

$$\times \begin{pmatrix} Contents to \\ Structure Ratio \end{pmatrix} X \begin{pmatrix} Contents \\ Damage Rate \end{pmatrix}$$

Relative Land Damage Rate per Acre

The Relative Land Damage Rate per Acre represents the relative damage to site improvements (e.g. landscaping, utilities, etc.) that occurs as a result of inundation and deposition of material (i.e., sediment and contaminants) carried in floodwaters. The Relative Land Damage Rate per Acre was determined by assigning a Relative Land Value per Acre to each land use category and applying a 10% damage factor to the Relative Land Value per Acre. **Table 4** summarizes the Relative Land Damage Rate for each Land Use Category.

Structure Damage Rate

The Structure Damage Rate is calculated based on the methodology used in the USACE Flood Damage Analysis (FDA) program. The FDA program assigns a relative Structure Replacement Value according to type of structure and estimates the percent structure damage based on the depth of flooding. Similarly, the FDA program assigns a relative Contents Replacement Value according to type of structure and estimates the percent of contents damage based on the depth of flooding (**Table 5** & **Table 6**). **Table 7** summarizes the EBU's by Land Use Category. When calculating the flood depth to a finished floor, a finish floor height elevation was assumed at 1' for all structures and 2' for mobile homes.



Table 4
Relative Land Damage Rate

Land Use Category	Percent Land Damage	Relative Land Value per Acre	Relative Land Damage per Acre
		[1]	
	Α	В	C = A * B
Agriculture	10%	\$25,000	\$2,500
Commercial	10%	\$70,000	\$7,000
Industrial	10%	\$70,000	\$7,000
Multi-Family Residential	10%	\$70,000	\$7,000
Mobile Home Parks	10%	\$50,000	\$5,000
Rural Residential	10%	\$25,000	\$2,500
School	10%	\$41,000	\$4,100
Single-Family Residential	10%	\$50,000	\$5,000
Open Space	10%	\$10,000	\$1,000
Open Space - Developed	10%	\$15,000	\$1,500

^[1] Relative land value based on previous Engineer's Reports prepared in the region



Table 5
Structure Replacement Value and Depth Damage

Land Use	Structure Replacement Value per SF	Contents to Structure Ratio			Stru	ıcture Pe	rcent Da	mage	5 6 7 8 9 10 11 12 13 14 53.3% 58.6% 63.2% 67.2% 70.5% 73.2% 75.4% 77.2% 78.5% 79.5% 30.6% 36.7% 45.3% 56.8% 62.4% 62.4% 62.4% 62.4% 62.4% 62.4%										
Depth			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Agricultural [1]	\$111.67	50.0%	0.0%	23.3%	32.1%	40.1%	47.1%	53.3%	58.6%	63.2%	67.2%	70.5%	73.2%	75.4%	77.2%	78.5%	79.5%	80.29	
Commercial [2]	\$85.56	51.0%	0.0%	12.8%	18.4%	25.6%	25.6%	30.6%		45.3%				62.4%	62.4%		62.4%	62.49	
Industrial [4]	\$54.51	31.0%	0.0%	11.5%	17.9%	24.4%	26.5%	32.4%	38.8%	40.9%	51.8%	56.2%	56.2%	56.2%	56.2%	56.2%	56.2%	56.29	
Mobile Home [5]	\$45.85	50.0%	0.0%	50.0%	71.0%	82.0%	87.0%	89.0%	91.0%	91.0%	91.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.09	
Multi-Family Residential [6]	\$84.40	50.0%	0.0%	23.3%	32.1%	40.1%	47.1%	53.3%	58.6%	63.2%	67.2%	70.5%	73.2%	75.4%	77.2%	78.5%	79.5%	80.29	
School [3]	\$144.46	38.0%	7.0%	21.7%	30.2%	31.2%	32.4%	32.4%	39.8%	42.8%	51.7%	53.1%	54.1%	61.8%	64.8%	64.8%	65.5%	86.19	
Single-Family Residential [1]	\$111.67	50.0%	0.0%	23.3%	32.1%	40.1%	47.1%	53.3%	58.6%	63.2%	67.2%	70.5%	73.2%	75.4%	77.2%	78.5%	79.5%	80.29	
Rural Residential [1]	\$111.67	50.0%	0.0%	23.3%	32.1%	40.1%	47.1%	53.3%	58.6%	63.2%	67.2%	70.5%	73.2%	75.4%	77.2%	78.5%	79.5%	80.29	
Open Space	\$0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.09	
Open Space - Developed	\$0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.09	

Source Data: 2012 CVFPP HEC_FDA Structure and Damage Functions – CVFPP Attachment 8F Flood Damage Analysis, Table C-1



^[1] Source: Table B-33 - Good Status for Single Family Residential

^[2] Source: Table B-9 - Good Status for Commercial Retail

^[3] Source: Table B-29 Good Status for Public and Private Schools

^[4] Source: Table B-21 - Good Status for Industrial Light

^[5] Source: Table B-25 - Good Status for Mobile Home

^[6] Source: Table B-26 - Good Status Construction Class and Quality for Multi-Family Residential

Table 6
Contents Replacement Value and Depth Damage

Land Use	Structure Replacement Value per SF	Contents to Structure Ratio			Co	ontents Pe	ercent Dai	mage		81.0% 95.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 72.0% 82.1% 90.7% 94.3% 95.0% 95.0% 95.0% 95.0% 87.0% 88.0% 90.0% 100.0% 100.0% 100.0% 100.0% 100.0%									
Depth			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Agricultural [1]	\$111.67	50.0%	0.0%	13.3%	15.6%	17.9%	22.0%	25.7%	28.8%	31.5%	33.8%	35.7%	37.2%	38.4%	38.4%	38.4%	38.4%	38.4	
Commercial [2]	\$85.56	51.0%	0.0%	20.0%	25.0%	30.0%	40.0%	57.5%	70.0%	81.0%	95.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0	
Industrial [4]	\$54.51	31.0%	0.0%	19.3%	26.6%	31.0%	42.3%	52.3%	60.7%	72.0%	82.1%	90.7%	94.3%	95.0%	95.0%	95.0%	95.0%	95.0	
Mobile Home [5]	\$45.85	50.0%	0.0%	35.0%	43.0%	56.0%	72.0%	79.0%	84.0%	87.0%	88.0%	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0	
Multi-Family Residential [6]	\$84.40	50.0%	0.0%	13.3%	15.6%	17.9%	22.0%	25.7%	28.8%	31.5%	33.8%	35.7%	37.2%	38.4%	38.4%	38.4%	38.4%	38.4	
School [3]	\$144.46	38.0%	0.0%	87.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.09	
Single-Family Residential [1]	\$111.67	50.0%	0.0%	13.3%	15.6%	17.9%	22.0%	25.7%	28.8%	31.5%	33.8%	35.7%	37.2%	38.4%	38.4%	38.4%	38.4%	38.49	
Rural Residential [1]	\$111.67	50.0%	0.0%	13.3%	15.6%	17.9%	22.0%	25.7%	28.8%	31.5%	33.8%	35.7%	37.2%	38.4%	38.4%	38.4%	38.4%	38.4	
Open Space	\$0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	
Open Space - Developed	\$0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0	

Source Data: 2012 CVFPP HEC_FDA Structure and Damage Functions – CVFPP Attachment 8F Flood Damage Analysis, Table C-1



^[1] Source: Table B-33 - Good Status for Single Family Residential

^[2] Source: Table B-9 - Good Status for Commercial Retail

^[3] Source: Table B-29 Good Status for Public and Private Schools

^[4] Source: Table B-21 - Good Status for Industrial Light

^[5] Source: Table B-25 - Good Status for Mobile Home

^[6] Source: Table B-26 - Good Status Construction Class and Quality for Multi-Family Residential

Table 7
Summary of Resulting Equivalent Benefit Units

Land Use Category [1]	Land Damages	Structure Damages	Content Damages	Total Damages
Agriculture	0	0	0	0
Commercial	445,916	4,888,719	4,337,482	9,672,117
Industrial	42,187	2,114,580	1,058,139	3,214,906
Multi-Family Residential	652,610	90,253,851	21,820,825	112,727,285
Mobile Home Parks	0	0	0	0
Rural Residential	0	0	0	0
Single-Family Residential	1,720,956	216,834,523	52,315,600	270,871,079
School	46,754	3,767,790	3,345,234	7,159,779
Open Space	22,906	0	0	22,906
Open Space - Developed	200,923	0	0	200,923
Outside	896,177	30,951,443	9,866,712	41,714,332
Total	4,028,430	348,810,906	92,743,992	445,583,327

[1] This table does not contain general benefits but general benefits are utilized in the determination of equivalent benefit units.



General Benefits

Thoroughfare Damages Calculation

As described above, the Services provide a general benefit to the public at large by protecting thoroughfares within the boundary of the Proposed Assessment from flood damages. The amount of general benefit associated with each thoroughfare was quantified by identifying the cost to repair the road because of the flood damages. San Joaquin County indicated that the average cost to repair flood damages for an entire reach of thoroughfare is approximately \$5.00 per square-foot.

Table 8 lists the reaches of thoroughfares protected against flood damages by the Services; identifies the cross-street limits, reach length, and typical road width; calculates the general benefit from protecting thoroughfares by multiplying the area of thoroughfare pavement by the estimated cost to repair flood damages. The general benefit from protecting all thoroughfares was calculated to be 3,715,000 Equivalent Benefit Units.





Table 8
Protected Throughfares and General Benefit Calculations

Throughfare	Reach Description	Reach Length (ft) A	Width (ft)	Total SQFT C = A X B	Total General Benefit @\$5/sqft D = \$5 X C [1]
Benjamin Holt Dr	West of I-5	5,300	60	318,000	1,590,000
Benjamin Holt Dr	East of I-5 To Harrisburg Pl	4,700	50	235,000	1,175,000
Alexandria Place	W Lincoln Road to Swain Rd	4,750	40	190,000	950,000
Total				743,000	3,715,000

[1] Based on input from San Joaquin County Public Works

Source: GIS Imagery



Evaluation of Funding Sources for General Benefit

The thoroughfares amount to 3.715 M Equivalent Benefit Units in general benefit. Using the special benefit assessment calculation steps described in the next section and the \$/EBU, the total revenue required to fund the total general benefit is \$2,729.

Available San Joaquin County property tax revenues can be used to fund the general benefits provided by the Services. In short, this funding source is sufficient to fund the general benefit provided by the Services.

Proposed Special Benefit Assessment Calculation

To determine the proposed assessment for an individual parcel, the amount of Equivalent Benefit Units for the parcel is calculated and multiplied by the assessment rate per EBU. The proposed assessment rate per EBU is equal to the required annual revenue divided by the total quantity of EBU's as shown on **Table 9.** All factors required to calculate each Parcel's EBU have been described above and can be found in the provided tables and appendices. The proposed assessment rate per EBU is **\$0.0007345** / EBU.

Special Benefit Considerations for Parcels outside of RD 1608 Legal Boundary

As previously discussed, the Benefit Area encompasses the entire mapped floodplain area. This results in special benefit being received by parcels outside of the RD 1608 boundary. By law, RD 1608 cannot levy assessments on parcels outside of its legal boundary. This lost revenue cannot be reapportioned or assessed to property owners within RD 1608 but must be funded by other revenue sources. Funding is available and sufficient from the property tax revenues received from San Joaquin County by RD 1608 for this purpose. When determining the assessment per EBU, all special benefit areas, including those outside of the RD 1608 boundary were used, so that the benefits are apportioned to all parcels receiving special benefit. Of the total equivalent benefit units, 41,714,332 (or 9.4%) are outside of the legal boundary of the District. After funding General Benefits from property tax revenues, RD 1608 has an additional \$223,000 in property tax revenue available to fund Special Benefits received outside of its legal boundary. Given the EBU in the areas outside of the legal boundary and the \$/EBU, the amount of other available revenue needs to be at least \$31,000. The property tax revenue is more than sufficient to cover these and the general benefits, even in years where costs may fluctuate.

Example Parcel Assessment

Using the proposed parcel assessment equation and supporting EBU equations as well as parcel attributes including parcel size, structure size, relative land damage rate per acre, structure damage rate per square foot, and finally the proposed assessment rate, an individual parcel's assessment can be calculated.

Assessments are rounded down to the closest multiple of \$0.02 as required by the San Joaquin County Assessor's office for submission of the special assessment roll for collection on County Property Tax Bills.

The following list of steps are taken to calculate a parcel's assessment:

Step 1 – Determine the Parcel Size, Structure Size, and Land Use.

Step 2 – Using **Table 4**, determine the Relative Land Damage Rate per Acre.



- Step 3 Using **Table 5**, determine the Structure Damage Rate per Square Foot.
- Step 4 Using **Table 6**, determine the Contents Damage Rate per Square Foot.
- Step 5 Calculate the Parcel EBU using Equation 1: Equivalent Benefit Units
- Step 7 Calculate the parcel assessment using **Equation 2.**
- Step 8 Round down to the closest multiple of \$0.02. Raise up to \$2.00 if it is less than the minimum⁵

A detailed example parcel assessment calculation is included at the end of this report on Table 11.

Summary of Assessments

A detailed listing by Assessor's parcel number of the assessments is included in **Appendix E.** The proposed assessments are summarized by Land Use Category in **Table 10**.

Table 9
Initial Proposed Assessment Rate Calculation – FY 2025/26

Total Budget		\$330,000
Total EBU	[1]	449,298,327
\$/EBU		\$0.0007345

[1] Includes general benefit units

⁵ Reference Minimum Assessment Amount discussion below.



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Table 10
Summary of Proposed FY 2025/26 Assessments by Land Use Category

Land Use Category	Total Assessment	Total Parcel Acreage	Total EBU	% of Total Assessment
Agriculture	\$0	0	0	0.00%
Commercial	\$7,104	65	9,672,117	2.15%
Industrial	\$2,361	6	3,214,906	0.72%
Multi-Family Residential	\$82,796	95	112,727,285	25.09%
Mobile Home Parks	\$0	0	0	0.00%
Rural Residential	\$0	0	0	0.00%
School	\$5,259	11	7,159,779	1.59%
Single-Family Residential	\$198,949	354	270,871,079	60.29%
Open Space	\$17	25	22,906	0.01%
Open Space - Developed	\$148	142	200,923	0.04%
Outside	\$30,638	333	41,714,332	9.28%
General Benefit	\$2,729		3,715,000	0.83%
Totals	\$330,000	1,032	449,298,327	100.00%



5. ASSESSMENT ADMINISTRATION

Schedule for Collection

If property owners approve the Proposed Assessment, RD 1608 intends to commence collection of the assessments in FY 2025/26. The assessment would be collected annually on the secured property tax rolls of San Joaquin County or via direct bills where not collected through the property tax rolls, as described further below under "Duration of the Assessment".

The annual administrative expenses would also be funded through the annual levy of assessments. Ongoing administrative expenses would include the annual calculation and preparation of the assessment roll, the actual costs of collecting the annual assessments and the costs of responding to inquiries including the review and processing of any appeals.

Appeals of Assessments Levied to Property

Any property owner who believes his or her property should be reclassified and the assessment adjusted may file a written appeal with the RD 1608 Board of Trustees. Any such appeal is limited to correction of an assessment during the then-current fiscal year and future years.

All appeals must include a statement of reasons why the property should be reclassified and may include supporting evidence. On the filing of any such appeal, RD 1608 Board of Trustees will direct staff to promptly review the appeal and any information provided by the property owner and may investigate and assemble additional evidence necessary to evaluate the appeal. If the RD 1608 Board of Trustees finds that the assessment should be modified, the appropriate changes will be made to the assessment roll for the following fiscal year. Any such changes approved after the assessment roll has been filed with the County for collection, will not result in a refund of the current or any prior year's assessments paid before the appeal was filed unless so directed by the RD 1608 Board of Trustees.

Impact of Appeals

The majority of the data being used to generate the assessment rates for specific parcels comes from the San Joaquin County Assessor. Because the main purpose of the Assessor in compiling this data is not to support this and other Special Benefit Assessment efforts but rather to determine Assessed Value for the purpose of administering the County's Secured Tax Roll, the Assessment Engineer has worked to refine the Assessor's data so it properly reflects the conditions present in the physical benefit area. However, throughout the formation period (and indeed even after the formation of the assessment), data errors and discrepancies with the San Joaquin County Assessor data may surface and require modification of the assessment calculation for various parcels. Changes in the data without a corresponding change in the Assessment Rate established by this report will, by definition, change the total amount of assessments levied and collected in any one year. For example, if the data assumes the existence of a house that has since been destroyed and not been reconstructed, once the database is corrected the rates will generate a smaller total assessment. On the other hand, if the data assumes an empty lot where a house has since been constructed, once the database is corrected the rates will generate a larger total assessment. Due to the database being constantly refined (either through internal review or an external appeal process), it



is infeasible to fine-tune the rates between the Preliminary Engineer's Report and the Final Engineer's Report. In addition, because changes to the database will either increase or decrease the total amount assessed, it is presumed that these amounts will roughly offset each other. Therefore, although minor changes to the database will continue to be made during the formation period, the rates proposed in this Report are not being fine-tuned, even though that will result in a total assessment which may be slightly less than or slightly more than the amount determined for the development of this report.

Duration of the Assessment

If approved by property owners in an assessment ballot proceeding conducted pursuant to Article XIIID Section 4 of the State Constitution and Government Code § 53750, et. seq., and subsequently approved by the RD 1608 Board of Trustees, the assessment can be levied annually commencing FY 2025/26. The RD 1608 Board of Trustees will establish the assessment rate each year and while the assessment is only effective for that year, the assessment may be continued each year without another ballot proceeding with approval of the RD 1608 Board of Trustees. The budget for RD 1608 Services will be collected each year that Services are provided, which is expected to be in perpetuity. On-going annual assessments cannot be increased without property owner approval, except for the annual escalation as described below.

Annual Escalation of the Assessments

To ensure that RD 1608 can provide the needed services over time, it is important to allow for an increase of the assessment over time to address the rising costs of labor, supplies, and materials. The Assessment Engineer has determined that an appropriate escalation factor is a factor that is reflective of rising labor costs and goods over time. Therefore, beginning in FY 2026/27, the maximum authorized assessment may be increased subject to an annual inflationary escalator pursuant to Government Code § 53739 (b), based on the annual change in the Consumer Price Index February to February CPI-W for San Francisco-Oakland-Hayward all Items, with Base Period 1982-84 = 100, published by the U.S. Department of Labor, Bureau of Labor Statistics, subject to a minimum of zero percent and a maximum of 4% in any given year. The adjustment to the maximum authorized assessment would be applied to the prior year's annual assessment rate.

Special Considerations

Property Tax Revenue Uses

RD 1608's property tax apportionment revenue that it receives from San Joaquin County makes up an important element of the District's overall budget. Several District expenditures draw on this revenue source, which can fluctuate over time. RD 1608 anticipates that the property tax revenue will fund the general benefit and the special benefits attributed to those outside of its legal jurisdiction. The cost for these items is approximately \$35,000, and the current revenue of \$226,000 is sufficient to cover these costs. The remaining \$191,000 of property tax apportionment revenue will go toward servicing other debt (e.g. any outstanding warrant debt), funding emergency repairs requirements to its infrastructure, funding the reserve set-aside expenditure line-item, and other District costs.



Public Parcels

Consistent with the requirements of Proposition 218, all publicly owned parcels are assessed proportionately based upon the special benefits they receive from services provided by the proposed assessment. That is, public parcels are treated the same as privately owned parcels for assessment calculation purposes. To calculate assessments for these parcels, a land use category was assigned to each public parcel based on its current use.

Parcels Outside of RD 1608 Boundary

As noted previously, the special benefits received by parcels outside of RD 1608 are calculated but cannot be assessed and levied. Instead, RD 1608 will utilize a portion of the San Joaquin County property tax revenue to fund this portion of the costs, so they are not absorbed by other beneficiaries.

Minimum Assessment Amount

RD 1608 has determined that the collection of very small annual assessments can result in a net loss to RD 1608 due to the costs of processing. In light of the legal obligation to ensure that property owners pay assessments in proportion to the special benefit they receive, RD 1608 has determined that waiving those very small assessments is not legally permissible. RD 1608 has therefore set a minimum assessment at \$2.00. The minimum annual assessment will be \$2.00 per parcel to reflect the cost to administer the Assessment Roll. All annual assessments calculated to be less than \$2.00 will be raised to the \$2.00 minimum. If the additional revenue collected by RD 1608 due to the minimum assessment exceeds the cost to administer the Assessment Roll, the funds will be added to the reserve fund for RD 1608's Services.

Application of the Assessment Boundary to Parcels

The Assessment Boundary described above represents a boundary driven by the hydraulics associated with flooding and RD 1608 existing boundary. The hydraulic floodplain does not align with the parcel boundaries as they are configured, assessed, and taxed by the County. The Assessment Engineer has determined that those parcels with 50% of their land area located within the Assessment Boundary will be subject to the Assessment. While the hydraulics are not expected to change significantly over time, parcel boundaries can and do change occasionally. As a result, the area subject to the collection of the assessment will not align with the boundary of the assessment. The application of the Assessment Boundary to the then current set of parcels will take place every five years as part of the assessment administration process.

Updating the Annual Assessment Roll

Recalculating individual property assessments will accommodate changes within benefit area over time. These changes can result from development activity such as recordation of subdivision maps, zoning changes, conditional use permits, and lot splits or mergers. Placement of a structure on an undeveloped parcel or other changes to improvements on a parcel may trigger a recalculation of the assessment if there is a change in the land use category.



Reclamation District 1608 Maintenance and Capital Services Assessment Public Draft Preliminary Engineer's Report September 26, 2024

It is recognized that when compiling data for the parcels within the assessment boundary, the data⁶ used to derive individual parcel characteristics may not be accurate and may not precisely fit the intent of the Assessment Engineer thus leading to errors and/or circumstances that result in inaccurate assessment calculations on an annual basis. Where such circumstances are discovered, either by the persons administering the assessment district or by the owners of the properties affected, RD 1608 staff shall review such circumstances and determine if corrections or adjustments are appropriate. Any such corrections or adjustments are to be consistent with the concept, intent, and parameters of the methodology for the assessment as set forth within this Engineer's Report without formal approval. Unless such proposed changes are appealed to the RD 1608 Board of Trustees and determined not to be acceptable, they will be incorporated into the Assessment Roll.



⁶ The Assessment Engineer has utilized data compiled from the San Joaquin County Assessor to determine the individual property characteristics used as the basis for assessing and apportioning special benefit. While the data from the San Joaquin County Assessor is assumed to be accurate, its primary purpose is for use by the San Joaquin County Assessor and is subject to the Assessor's standards for accuracy and update. As a result, the information may be inaccurate and not reflect the actual property characteristics of every parcel.



6. CONCLUSIONS

It is concluded that the proposed assessments do not exceed the reasonable cost of the proportional special benefit conferred on each property assessed.

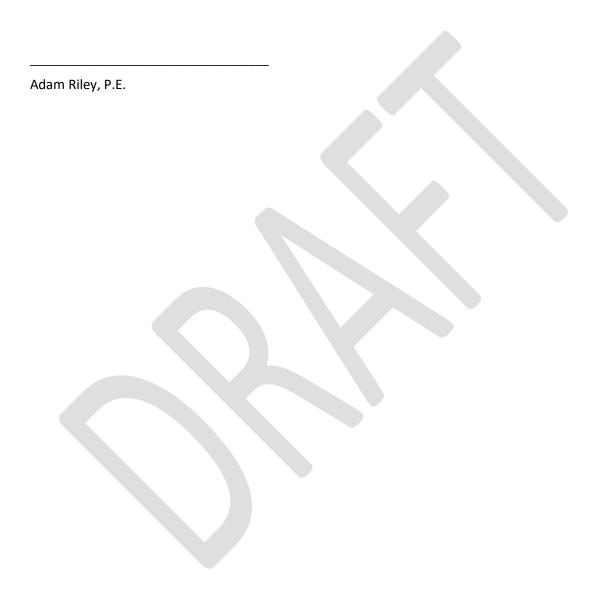




Table 11 Assessment Parcel Equations and Example Calculations

Equation 1: Equivalent Benefit Units

EBU = $\{(Parcel\ Size\ [2] \times Relative\ Land\ Damage\ Per\ Acre\ [3]) + (Structure\ Sq.\ Ft.\ [2] \times Structure\ Replacement\ Value\ [4] \times Structure\ Depth\ Damage\ [4] + (Structure\ Sq.\ Ft.\ [2] \times Structure\ Replacement\ Value\ [4] \times Contents\ to\ Structure\ Ratio\ [5] \times Contents\ Depth\ Damage\ [5])\}$

- [2] Assessor's Data
- [3] Table 4
- [4] Table 5
- [5] Table 6

Equation 2: Proposed Parcel Assessment

Calculated Parcel Assessment = $Parcel\ EBU \times Assessment\ Rate\ per\ EBU\ [6]$

[6] Table 9; Assessment Rate per EBU = \$0.0007345



Example Assessment Calculations

The following examples illustrate the application of the assessment equation to determine the annual assessment for several hypothetical properties.

Example 1

Consider a 0.23-acre single-family residential property the following property characteristics.

Structure	Depth (ft)
Size (Sqft)	
2,000	6

EBU Calculation

Land Use Category - Single-Family

From assessor data, Structure Sq. Ft. – 2,000 sq ft per acre

From **Table 4**, the Relative Damage per Acre - \$5,000 per acre

From **Table 5** and **Table 6**, the Structure Replacement Value - \$111.67 per square foot; Structure Depth Damage 58.60% for 8 ft; Structure to Contents Ratio of 50.00%; Contents Depth Damage of 28.8% for 8ft

EBU =
$$\{(0.23 \ acres \ x \$5,000 \ per \ acre) + (2,000 \ sq \ ft \ x \$111.67 \ x (58.60\% + 50.0\% \ X \ 28.8\%)\} = 164,188$$

Total EBU =164,188

Assessment Calculation

Calculated Parcel Assessment = $(164,188 \times 0.0007345) = 120.59$

[Proposed Assessment] = \$120.59

Example 2

Assume a 0.21-acre Multi-Family property the following property characteristics:

Structure Size	Depth (ft)
(Sqft)	
4,425	5

EBU Calculation

Land Use Category - Commercial

From assessor data, Structure Size – 4,425 sqft



From **Table 4**, the Relative Damage per Acre - \$7,000 per acre

From **Table 5** and **Table 6**, the Structure Replacement Value - \$84.40 per square foot; Structure Depth Damage 53.3% for 5 ft; Structure to Contents Ratio of 50.00%; Contents Depth Damage of 25.7% for 5ft.

$$EBU = \{(0.21 \ acres \ x \ \$7,000 \ per \ acre) + (4,425 \ sqft \ x \ \$84.40 \ x \ (53.3\% + 50\% \ x \ 25.7\%)\} = 248,520$$

Assessment Calculation

Calculated Proposed Assessment = $(248,520 \times 0.0007345) = 182.53

[Proposed Assessment] = \$182.53



Appendix A RD 1608 Cash Flow Model

Budget Item/Category	F	Y 2025-2026	FY	2026-2027	FY	2027-2028	FY 2	2028-2029	FY 20	029-2030	FY 2	2030-2031	FY 2	2031-2032	FY 2	2032-2033	FY 2	033-2034	FY	2034-2035	FY 2	035-2036	FY 2	036-2037	FY 2	037-2038 I	FY 20	038-2039	FY 20	39-2040
Revenues																														
Property Tax and Interest Income, Net [1]] :	\$ 195,84	4 \$	197,137	\$	198,424	\$	199,705	\$	200,977	\$	202,241	\$	203,497	\$	204,742	\$	205,977	\$	207,201	\$	208,413	\$	209,612	\$	210,797	\$	211,968	\$	213,124
Subvensions Reimbursements [2]] :	\$ 149,986	5 \$	155,104	\$	159,218	\$	165,968	\$	170,430	\$	176,342	\$	182,434	\$	188,793	\$	194,047	\$	202,139	\$	207,843	\$	213,627	\$	219,573	\$	225,684	\$	231,965
Financing Revenue [3]]																		\$	1,500,000										
New Direct Assessment [4]		330,000) \$	339,570	\$	349,418	\$	359,551	\$	369,978	\$	380,707	\$	391,747	\$	403,108	\$	414,798	\$	426,827	\$	439,205	\$	451,942	\$	465,049	\$	478,535	\$.	492,413
Total Revenues	,	675,830	\$	691,812	\$	707,060	\$	725,223	\$	741,385	\$	759,291	\$	777,678	\$	796,643	\$	814,823	\$	2,336,168	\$	855,461	\$	875,182	\$	895,419	\$	916,187	\$ 9	937,501
Expenditures																														
General & Administrative	,	5 150,294	4 \$	121,835	\$	156,476	\$	128,222	\$	163,075	\$	135,039	\$	170,118	\$	142,316	\$	177,638	\$	150,086	\$	185,667	\$	156,870	\$	194,059	\$	163,961	\$	202,831
Engineering, Planning, Environmental	9	76,672	2 \$	78,972	\$	81,341	\$	83,781	\$	86,295	\$	88,883	\$	91,550	\$	94,296	\$	97,125	\$	100,039	\$	103,040	\$	106,584	\$	110,250	\$	114,041	\$	117,963
Operations and Maintenance	,	240,83	3 \$	250,770	\$	256,268	\$	266,878	\$	272,883	\$	284,217	\$	290,774	\$	302,886	\$	310,045	\$	322,995	\$	330,809	\$	343,168	\$	355,989	\$	369,289	\$	383,086
CIP (Design and Construction) [5]] :	57,132	2 \$	58,245	\$	59,393	\$	62,241	\$	63,458	\$	64,712	\$	67,670	\$	69,000	\$	70,370	\$	73,448	\$	74,902	\$	77,700	\$	80,603	\$	83,614	\$	86,738
Dredge Project		-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	71,765	\$	662,448	\$ 1	,656,121	\$	-	\$	-	\$	-	\$	-
New Warrant Debt Expense [6]] :	3 136,23	4 \$	138,959	\$	141,738	\$	144,573	\$	-	\$	-	\$	- ^	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
New Financing Expense [7]] :	; -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	164,692	\$	164,692	\$	164,692	\$	164,692
Emergency Reserve Set-aside [8]] :	5 15,000) \$	15,300	\$	15,606	\$	15,918	\$	100,000	\$	102,000	\$	104,040	\$	53,060	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total Expenditures	,	676,16	4 \$	664,081	\$	710,823	\$	701,613	\$	685,711	\$	674,851	\$	724,153	\$	661,560	\$	726,944	\$	1,309,017	\$ 2	,350,539	\$	849,015	\$	905,593	\$	895,598	\$	955,311
Net Fund Balance Change	,	\$ (334	4) \$	27,731	\$	(3,763)	\$	23,609	\$	55,673	\$	84,439	\$	53,526	\$	135,083	\$	87,879	\$	1,027,150	\$ (1	,495,078)	\$	26,167	\$	(10,174)	\$	20,589	\$	(17,809)
De ation to a Delegación		5 2.404		2.465	,	20.005	<u>,</u>	20 422	4	40.742	,	105 445	4	100.055	,	242 200	<u>,</u>	270 464		466.242	٠.	402 402	<u>,</u>	(4.505)	<u>,</u>	24 502	<u>,</u>	4.4.400	<u>,</u>	24.007
Beginning Balance		2,499	•	2,165	\$ •	-,	\$ •	26,133		49,742	\$ •	105,415	\$	_00,000	\$	243,380	\$ •	378,464	\$	/	Ş 1	,493,493	\$ •	(1,585)	\$ •	24,582	\$ •	14,408	\$ •	34,997
Ending Balance		\$ 2,16	5	29,895	\$	26,133	\$	49,742	\$	105,415	\$	189,855	\$	243,380	\$	378,464	\$	466,343	\$	1,493,493	>	(1,585)	\$	24,582	\$	14,408	>	34,997	>	17,188
Emergency Reserve Set Aside Balance [9]	1 :	\$ 95,000) \$	110,300	\$	125,906	\$	141,824	ć	241,824	\$	343,824	\$	447,864	\$	500,925	Ś	500,925	\$	500,925	¢	500,925	\$	500,925	\$	500,925	\$	500,925	¢	500,925
· .	-			1,328,162	Y		•	141,824 L,403,227			7	1,349,703	Т.	1,448,305	·.	•	•	1,453,887		2,618,034	ب د ۱	•	Τ.	•	•	,	•	•	•	910,621
Target Emergency Reserve [10	0] :	2 1,332,320	5	1,320,102	Ş	1,421,043	ا د	1,403,227	Ş 1,	,371,423	Ş :	1,343,703	ب	1,440,303	\$	1,323,119	Ş 1	1,433,007	Ą	z,010,03 4	4 ډ	, / UI, U/ O	ŞΙ	.,030,023	۱ ډ	,011,100	γı	, / 31, 130	Э 1,	J10,021

^[1] Net revenue after account for funding the general benefit and special benefit for properties outside of RD; assumed grows at 1% annually

Source: RD 1608 and LWA

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^[2] The Delta Levee Subventions Program, AB 360, assumes that the program will continue to be funded well into the future for reimbursment of certain portions of Levee related expenses. initiation.

^[4] Assume 2.9% annual growth average.

^[5] Capital requirements for repair, replacement and rehabilitation; not inclusive of Dredge Project.

^[6] RD historically has utilized bank warrants to cover short term cash flow requirements. RD anticipates utilizing a \$450k warrant in FY 24/25 for this same reason and a payback set-aside budget is shown here over a four year period (assume baloon payment at end of year 4 and no interest savings benefit to early pay-off). Upon retiring debt, budget expense will go to increase emergency reserve set aside or pay-go for future Dredging Project.

^[7] Finance cost to repay \$1.5M loan for Dredging Project

^[8] Target fund is two times annual expenditures with an annual set aside of \$100,000. Lower budget reflects that full contribution in a given year is infeasbile.

^[9] Emergency Reserve Balance is in addition to cash flow end balance.

^[10] Target emergency reserve balance is 2x expenditures.

Appendix B

Reference: San Joaquin River Delta Base Flood Elevation Refinement Stage Frequency Analysis, Peterson Brustad, Inc, September 2, 2010



San Joaquin River Delta Base Flood Elevation Refinement Stage Frequency Analysis

Rindge Pump Gage Station (B95620) Burns Cutoff Gage Station (B95660)

September 2, 2010



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Appendices

Appendix A: HEC-SSP Analytical Plot & Stage Frequency Analysis Report for Rindge Pump Gage Station Appendix B: HEC-SSP Analytical Plot & Stage Frequency Analysis Report for Burns Cutoff Gage Station

1.0 Introduction

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) for the Stockton Metropolitan Area reflect base flood elevations (BFEs) developed in 1978 by the United States Army Corps of Engineers (USACE). The BFEs were developed from stage frequency analyses from tidal gage data collected from the Delta. The USACE updated these analyses in 1982 and 1992, but FEMA mapping remains tied to the 1978 study. This study updates the 1992 stage-frequency analysis at two gage stations near the City of Stockton: San Joaquin River at Rindge Pump (Rindge Pump) and Stockton Ship Channel at Burns Cutoff (Burns Cutoff). Figure 1 presents the location of these two gage stations. The updates for these gage stations presented in this study include the following changes from the previous study:

- ◆ <u>Datum</u> all previous studies were prepared using the National Geodetic Vertical Datum of 1929 (NGVD29). This study converts the raw data into the North American Vertical Datum 1988 (NAVD88).
- Period of Record this study extends the period of record through water year 2009 and includes a total of 57 years for each gage station; the 1992 study included 43 years of data for Rindge Pump and only 30 years of data for Burns Cutoff.
- ♦ <u>Tide Cycles</u> astronomic tides follow a 19-year epoch cycle, requiring analysis of an entire 19-year epoch cycle to eliminate effects of the tide cycle on the measured river stage; the period of record for this study includes the data from three complete 19-year epoch cycles.
- ♠ Lower-Low Tide Analysis Since the annual lower-low tide has minimal hydraulic affects, the trend in the lower-low tide level over time represents the combined impact of gage station subsidence and sea level rise at the gage station; the average annual lower-low tide over 19-year epoch cycles was used to determine this combined impact at each gage station; changes in stage readings due to subsidence were based on historical survey information when available; the historical sea level rise at San Francisco was used to estimate subsidence in the absence of historical survey information.
- ♦ <u>Climate Change Impacts</u> the results of the stage frequency analysis will be impacted over time by climate change in the form of future sea level rise; this study projects a range of climate change impacts on the stage frequency results through the year 2100.

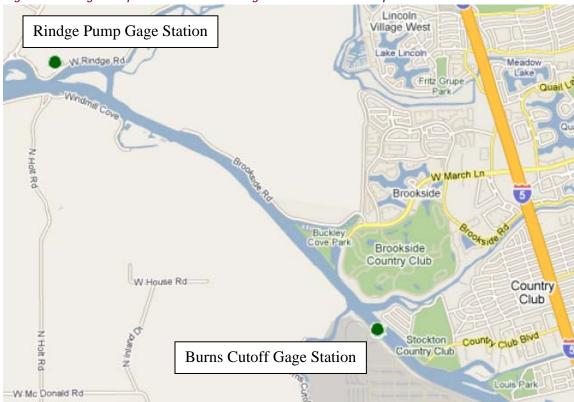


Figure 1 - Rindge Pump and Burns Cutoff Gage Station Location Map

1.1 Gage Stations

The Rindge Pump gage station, California Department of Water Resources (DWR) No. B95620, was installed on July 27, 1939. The station consists of a gage housing unit and a staff gage located in 14 Mile Slough (see Figure 2). Stage data was collected from DWR for water year (WY) 1939 through WY 2009. Note that the stage data prior to WY 1945 was not used in previous stage frequency analysis studies because Shasta Dam was not in operation.



Figure 2 - Rindge Pump Gage Station

The stage data for the Rindge Pump gage station was evaluated to determine the annual higher-high and lower-low tide from the following sources:

- Weekly chart graphs for WY 1939 through WY 1960
- ♦ Monthly and/or annual summaries for WY 1957 through WY 1982
- Daily data for WY 1983 through WY 2009

The Burns Cutoff gage station, DWR No. B95660, was installed in 1940. The gage station is located within the ship channel for the Port of Stockton (see Figure 3). Stage data was collected from DWR for WY 1958 through WY 2009. Note that even though the gage station was installed in 1940, no data prior to WY 1958 can be located.





The stage data for the Burns Cutoff gage station was evaluated to determine the annual higher-high and lower-low tide from the following sources:

- Monthly and/or annual summaries for WY 1957 through WY 1975
- Daily data for WY 1975 through WY 2009

Stage records for each gage station from WY 1983 to WY 2009 were collected from the DWR's online Water Data Library. Prior to WY 1983, hardcopies of stage data were used for analysis.

2.0 Data Adjustments

The raw data collected was adjusted to address the following issues:

- ♦ Missing Data In some cases, one of the two gages was out of service or no data was available during the annual higher-high and/or lower-low tide event.
- "Zero on Gage" Corrections Both gage stations were adjusted for "zero on gage," which were documented through WY 1964; these adjustments were considered to be corrections for subsidence by this study.

- **Datum Conversion** − The raw data was collected in four different datums that need to be converted to the current datum, NAVD88.
- Subsidence/Sea Level Rise The combined effect of subsidence and sea level rise was determined from the 19-year running average of the annual lower-low tide data; separation of the combined impact of subsidence from sea level rise was based on the quality of the data available.

2.1 Missing Data

From WY 1983 through WY 2009, nearly all of the annual higher-high tides occurred on the same day (26 out of 27) at the Rindge Pump and Burns Cutoff gage stations. The difference between the annual higher-high tides on different days was less than 0.05 ft. During the same period, most of the annual lower-low tides occurred on the same day (21 out of 27) at the two gage stations. The greatest difference between the annual lower-low tides on different days was 0.16 ft.

2.1.1 Gages Out of Service

Assuming that the annual higher-high tide events occur on the same day for the two gage stations, missing data was identified during periods when one gage was out of service during the other gage's higher-high tide event. This was observed twice during WY 1986 and WY 2006 when the Burns Cutoff gage station was out of service during the higher-high tide event for the Rindge Pump gage station.

Similarly, assuming the annual lower-low tide events occur on the same day at the two gage stations, missing data was identified during periods when one gage was out of service during the other gage's lower-low tide event. This was observed during WY 1984 when the Burns Cutoff gage station was out of service during the lower-low tide event for the Rindge Pump gage station. This was also observed during WY 1965 when the Rindge Pump gage station was out of service during the lower-low tide event for the Burns Cutoff gage station.

Missing data was replaced for the four instances discussed above where one gage was out of service during the other gage's high/low tide event. The new data was generated by averaging the difference between the two gages for the 7-days around the second highest/lowest tide event for that water year when both gages were operational and adding/subtracting the difference from the operating gage reading.

2.1.2 No Data Available

Data for the Burns Cutoff gage station prior to WY 1958 was not available from DWR. Data prior to WY 1958 was not used in any of the previous stage frequency analyses performed by the USACE in 1978, 1982, and 1992. In order to evaluate three complete 19-year epoch periods, data is required for both gage stations from WY 1953 through WY 2009. Therefore, data was missing for both annual higher-high and lower-low tide events for the Burns Cutoff gage station for WY 1953 through WY 1957.

The missing data was estimated from the average difference between the two gages over the remainder of the 19-year epoch period (ending in WY 1971). For annual higher-high tide events, the Burns Cutoff gage station was 0.14 ft NGVD29 higher than the Rindge Pump gage station. For annual lower-low tide events, the Burns Cutoff gage station was 0.02 ft NGVD29 higher than the Rindge Pump gage station. The resulting equations used to generate the missing data for WY 1953 through WY 1957 are presented below:

Higher-High Tide: Burns Cutoff = Rindge Pump + 0.14 ft NGVD29

Lower-Low Tide: Burns Cutoff = Rindge Pump + 0.02 ft NGVD29

2.2 "Zero on Gage" Correction

The annual data summaries collected from WY 1961 through WY 1975 include a table to present the "zero on gage" measurement along with the datum used. These summaries show that in 1964 the gage reading was corrected for 0.52 ft of subsidence between 1940 and 1964 at the Rindge Pump gage station. These summaries also show that in 1964 the gage reading was corrected for 0.52 ft of subsidence between 1951 and 1964 at the Burns Cutoff gage station.

For the Rindge Pump gage station, the difference between the "zero on gage" measurements between WY 1940 and WY 1964 was assumed to be a linear correction. This results in an average rate of correction of 0.022 ft/yr (6.7 mm/yr) over this period of time.

Similarly, for the Burns Cutoff gage station, the difference between the "zero on gage" measurements between WY 1951 and WY 1964 was assumed to be a linear correction. This results in an average rate of correction of 0.039 ft/yr (11.9 mm/yr) over this period of time.

These "zero on gage" were assumed to be subsidence corrections and were made on a linear basis from WY 1953 through WY 1964 for each of the gage stations.

2.3 Datum Conversion

Four vertical datums were used to record the raw stage data:

- ♦ USED United States Engineering Datum
- USCGS United States Coast and Geodetic Survey
- NGVD29 National Geodetic Vertical Datum of 1929, and in some cases the datum NGVD29+3ft was used to avoid negative stage values
- NAVD88 North American Vertical Datum 1988

The datum conversions between USED, USCGS, and NGVD29 are straightforward. Per the stage data summaries, 3.0 ft USED equals 0.0 ft USCGS. The USCGS datum became the NGVD29 datum with a general change to the determination of the combined mean sea level used as its basis. Therefore, the USCGS and NGVD29 datums are assumed to be equal.

The conversion between NGVD29 and NAVD88 is site specific. The adjustment can be estimated using the VERTCON conversion program developed by the National Oceanographic and Atmospheric Administration's (NOAA's) National Geodetic Survey (NGS). The calculated adjustment for each gage station per the VERTCON conversion program is as follows:

Rindge Pump: NGVD29 + 2.14 ft = NAVD88

Burns Cutoff: NGVD29 + 2.06 ft = NAVD88

In 2002, the DWR in association with the NGS, conducted a global positioning system (GPS) survey of the Sacramento-San Joaquin Delta to establish new NAVD88 elevations at over 100 bench marks throughout the area. This survey resulted in adjustments to the calculated conversion from NGVD29 to NAVD88. The resulting conversion for NGVD29 to NAVD88 for each gage station is as follows (+/- 0.07 ft):

Rindge Pump: NAVD88 = NGVD29 + 2.50 ft= (NGVD29+3ft) - 0.5 ft

Burns Cutoff: NAVD88 = NGVD29 + 2.13 ft = (NGVD29+3ft) - 0.87 ft

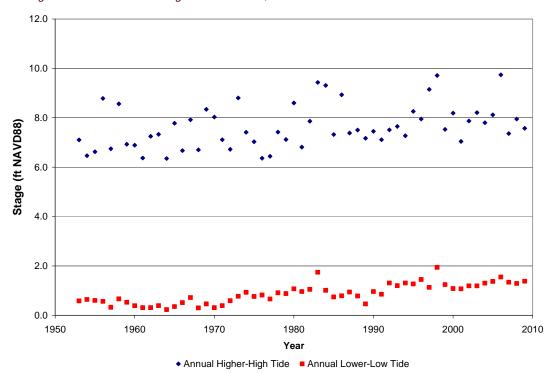
Note that the conversion is presented in both NGVD29 and NGVD29+3ft datums. The NGVD29+3ft datum was in use at both gage stations just prior to the conversion to NAVD88 in WY 2006. Therefore, the adjustments listed by DWR were to the NGVD29+3ft datum.

The NAVD88 adjustment used in this study is based on the 2002 DWR survey adjustment factors. Figure 4 and Figure 5 present the data for the Rindge Pump and Burns Cutoff gage station in the NAVD88 datum with no correction for subsidence or sea level rise other than the "zero on gage" corrections made prior to WY 1965.

12.0 10.0 8.0 Stage (ft NAVD88) 4.0 2.0 0.0 1950 1960 1970 1980 1990 2000 2010 Year ◆ Annual Higher-High Tide ■ Annual Lower-Low Tide

Figure 4 - Rindge Pump Gage Station Data, Converted to NAVD88





2.4 Lower-Low Tide Analysis

The annual lower-low tide data can be used to estimate the combined impact of subsidence and sea level rise over time. Lower-low tide data is used because hydraulic impacts on the stage data are minimized. The annual lower-low tide data is evaluated for three 19-year epoch periods, to eliminate variability due to the astronomic tide cycle:

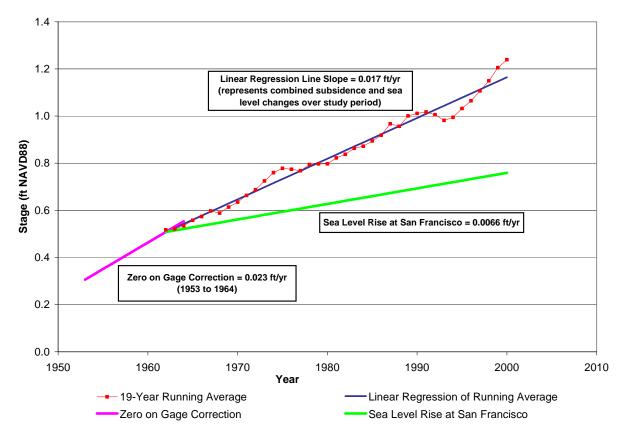
▲ Period 1: WY 1953 to WY 1971

▲ Period 2: WY 1972 to WY 1990

▲ Period 3: WY 1991 to WY 2009

Figure 6 and Figure 7 present the running 19-year average of the annual lower-low tide data for the Rindge Pump and Burns Cutoff gage stations. Note that the averages are presented at the mid-point of the 19-year period (e.g. the 19-year average for WY 1972 through WY 1990 is presented in WY 1981).

Figure 6 - Rindge Pump Gage Station 19-Year Running Average of Annual Lower-Low Tides



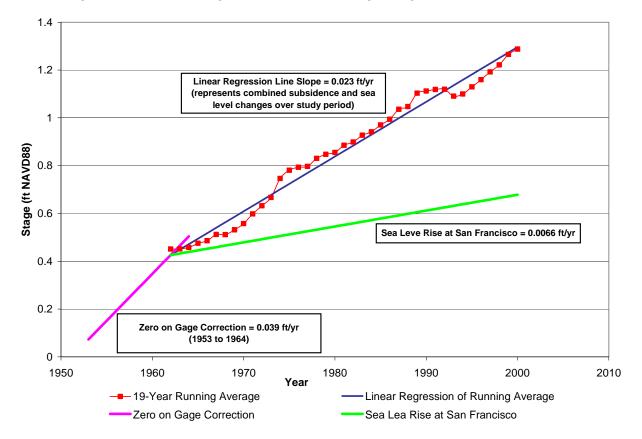


Figure 7 - Burns Cutoff Gage Station 19-Year Running Average of Annual Lower-Low Tides

Each of these figures includes a line representing the linear regression that was performed on the 19-year running average annual lower-low tide data. The slope of this line represents the combined rate of subsidence and sea level rise at each gage station. These results show that the combined impact of subsidence and sea level rise is greater at the Burns Cutoff gage station. Since the sea level rise should be the same at both gage stations (Figure 6 and Figure 7 present the sea level rise at San Francisco for comparison), the impact of subsidence is greater at the Burns Cutoff gage station when compared to the Rindge Pump gage station. For reference, these figures also show the "zero on gage" corrections from the early years of the study relative to the combined impact of subsidence and sea level rise over the entire study period.

2.4.1 Subsidence

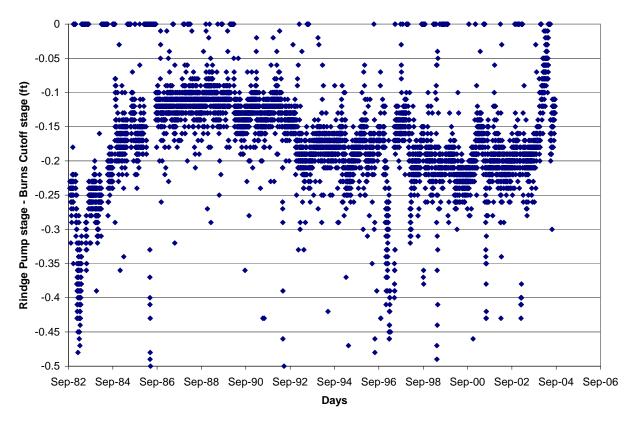
Recall that the "zero on gage" corrections prior to WY 1965 were used to account for subsidence up to WY 1964 in Section 2.2 above. These rates of subsidence are much greater than the combined impact of subsidence and sea level rise shown by the data in Figure 6 and Figure 7. These differences could indicate several possible scenarios:

The rate of subsidence decreased over time

- The 1964 "zero on gage" correction was not a correction for subsidence only
- ♦ The 1964 "zero on gage" correction was made to faulty benchmarks due to land subsidence in the delta region

Figure 8 presents the daily difference between the Rindge Pump and Burns Cutoff gage station lower-low tide since WY 1983 (the first year data is available electronically). Days when the difference equals zero represent days when one of the two gage stations was out of service. The difference between the daily gage readings at the two gage stations would remain constant over time if there was no difference in rates of subsidence at the two gage station. A difference in subsidence rates, suggested by the 1964 "zero on gage" corrections, should result in an overall trend that increases/decreases the daily difference between the lower-low tide levels over time. Note the Figure 8 shows both increasing and decreasing trends in the difference between the lower-low tide levels at the two gage stations. Note also that there appear to be shifts in the data presented in Figure 8 following each time one of the gages is out of service. These shifts could represent undocumented corrections for subsidence over time.

Figure 8 - Daily Lower-Low Tide Gage Reading Differences between the Rindge Pump and Burns Cutoff Gage Stations (WY 1983 through WY 2005)



Subsidence should be separated from sea level rise first using survey data over the entire period of record. There is no documented data to record subsidence rates after WY 1964. Data from

the 2002 DWR GPS survey is only a single point with nothing to use for comparison. Due to the lack of reliable subsidence data and documentation, subsidence is estimated using two methods – depending on the period of record:

- ♦ <u>WY 1953 through WY 1964</u> Use the 1964 "zero on gage" correction as the linear representation of the rate of subsidence. Note that the data has already been corrected for "zero on gage" during the datum conversion.
- ♦ <u>WY 1965 through WY 2009</u> Use the known sea level rise at San Francisco (0.0066 ft/yr) to determine the rate of subsidence on a linear basis. This results in an estimated subsidence of 0.5 ft (0.011 ft/yr) at the Rindge Pump gage station and 0.8 ft (0.017 ft/yr) at the Burns Cutoff gage station.

2.4.2 Sea Level Rise

Theoretically, the subsidence correction would have been based on actual survey data over the entire period of record. This would allow the calculation of the local sea level rise at each of the gage stations. Since this survey data was not available over the entire period of record, the sea level rise at the Rindge Pump and Burns Drive gage stations was assumed to be equal to the historic sea level rise at San Francisco – 0.0066 ft/yr (2.0 mm/yr). All data was adjusted using a linear rate of sea level rise to raise all values over the period of record to the 2009 sea level.

3.0 Stage Frequency Analysis

3.1 Data Used

Prior to performing the stage frequency analysis, the annual higher-high tide data was adjusted to address the following issues discussed previously in this report:

- Conversion to NAVD88 Datum
- Subsidence
- Sea Level Rise

Table 1 and Table 2 present the data used in the stage frequency analysis for the Rindge Pump and Burns Cutoff gage stations. Figure 9 presents the annual higher-high tide data for both gage stations in graphical form for comparison.

Table 1 - Rindg	Table 1 - Rindge Pump Gage Station Adjusted Annual Higher-High Tide Data					
19-Year Epoch Period 1		19-Year Ep	och Period 2	19-Year Epoch Period 3		
Water Year	Stage (ft NAVD88)	Water Year	Stage (ft NAVD88)	Water Year	Stage (ft NAVD88)	
1953	7.2(1)	1972	6.79	1991	6.76	
1954	6.6 ⁽¹⁾	1973	8.83	1992	7.13	
1955	6.8(1)	1974	7.41	1993	7.24	
1956	8.9(1)	1975	6.99	1994	6.83	
1957	6.9(1)	1976	6.28	1995	7.77	
1958	8.8(1)	1977	6.37	1996	7.43	
1959	7.2(1)	1978	7.27	1997	8.57	
1960	7.21	1979	6.86	1998	9.20	
1961	6.53	1980	8.27	1999	6.95	
1962	7.45	1981	6.52	2000	7.58	
1963	7.59	1982	7.68	2001	6.42	
1964	6.64	1983	9.02	2002	7.25	
1965	8.06	1984	8.94	2003	7.57	
1966	7.00	1985	7.01	2004	7.17	
1967	8.11	1986	8.68	2005	7.49	
1968	6.87	1987	7.09	2006	9.29	
1969	8.44	1988	7.23	2007	6.95	
1970	8.14	1989	6.83	2008	7.53	
1971	7.20	1990	7.09	2009	7.12	

Notes:

⁽¹⁾ Tide Stage Data recorded prior to 1960 was recorded to the tenths of a foot. Therefore, the precision of the adjusted annual higher-high tide data is presented only to the tenths of a foot. Tide Stage Data recorded in 1960 and later was recorded to the hundredths of a foot.

Table 2 - Burns Cutoff Gage Station Adjusted Annual Higher-High Tide Data					
19-Year Epoch Period 1		19-Year Ep	och Period 2	19-Year Epoch Period 3	
Water Year	Stage (ft NAVD88)	Water Year	Stage (ft NAVD88)	Water Year	Stage (ft NAVD88)
1953	7.5 ⁽¹⁾	1972	6.84	1991	6.78
1954	6.8(1)	1973	8.90	1992	7.15
1955	7.0(1)	1974	7.49	1993	7.27
1956	9.1(1)	1975	7.08	1994	6.87
1957	7.1 ⁽¹⁾	1976	6.39	1995	7.83
1958	8.9(1)	1977	6.44	1996	7.50
1959	7.3 ⁽¹⁾	1978	7.40	1997	8.67
1960	7.21	1979	7.08	1998	9.21
1961	6.69	1980	8.53	1999	7.01
1962	7.56	1981	6.72	2000	7.64
1963	7.64	1982	7.74	2001	6.47
1964	6.65	1983	9.29	2002	7.27
1965	8.07	1984	9.15	2003	7.59
1966	6.94	1985	7.13	2004	7.16

Table 2 - Burns Cutoff Gage Station Adjusted Annual Higher-High Tide Data					
19-Year Epo	19-Year Epoch Period 1		19-Year Epoch Period 2		och Period 3
Water Year	Stage (ft NAVD88)	Water Year	Stage (ft NAVD88)	Water Year	Stage (ft NAVD88)
1967	8.16	1986	8.72	2005	7.45
1968	6.92	1987	7.14	2006	9.05
1969	8.54	1988	7.24	2007	6.64
1970	8.20	1989	6.89	2008	7.21
1971	7.26	1990	7.14	2009	6.81

Notes:

10.0 9.5 9.0 Output Stage Height (ft NAVD88) 8.5 8.0 7.5 7.0 6.5 6.0 1950 1960 1970 1980 1990 2000 2010 2020 Year

Figure 9 - Adjusted Annual Higher-High Tide Gage Station Data

3.2 Stage Frequency Analysis Results

The data presented in Table 1 and Table 2 was analyzed using the USACE Hydrologic Engineering Center Statistical Software Package (HEC-SSP). The data analyses were

◆ Rindge Pump □ Burns Cutoff

⁽¹⁾ Tide Stage Data recorded prior to 1960 was recorded to the tenths of a foot. Therefore, the precision of the adjusted annual higher-high tide data is presented only to the tenths of a foot. Tide Stage Data recorded in 1960 and later was recorded to the hundredths of a foot.

performed using the generalized frequency analysis with a Weibull plotting position and a normal probability distribution. Table 3 presents the stage frequency analysis results for the Rindge Pump and Burns Cutoff gage stations using the graphical method to address the S-shaped curve that passes through the data. The graphical method acknowledges that the higher stage events are dependent on higher flows, which in turn can be impacted by channel geometry as well as upstream and downstream overall system operation (e.g. levee failures and dam releases). Appendices A and B present the HEC-SSP analytical plots and stage frequency analysis reports for the Rindge Pump and Burns Cutoff gage stations.

Table 3 - Stage Frequency Analysis Results (WY 2009 Sea Level Conditions)				
Annual Exceedance Probability	Confidence Limit ⁽¹⁾	Rindge Pump (ft NAVD88)	Burns Cutoff (ft NAVD88)	
	95%	8.9	9.0	
1/50	50%	9.3	9.3	
	5%	9.7	9.6	
	95%	9.1	9.0	
1/100	50%	9.4	9.4	
	5%	9.8	9.8	
	95%	9.2	9.1	
1/200	50%	9.6	9.5	
	5%	10.0	9.9	

⁽¹⁾ The confidence limit represents the percent confidence the stage will be exceeded. For example, there is a 95% confidence that a 1/50 flood stage of 8.9 ft would be exceeded and a 5% confidence that a 1/50 flood stage of 9.7 ft would be exceeded at the Rindge Pump gage station. Note that the range of values between the 95% and 5% confidence limits represents the 90% confidence interval – meaning that there is 90% confidence that the given flood stage will occur between the two values.

3.2.1 Comparison to Previous Studies

Table 4 presents the stage frequency analysis results from the previous USACE studies in 1976, 1982, and 1992. The results were converted from NGVD29 datum to NAVD88 datum using the 2002 DWR GPS survey correction factors for comparison.

Table 4 -	Table 4 - Stage Frequency Analysis Results from Previous USACE Studies					
USACE	Annual	Rindge	Pump	Burns Cutoff		
Report Year	Exceedance Probability	ft NGVD29	ft NAVD88	ft NGVD29	ft NAVD88	
1976	1/50	7.1	9.6	7.2	9.3	
1970	1/100	7.4	9.9	7.5	9.6	
1982	1/50	7.1	9.6	7.2	9.3	
1982	1/100	7.4	9.9	7.5	9.6	
1992	1/50	7.2	9.7	7.4	9.5	
1992	1/100	7.4	9.9	7.6	9.7	

Because the previous study results presented in Table 4 do not address subsidence and sea level rise, the results of the two studies cannot be compared quantitatively. However, the previous studies showed that the higher-high tide stage was 0.1 to 0.2 ft higher in NGVD29 datum at Burns Cutoff gage station than at Rindge Pump gage station. Since the Burns Cutoff gage station is upstream of the Rindge Pump gages station, this difference is reasonable at the higher-high tide. Without any correction for subsidence and sea level rise, the conversion from NGVD29 to NAVD88 datum for the previous studies shows that the Burns Cutoff higher-high tide stage is 0.2 to 0.3 ft <u>lower</u> than at the Rindge Pump gage station. The results of this study (see Table 3), which take subsidence and sea level rise into account, show that the higher-high tide stage is approximately the same in NAVD88 datum at Burns Cutoff gage station as it is at Rindge Pump gage station – which is consistent with the previous studies and as expected due to their close proximity.

4.0 Climate Change Impacts

Future sea level rise will increase the stage frequency results calculated for WY 2009. USACE Circular No. 1165-2-211, "Water Resources Policies and Authorities Incorporating Sea-Level Change Considerations in Civil Works Programs," states that planning studies and engineering designs should consider alternatives that are developed and assessed for the entire range of possible future rates of sea level rise. Alternatives should be analyzed using "low," "intermediate," and "high" rates of future sea level rise, based on the following:

- ♦ <u>Low</u> use local historic rate of sea level rise; assumed to be 0.66 ft/100-yr (2.0 mm/yr) per the value measured at San Francisco
- ♦ <u>Intermediate</u> use the modified National Research Council (NRC) Curve I for estimating future sea level rise
- ♦ <u>High</u> use the modified NRC Curve III for estimating future sea level rise

The equation for the modified NRC curves to determine the change in sea level since 1986 is presented below:

$$E(t_2) - E(t_1) = 0.0017(t_2 - t_1) + b(t_2^2 - t_1^2)$$
, where

 $E(t_2) - E(t_1)$ = represents sea level rise between current and future years

 $E(t_1)$ = current sea level rise relative to the 1986 sea level, meters

 $E(t_2)$ = sea level rise in the future relative to the 1986 sea level, meters

 $t_1 = current year - 1986$

 $t_2 = \text{future year} - 1986$

b = constant = 2.360E-05 for NRC Curve I

1.005E-04 for NRC Curve III

Table 5 presents the estimated sea level rise at the Rindge Pump and Burns Cutoff gage stations. Note that all three rates of sea level rise are identical for the two gage stations.

Table 5 - Estimated Future Sea Level Rise from 2009					
Voor		Sea Level Rise, ft			
Year	Low	Intermediate	High		
2030	0.1	0.2	0.6		
2050	0.3	0.5	1.4		
2080	0.5	1.1	3.2		
2100	0.6	1.5	4.7		

4.1 Estimated Future Stage Frequency

To estimate the future stage frequencies for the Rindge Pump and Burns Cutoff gage stations, the stage frequency analysis results from Table 3 were combined with the estimated sea level rise presented in Table 5. The combination of this information results in a series of figures for each gage station presenting the estimated stage (including the 90% confidence interval) for a given exceedance probability and the three sea level rise scenarios. A description of these figures is presented below:

- ♦ Rindge Pump Gage Station
 - Figure 10, estimated stage with a 1/200 annual exceedance probability
 - ♦ Figure 11, estimated stage with a 1/100 annual exceedance probability
 - Figure 12, estimated stage with a 1/50 annual exceedance probability
- Burns Cutoff Gage Station
 - ♦ Figure 13, estimated stage with a 1/200 annual exceedance probability
 - ♦ Figure 14, estimated stage with a 1/100 annual exceedance probability
 - Figure 15, estimated stage with a 1/50 annual exceedance probability

For reference, the minimum levee height in the area near each gage station is shown on each of these figures. Note that the stage projections into the future are based on an assumption that the levee height will be increased in the future to accommodate sea level rise.

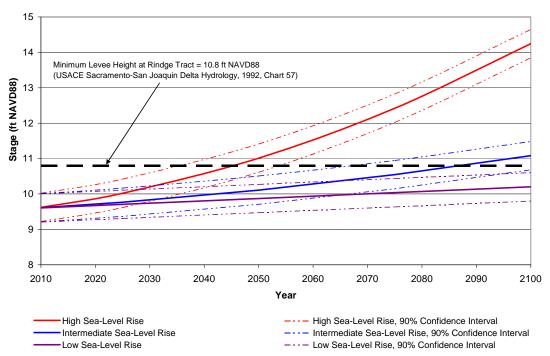
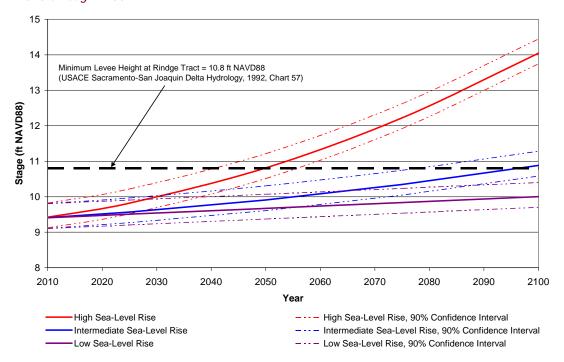


Figure 10 - Rindge Pump Gage Station Estimated Stage with 1/200 Annual Exceedance Probability, 2010 through 2100

Figure 11 - Rindge Pump Gage Station Estimated Stage with 1/100 Annual Exceedance Probability, 2010 through 2100



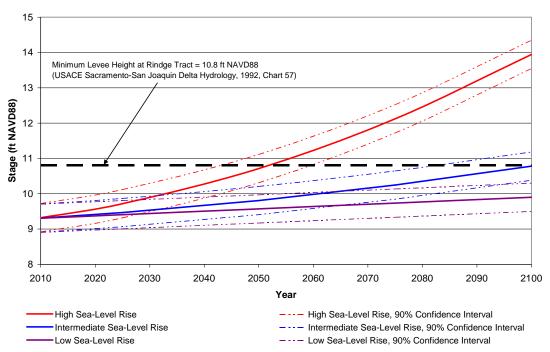
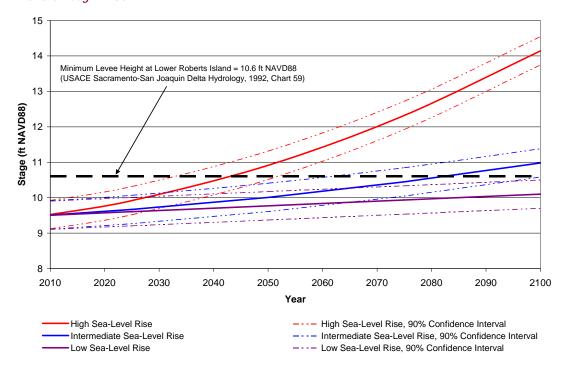


Figure 12 - Rindge Pump Gage Station Estimated Stage with 1/50 Annual Exceedance Probability, 2010 through 2100

Figure 13 - Burns Cutoff Gage Station Estimated Stage with 1/200 Annual Exceedance Probability, 2010 through 2100



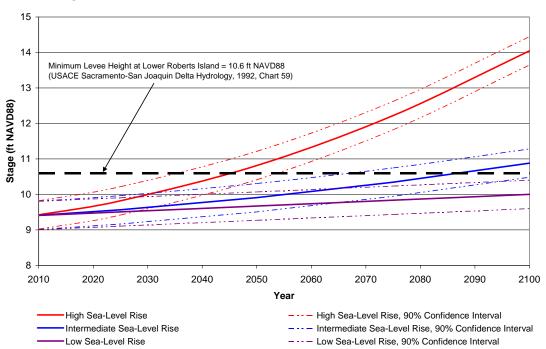
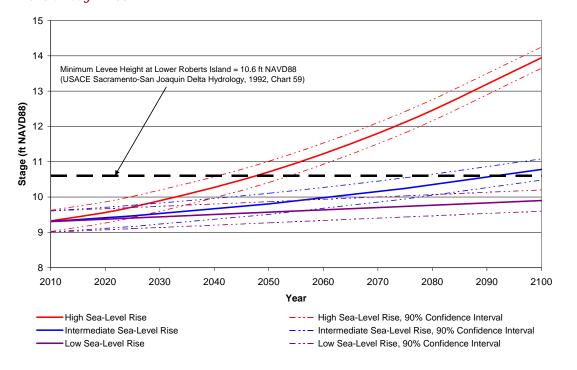


Figure 14 - Burns Cutoff Gage Station Estimated Stage with 1/100 Annual Exceedance Probability, 2010 through 2100

Figure 15 - Burns Cutoff Gage Station Estimated Stage with 1/50 Annual Exceedance Probability, 2010 through 2100



Appendix A

HEC-SSP Analytical Plot and Stage Frequency Analysis Report for Rindge Pump Gage Station

General Frequency Analysis 02 Aug 2010 10:05 AM

--- Input Data ---

Analysis Name: Rindge Pump SFA

Description:

Data Set Name: RP Final Report

DSS File Name: C:/Documents and Settings/dmurbach/My Documents/HEC/Rindge_Pump_051010/

Rindge_Pump_051010.dss

DSS Pathname: /STAGE////IR-CENTURY//

Start Date: 01 Oct 1952 End Date: 30 Sep 2009

Project Path: C:\Documents and Settings\dmurbach\My Documents\HEC\Rindge_Pump_051010
Report File Name: C:\Documents and Settings\dmurbach\My Documents\HEC\Rindge_Pump_051010\

GeneralFrequencyResults\Rindge_Pump_SFA\Rindge_Pump_SFA.rpt

Result File Name: C:\Documents and Settings\dmurbach\My Documents\HEC\Rindge_Pump_051010\

 $General Frequency Results \\ \label{lem:lem:results} Rindge_Pump_SFA \\ \label{lem:lem:results} Rindge_Pump_SFA. \\ xml$

Plotting Position Type: Weibull

Probability Distribution Type: Normal Compute Expected Probability Curve

Upper Confidence Level: 0.05 Lower Confidence Level: 0.95

!Gfa.Input.UseNonStandardFrequency.label!

Frequency: 0.2 Frequency: 0.5 Frequency: 1.0 Frequency: 2.0 Frequency: 13.0 Frequency: 31.0 Frequency: 99.0

Display ordinate values using 2 digits in fraction part of value

--- End of Input Data ---

<< High Outlier Test >>

Based on 57 events, 10 percent outlier test deviate K(N) = 2.818Computed high outlier test value = 9.678

0 high outlier(s) identified above test value of 9.678

<< Low Outlier Test >>

Based on 57 events, 10 percent outlier test deviate K(N) = 2.818Computed low outlier test value = 5.237

0 low outlier(s) identified below test value of 5.237

--- Final Results ---

<< Plotting Positions >>

RP Final Report

Events Analyz	zed l	Ordered	Events
	l Water	W	eibull
Day Mon Year	FT Rai	nk Yea	r FT Plot Pos l
01 Dec 1952	7.22 1	2006	9.29 1.72
17 Jan 1954	$6.59 \mid 2$	1998	9.20 3.45
09 Dec 1954	6.76 3	1983	9.02 5.17
26 Jan 1956	8.93 4	1984	8.94 6.90
29 Jun 1957	6.90 5	1956	8.93 8.62
06 Apr 1958	8.77 6	1973	8.83 10.34
16 Feb 1959	7.24 7	1958	8.77 12.07 I
09 Feb 1960	7.21 8	1986	8.68 13.79
01 Dec 1960	6.53 9	1997	8.57 15.52
15 Feb 1962	7.45 10	1969	8.44 17.24
04 Feb 1963	7.59 11	1980	8.27 18.97 I
05 Nov 1963	6.64 12	1970	8.14 20.69
27 Dec 1964	8.06 13	1967	8.11 22.41
l 04 Feb 1966	7.00 14	1965	8.06 24.14
24 Jan 1967	8.11 15	1995	7.77 25.86

```
| 08 Jul 1968
                 6.87 \mid 16
                               1982
                                        7.68 27.59 |
| 15 Feb 1969
                  8.44 | 17
                                1963
                                         7.59 29.31 I
                                         7.58 31.03 |
| 23 Jan 1970
                  8.14 | 18
                               2000
| 30 Nov 1970
                   7.20 \mid 19
                                2003
                                          7.57 32.76 |
| 02 Dec 1971
                  6.79 \mid 20
                                2008
                                         7.53 34.48 1
                               2005
                                              36.21 l
| 18 Jan 1973
                  8.83 | 21
                                         7.49
| 08 Jan 1974
                  7.41 | 22
                                         7.45 37.93 |
                               1962
| 11 Jun 1975
                  6.99 + 23
                               1996
                                         7.43 39.66 |
| 05 Nov 1975
                   6.28 \mid 24
                                1974
                                          7.41 41.38 I
                  6.37 \mid 25
                               1978
                                         7.27 43.10 |
| 30 Jun 1977
| 16 Jan 1978
                  7.27 \mid 26
                               2002
                                         7.25 44.83 |
| 23 Feb 1979
                  6.86 | 27
                                1993
                                         7.24 46.55 |
| 18 Jan 1980
                               1959
                                         7.24 48.28 |
                  8.27 | 28
                                        7.23
                                              50.00
| 29 Jul 1981
                 6.52 \mid 29
                               1988
                                         7.22 51.72 I
| 05 Jan 1982
                  7.68 | 30
                               1953
| 29 Jan 1983
                               1960
                                         7.21 53.45 |
                  9.02 \mid 31
| 03 Dec 1983
                  8.94 \mid 32
                                1971
                                         7.20 55.17 I
| 24 Nov 1984
                   7.01 \mid 33
                                2004
                                          7.17 56.90 |
                                1992
                                         7.13 58.62 |
| 21 Feb 1986
                  8.68 | 34
| 11 Jul 1987
                 7.09 + 35
                               2009
                                        7.12 60.34 |
| 06 Dec 1987
                  7.23 \mid 36
                                1990
                                         7.09 62.07 |
| 04 Jun 1989
                  6.83 | 37
                               1987
                                         7.09 63.79 1
| 22 Jun 1990
                  7.09 \mid 38
                               1985
                                         7.01 65.52 |
| 09 Jul 1991
                 6.76 \mid 39
                               1966
                                        7.00 67.24 |
| 15 Feb 1992
                                         6.99 68.97 1
                  7.13 \mid 40
                                1975
| 19 Feb 1993
                  7.24 \mid 41
                                2007
                                         6.95 70.69 |
                                1999
                                         6.95 72.41 I
| 11 Dec 1993
                  6.83 + 42
| 21 Mar 1995
                                1957
                   7.77 \mid 43
                                         6.90 74.14 |
| 21 Feb 1996
                  7.43 \mid 44
                                1968
                                         6.87 75.86 I
| 05 Jan 1997
                  8.57 | 45
                               1979
                                         6.86 77.59 |
| 06 Feb 1998
                  9.20 + 46
                                1994
                                         6.83
                                               79.31 I
                  6.95 | 47
                                1989
                                         6.83 81.03 I
| 09 Feb 1999
| 14 Feb 2000
                  7.58 \mid 48
                                1972
                                         6.79 82.76 I
                                1991
| 06 Mar 2001
                  6.42 + 49
                                         6.76 84.48 |
| 02 Dec 2001
                  7.25 + 50
                                1955
                                               86.21
                                         6.76
| 16 Dec 2002
                  7.57 \mid 51
                                1964
                                         6.64
                                               87.93 I
1 24 Dec 2003
                  7.17 \mid 52
                                1954
                                         6.59 89.66 |
| 08 Jan 2005
                  7.49 | 53
                               1961
                                         6.53 91.38 |
| 31 Dec 2005
                  9.29 + 54
                                1981
                                         6.52 93.10 |
| 11 Jul 2007
                 6.95 \mid 55
                               2001
                                        6.42 94.83 |
| 04 Jan 2008
                  7.53 + 56
                               1977
                                         6.37 96.55 |
1 25 Dec 2008
                  7.12 | 57
                                1976
                                         6.28 98.28 I
```

<< Frequency Curve >> RP Final Report

-	Compute	d Expect	ed I	Perc	ent C	onfidence I	Limits	
	Curve	Probabilit	y Ch	anc	e 0	0.05 0.9	51	
	STAGE	, FT NAVI	D88	l Ex	ceedance	STAGE	E, FT NAVD88	
-					-		-	
	9.73	9.84	0.2		10.18	9.38		
	9.49	9.58	0.5		9.90	9.17		
	9.29	9.36	1.0		9.68	9.00		
	9.08	9.13	2.0		9.43	8.80		
-	8.34	8.36	13.0	-	8.59	8.14		
1	7.85	7.85 l	31.0	-	8.04	7.67 l		
ı	5.62	5.55	99.0	Τ	5.92	5.24		
I-					.		-	
•							•	

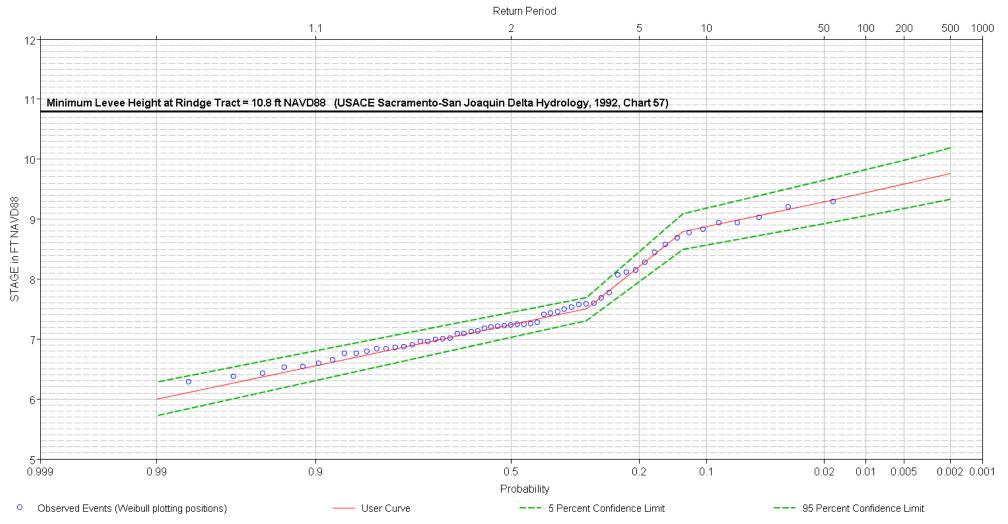
<< Systematic Statistics >> RP Final Report

,	NAVD88 Number	of Events
Mean	7.46 Historic Events	0
Standard Dev	0.79 High Outliers	0
Station Skew	0.85 Low Outliers	0
Regional Skew	Zero Events	0
Weighted Skew	Missing Events	0
Adopted Skew	0.00 Systematic Eve	nts 57 l

<< User-Defined Graphical Frequency Curve >> RP Final Report

Computed Expected Percent Confidence Limits					
Curve Probability Chance 0.05 0.95					
STAGE, FT NAVD88 Exceedance STAGE, FT NAVD88					
9.76 0.2 10.19 9.33					
9.58 0.5 9.98 9.18					
9.44 1.0 9.82 9.06					
9.29 2.0 9.65 8.93					
8.79 13.0 9.09 8.49					
7.50 31.0 7.69 7.31					
6.00 99.0 6.28 5.72					

General Frequency Graphical Plot for Rindge Pump Stage Frequency Analysis



Appendix B

HEC-SSP Analytical Plot and Stage Frequency Analysis Report for Burns Cutoff Gage Station

General Frequency Analysis 02 Aug 2010 10:54 AM

--- Input Data ---

Analysis Name: Burns Cutoff Stage Frequency Analysis

Description:

Data Set Name: Final Report with Dates

DSS File Name: C:/Documents and Settings/dmurbach/My Documents/HEC/Burns_Cutoff_051110/

Burns_Cutoff_051110.dss

DSS Pathname: /STAGE////IR-CENTURY//

Start Date: 01 Oct 1952 End Date: 30 Sep 2009

Project Path: C:\Documents and Settings\dmurbach\My Documents\HEC\Burns_Cutoff_051110 Report File Name: C:\Documents and Settings\dmurbach\My Documents\HEC\Burns_Cutoff_051110\

GeneralFrequencyResults\Burns_Cutoff_Stage_Frequency_Analysis\

Burns_Cutoff_Stage_Frequency_Analysis.rpt

Result File Name: C:\Documents and Settings\dmurbach\My Documents\HEC\

Burns_Cutoff_051110\GeneralFrequencyResults\Burns_Cutoff_Stage_Frequency_Analysis\Burns_Cutoff_

Stage_Frequency_Analysis.xml

Plotting Position Type: Weibull

Probability Distribution Type: Normal Compute Expected Probability Curve

Upper Confidence Level: 0.05 Lower Confidence Level: 0.95

Use Low Outlier Threshold Low Outlier Threshold: 5.0

!Gfa.Input.UseNonStandardFrequency.label!

Frequency: 0.2 Frequency: 0.5

Frequency: 1.0 Frequency: 2.0

Frequency: 9.0

Frequency: 18.0

Frequency: 28.0

Frequency: 45.0

Frequency: 99.0

Display ordinate values using 2 digits in fraction part of value

--- End of Input Data ---

<< High Outlier Test >>

Based on 57 events, 10 percent outlier test deviate K(N) = 2.818Computed high outlier test value = 9.772

0 high outlier(s) identified above test value of 9.772

<< Low Outlier Test >>

Based on 57 events, 10 percent outlier test deviate K(N) = 2.818Computed low outlier test value = 5.26

0 low outlier(s) identified below input threshold of 5

--- Final Results ---

<< Plotting Positions >> Final Report with Dates

_____ **Ordered Events** Events Analyzed Weibull | Water Day Mon Year FT | Rank Year FT Plot Pos I |-----| | 01 Dec 1952 7.47 1983 9.29 1.72 I | 17 Jan 1954 6.83 2 1998 9.21 3.45 | 09 Dec 1954 $6.98 \mid 3$ 1984 9.15 5.17 | | 26 Jan 1956 9.14 | 4 1956 9.14 6.90 | 29 Jun 1957 7.09 | 5 9.05 2006 8.62 | 04 Apr 1958 8.90 | 6 1973 8.90 10.34 | | 21 Feb 1959 7.26 | 7 1958 8.90 12.07 | 7.21 | 8 | 09 Feb 1960 1986 8.72 13.79 |

01 Dec 1960	6.69 9	1997	8.67 15.52
15 Feb 1962	7.56 10	1969	8.54 17.24
04 Feb 1963	7.64 11	1980	8.53 18.97
05 Nov 1963	6.65 12	1970	8.20 20.69
27 Dec 1964	8.07 13	1967	8.16 22.41
10 Dec 1965	6.94 14	1965	8.07 24.14
24 Jan 1967	8.16 15	1995	7.83 25.86
08 Jul 1968	6.92 16	1982	7.74 27.59 I
15 Feb 1969	8.54 17	2000	7.64 29.31
23 Jan 1970	8.20 18	1963	7.64 31.03
30 Nov 1970	7.26 19	2003	7.59 32.76
02 Dec 1971	6.84 20	1962	7.56 34.48
18 Jan 1973	8.90 21	1996	7.50 36.21
08 Jan 1974	7.49 22	1974	7.49 37.93
11 Jun 1975	7.08 23	1953	7.47 39.66
05 Nov 1975	6.39 24	2005	7.45 41.38
30 Jun 1977	6.44 25	1978	7.40 43.10
16 Jan 1978	7.40 26	2002	7.27 44.83
23 Feb 1979	7.08 27	1993	7.27 46.55
21 Feb 1980	8.53 28	1971	7.26 48.28
29 Jul 1981	6.72 29	1959	7.26 50.00
05 Jan 1982	7.74 30	1988	7.24 51.72
29 Jan 1983	9.29 31	2008	7.24 51.72 1
03 Dec 1983	9.15 32	1960	7.21 55.17
24 Nov 1984	7.13 33	2004	7.16 56.90
1 10 Mar 1986	8.72 34	1992	7.15 58.62
10 Mai 1980 11 Jul 1987	7.14 35	1992	
06 Dec 1987	7.14 33	1990	7.14 60.34 7.14 62.07
04 Jun 1989		1985	7.13 63.79
22 Jun 1990		1957	7.09 65.52
09 Jul 1991	6.78 39	1979	7.08 67.24
15 Feb 1992	7.15 40	1975	7.08 68.97
07 Jan 1993	7.27 41	1999	7.01 70.69
11 Dec 1993	6.87 42	1955	6.98 72.41
21 Mar 1995	7.83 43	1966	6.94 74.14
21 Feb 1996	7.50 44	1968	6.92 75.86
05 Jan 1997	8.67 45	1989	6.89 77.59
06 Feb 1998	9.21 46	1994	6.87 79.31
09 Feb 1999	7.01 47	1972	6.84 81.03
1 14 Feb 2000	7.64 48	1954	6.83 82.76
08 Jan 2001	6.47 49	2009	6.81 84.48
02 Dec 2001	7.27 50	1991	6.78 86.21
16 Dec 2002	7.59 51	1981	6.72 87.93
24 Dec 2003	7.16 52	1961	6.69 89.66
08 Jan 2005	7.45 53	1964	6.65 91.38
03 Jan 2006	$9.05 \mid 54$	2007	6.64 93.10

11 Jul 2007	6.64 55	2001	6.47 94.83 I
04 Jan 2008	7.21 56	1977	6.44 96.55
25 Dec 2008	6.81 57	1976	6.39 98.28

<< Frequency Curve >> Final Report with Dates

```
| Computed | Expected | Percent | Confidence Limits |
  Curve Probability | Chance |
                               0.05
                                      0.95 |
  STAGE, FT NAVD88
                     | Exceedance | STAGE, FT NAVD88
|-----
    9.82
           9.94
                  0.2 \, \, \,
                          10.28
                                  9.47 [
    9.58
           9.67 |
                                  9.26 |
                  0.5
                     10.00
    9.38
           9.45 |
                 1.0
                          9.77
                                 9.081
    9.16
           9.21
                  2.0
                          9.52
                                 8.88
    8.59
           8.61
                 9.0
                          8.86
                                 8.37 |
    8.25
           8.26 |
                 18.0
                           8.48
                                  8.06 |
    7.98
           7.99 |
                 28.0
                           8.19
                                  7.80 |
    7.62
                           7.80
           7.62 \, \mathsf{I}
                 45.0
                                  7.44 |
    5.65
           5.58 |
                 99.0
                           5.95
                                  5.26 |
  -----|
```

I

<< Systematic Statistics >> Final Report with Dates

STAGE, FT NAVD88 Number of Events |-----| 7.52 | Historic Events | Mean | Standard Dev 0.80 | High Outliers 0 0.89 | Low Outliers | Station Skew 0 | --- | Zero Events $0 \perp$ | Regional Skew | Weighted Skew --- | Missing Events 0 | Adopted Skew 0.00 | Systematic Events 57 I |-----|

<< User-Defined Graphical Frequency Curve >> Final Report with Dates

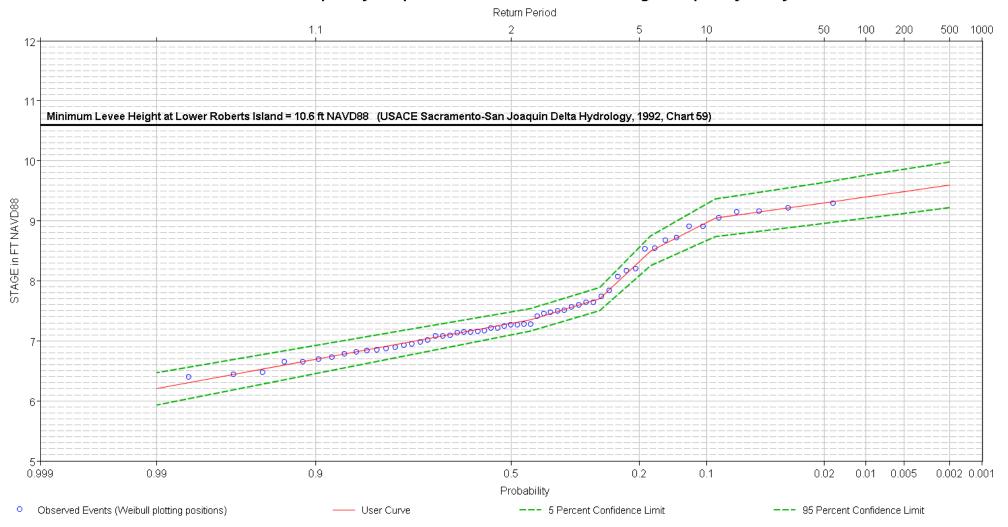
| Computed | Expected | Percent | Confidence Limits |

| Curve Probability | Chance | 0.05 0.95 |

STAGE, FT NAVD88 | Exceedance | STAGE, FT NAVD88

1	9.60		0.2	1	9.98	9.22
1	9.49		0.5	1	9.86	9.12
1	9.40		1.0	1	9.76	9.04
1	9.30		2.0	1	9.64	8.96
1	9.05		9.0	1	9.36	8.74 l
1	8.50		18.0	-	8.75	8.25
1	7.70		28.0	1	7.89	7.51
1	7.35		45.0	1	7.54	7.16
1	6.20		99.0	1	6.47	5.93

General Frequency Graphical Plot for Burns Cutoff Stage Frequency Analysis



Appendix C Assessment District Boundary Diagram

Proposed Assessment Boundary Swenson Park Golf Course Slough Legend Proposed Assessment Boundary

Appendix D San Joaquin County Use Codes

County Use Code	County Description	Land Use Category / Sub- Category
001	Vacant Residential Lot – Development with Utilities	Open Space - Developed
002	Vacant Lot with PROB. W/C Precludes Building A RE	Open Space
003	Vacant Lot – Totally Unusable (incurable)	Open Space
004	Vacant Residential Lot with miscellaneous Residential IMPRS (garage)	Open Space - Developed
005	Vacant Residential Subdivision Site	Open Space
006	Vacant Residential Lot- Undeveloped	Open Space
007	Potential Residential Subdivision	Open Space
010	Single-Family Dwelling (SFD)	Single-Family Residential
011	Condominium Unit	Multi-Family Residential
012	Planned Unit Residential Development (PURD)	Multi-Family Residential
013	Single-Family Residence with Secondary Residential Square Footage	Single-Family Residential
014	SFD with Secondary Use (i.e., barber shop)	Single-Family Residential
015	Zero Lot Line Residential	Single-Family Residential
016	Residential Lot with Mobile Home	Mobile Home
017	Single-Family with Common Wall (duet, halfplex, etc.)	Single-Family Residential
020	Vacant Lot (zoned for two units)	Open Space
021	One Duplex – One Building	Single-Family Residential
022	Two SFDs On Single Parcel	Single-Family Residential
030	Vacant Lot Zoned for 3 or 4 Units	Open Space
031	Single Triplex – (3 units, 1 structure)	Multi-Family Residential
032	Three Units - 2 or More Structures	Multi-Family Residential
034	Single Fourplex	Multi-Family Residential
035	Four Units, 2 or More Structures	Multi-Family Residential
040	Vacant Lots Zoned for Apartments	Open Space
041	5-10 Residential Units – Single Building	Multi-Family Residential
042	5-10 Residential Units – 2 or more Buildings	Multi-Family Residential

043	11-20 Residential Units – One Structure	Multi-Family Residential
044	11-20 Residential Units – 2 or more Buildings	Multi-Family Residential
045 046 047 048 050	21-40 Units 41-100 Units Over 100 Units High-Rise Apartments Rural Residential – Vacant Homesite	Multi-Family Residential Multi-Family Residential Multi-Family Residential Multi-Family Residential Agricultural
051 052	Rural Residence – 1 Residence Rural Residential – 2 or more residences	Rural Residential Rural Residential
053	Rural Residential – Vacant – Development with	Open Space - Developed
054	Rural Residences with Miscellaneous Residences. IMPS; Only	Open Space
055	Labor Camp	Rural Residential
056	Rural Residential with Mobil Home	Mobile Home
059	Residential Care Home (6 units or less)	Multi-Family Residential
060 061 062	Motels Less Than 50 Units Motels Over 50 Units Motels less than 50 units with some kitchens Motels over 50 Units with some Kitchens	Commercial Commercial
063		Commercial
064	Motels Less Than 50 Units with Shops Motels Over 50 Units with Shops	Commercial Commercial
068 070 071 078	Resort Motels – Cabins, Etc. Hotel without Restaurant Hotel with Restaurant Rooming House – Convent – Rectory, Etc.	Commercial Commercial Commercial
080 081	Common Areas – No Structures Common Areas – with Structures	Open Space - Developed Open Space - Developed
082	Common Areas – Roads and Streets	Open Space - Developed
090 091 092	Mobile Home Park Overnight Type Trailer Park Mobile Home Park with Overnight Facilities	Mobile Home Open Space Mobile Home

093	Resort Type Trailer Park	Mobile Home
094	Mobile Home Condominium Lot	Mobile Home
095	Mobile Home Appurtenances	Mobile Home
096	Mobile Home	Mobile Home
100	Vacant Commercial Land – Undeveloped	Open Space
101	Vacant Commercial Land with Utilities	Open Space - Developed
102	Vacant Commercial Land with Miscellaneous IMPS	O C D11
102	Vacant Commercial Land with Miscellaneous IMPS	Open Space - Developed
107	Potential Commercial Subdivision	Open Space
		1 1
110	Single-Story	Commercial
111	Multiple-Story Stories	Commercial
112	Multiple Stores in one Building	Commercial
113	Store with Residential Unit or Units	Commercial
114	Store Condo	Commercial
120	1 store and 1 office	Commercial
121	Multiple Combination of Offices, Shops	Commercial
130	1-Story Department Store	Commercial
131	2-Story Department Store	Commercial
140	Grocery Store	Commercial
141	Supermarkets	Commercial
142	Convenience Store	Commercial
143	Convenience Store with Gas Sales	Commercial
144	Fruit Stand	Commercial
150	Regional Shopping Center	Commercial
151	Community Shopping Center	Commercial
152	Neighborhood Shopping Center	Commercial
153	Individual Parcel Within Regional Shopping	Commercial
454	In this idea Dona With in Consequent Constant	
154	Individual Parcel Within Community Center	Commercial
155	Individual Parcel within neighborhood Shopping	Commercial
133	individual i arcei within heighborhood Shopping	Commercial
156	Shopping Center Common Area	Open Space - Developed
170	1-Story Office Building	Commercial
171	2-Story Office Building	Commercial
172	3 or More Story Office Building	Commercial
173	Office Building with Residential Unit or Units	Commercial
	C Saliding Man Residential Officer Office	Commercial
180	Assisted Living Residence	Multi-Family Residential
181	Congregate Seniors Housing	Multi-Family Residential
	·	,

182	Continuing Care Retirement Community	Multi-Family Residential
183	Skilled Nursing Facility	Multi-Family Residential
184	Specialty Home (Developmentally Disable)	Multi-Family Residential
190	Medical Offices	Commercial
191	Dental Offices	Commercial
192	Medical Dental Complex	Commercial
193	Veterinary Hospitals	Commercial
194	One-Story Office Condo	Commercial
195	Two-Story Office Condo	Commercial
196	Medical Office Condo	Commercial
197	Dental Office Condo	Commercial
200	Commercial Common Area – Non Shopping C	Open Space - Developed
201	Miscellaneous Multiple Uses – None Fully Dominant	Commercial
202	Commercial Use	Commercial
202	Animal Training Facility	Commercial
204	Day Care Center	Commercial
210	Restaurants	Commercial
211	Fast Food Restaurants	Commercial
212	Food Preparation – Take Out Only	Commercial
212	Tood Freparation Take Out Only	Commercial
213	Cocktail Lounge – Bars	Commercial
214	Restaurant with Residential Unit or Units	Commercial
000	Melle la The stars	
230	Walk-In Theaters	Commercial
231	Multiple Screen Theaters	Commercial
240	Banks	Commercial
250	Full Service Stations	Commercial
251	Self Service. Station (has no facilities)	Commercial
252	Service Station with Car Wash	Commercial
253	Truck Terminals	Commercial
254	Bulk Plants	Commercial
255	Self Service Station with Mini Mart	Commercial
256	Convenience Store (mini-mart) with gas station	Commercial
260	Auto Sales with Service Center	Commercial
261	Auto Sales without Service Center	Commercial
262	Used Car Lot	Commercial
263	Other Sales Centers (Trailers, mobile home	Commercial

270	Farm or CONTS. Machine Sales and Service	Commercial
271	Farm or CONTS. Machine Sales Only	Commercial
272	Farm or CONST. Machine Sales Only	Commercial
280	Auto and Truck Repairs and Accessories	Commercial
281	Specialty Shops (Tires, Brakes, Etc.)	Commercial
282	Car Wash	Commercial
283	Self Service Car Wash	Commercial
284	Laundry	Commercial
285	Auto Body Shop	Commercial
290	Retail Nursery	Commercial
291	Commercial/Wholesale Nursery	Commercial
296		Commercial
300	Vacant Industrial Land Undeveloped	Open Space
		1 1
301	Vacant Industrial Land – Developed With	Open Space - Developed
302	Vacant Industrial Land with Miscellaneous IMPS	Open Space - Developed
307	Potential Industrial Subdivision	Open Space
310	Light Manufacturing and Light Industrial	Industrial
311	Light Industrial and Warehousing	Industrial
312	Light Industrial Warehouse Multiple Tenants	
312	Light fridustrial warehouse wulltple Terrants	Industrial
313	Industrial Condo	Industrial Industrial
313	Industrial Condo	Industrial
313	Industrial Condo	Industrial
313 314	Industrial Condo Shop-Work Area with Small Office	Industrial Commercial
313 314 320	Industrial Condo Shop-Work Area with Small Office Warehousing – Active	Industrial Commercial Industrial
313 314 320 321	Industrial Condo Shop-Work Area with Small Office Warehousing – Active Warehousing – Inactive Warehousing – Yard Mini Storage Warehousing	Industrial Commercial Industrial Industrial
313 314 320 321 323	Industrial Condo Shop-Work Area with Small Office Warehousing – Active Warehousing – Inactive Warehousing – Yard	Industrial Commercial Industrial Industrial Industrial
313 314 320 321 323 324	Industrial Condo Shop-Work Area with Small Office Warehousing – Active Warehousing – Inactive Warehousing – Yard Mini Storage Warehousing	Industrial Commercial Industrial Industrial Industrial Industrial
313 314 320 321 323 324 330	Industrial Condo Shop-Work Area with Small Office Warehousing – Active Warehousing – Inactive Warehousing – Yard Mini Storage Warehousing Lumber Mills	Industrial Commercial Industrial Industrial Industrial Industrial Industrial
313 314 320 321 323 324 330 331	Industrial Condo Shop-Work Area with Small Office Warehousing – Active Warehousing – Inactive Warehousing – Yard Mini Storage Warehousing Lumber Mills Retail Lumber Yards	Industrial Commercial Industrial Industrial Industrial Industrial Industrial Industrial
313 314 320 321 323 324 330 331 332	Industrial Condo Shop-Work Area with Small Office Warehousing – Active Warehousing – Inactive Warehousing – Yard Mini Storage Warehousing Lumber Mills Retail Lumber Yards Specialty Lumber Products (Mouldings, SA	Industrial Commercial Industrial Industrial Industrial Industrial Industrial Industrial Industrial Industrial
313 314 320 321 323 324 330 331 332	Industrial Condo Shop-Work Area with Small Office Warehousing – Active Warehousing – Inactive Warehousing – Yard Mini Storage Warehousing Lumber Mills Retail Lumber Yards Specialty Lumber Products (Mouldings, SA Packing Plants	Industrial Commercial Industrial Industrial Industrial Industrial Industrial Industrial Industrial Industrial Industrial
313 314 320 321 323 324 330 331 332 340 341	Industrial Condo Shop-Work Area with Small Office Warehousing – Active Warehousing – Inactive Warehousing – Yard Mini Storage Warehousing Lumber Mills Retail Lumber Yards Specialty Lumber Products (Mouldings, SA Packing Plants Cold Storage or Refrigerated Warehouse	Industrial Commercial Industrial
313 314 320 321 323 324 330 331 332 340 341	Industrial Condo Shop-Work Area with Small Office Warehousing – Active Warehousing – Inactive Warehousing – Yard Mini Storage Warehousing Lumber Mills Retail Lumber Yards Specialty Lumber Products (Mouldings, SA Packing Plants Cold Storage or Refrigerated Warehouse Fruit and Vegetable	Industrial Commercial Industrial

353	Small/Boutique Winery	Commercial
355	Other Food Processing	Industrial
360	Feed and Grain Mills	Industrial
361	Retail Feed and Grain Sales	Industrial
362	Stockyards	Industrial
363	AG Chemical Sales and/or Application	Industrial
370	Heavy Industry	Industrial
371	Shipyard	Industrial
380	Mineral Processing	Industrial
381	Sand and Gravel – Shale	Industrial
390	Industrial Common Area	Industrial
391	Miscellaneous Industrial Multiple Uses – None Full	Industrial
392	Industrial Use (doesn't reasonably fit any	Industrial
393	Airport (private	Commercial
400	Irrigated Orchard	Agricultural
401	Irrigated Orchard with Residence	Agricultural
410		Agricultural
411		Agricultural
420	Irrigated Vineyard	Agricultural
421	Irrigated Vineyard with Residence	Agricultural
450	Irrigated Row Crops	Agricultural
451	Irrigated Row Crops with Residence	Agricultural
460	Irrigated Pasture	Agricultural
461	Irrigated Pasture with Residence	Agricultural
462	Horse Ranch	Agricultural
463	Horse Ranch with Residence	Agricultural
470		
	Dairy	Agricultural
471	Dairy Dairy with Residence	Agricultural Agricultural
471 480		_
	Dairy with Residence	Agricultural
480 481 490	Dairy with Residence Poultry Ranch	Agricultural Agricultural Agricultural
480 481	Dairy with Residence Poultry Ranch Poultry Ranch with Residence Feed Lots Dry Farm	Agricultural Agricultural Agricultural
480 481 490	Dairy with Residence Poultry Ranch Poultry Ranch with Residence Feed Lots	Agricultural Agricultural Agricultural

511	Dry Graze with Residence	Agricultural
520	Non-Irrigated Vineyards	Agricultural
521	Non-Irrigated Vineyards with Residence	Agricultural
	•	8
530	Specialty Farms	Agricultural
540		Agricultural
550	Tree Farm	Agricultural
551	Tree Farm (with or without residence)	Agricultural
570		Agricultural
590	Waste Lands	Open Space
591	Berms	Open Space
610	Swim Centers	Commercial
611	Recreational Centers	Commercial
612	Marina or Yachting Club	Commercial
613	Racquetball Club	Commercial
614	Tennis Club	Commercial
615	Private Campground or Resort	Commercial
620	Privately Owned Dance Halls	Commercial
630	Bowling Alleys	Commercial
631	Arcades and Amusement Centers	Commercial
632	Skating Rink	Commercial
640	Clubs, Lodge Halls	Commercial
650	Privately Owned Auditoriums and Stadiums	Commercial
660	18-Hole Public Golf Course	Open Space
661	9-Hole Public Golf Course	Open Space
662	Country Club	Open Space
664	Driving Range	Open Space
670	Privately Owned Race Tracks	Commercial
680	Non-Profit Organizations Camps (Boy Scouts, Etc.)	Commercial
690	Privately Owned Parks	Open Space
710	Church, Synagogue or Temple	Commercial
711	Other Church Property	Commercial
720	Private School	School
721	Parochial School	School
722	Special School	School
730	Private Colleges	School
740	Full Service Hospital	Commercial
742	Clinic	Commercial
760	Orphanages	Commercial

770	Cemeteries (non-profit)	Open Space
771	Mortuaries and Funeral Homes	Commercial
772	Cemetery Taxable (profit)	Open Space
810	SBE valued	Open Space - Developed
811	Utility Water Company	Open Space
812	Mutual Water Company	Open Space
813	Cable TV	Open Space
814	Radio and TV Broadcast Site	Open Space
815	Pipeline Right-Of-Way	Open Space
816		Open Space
850	Right-Of-Way	Open Space
851	Private Road	Open Space - Developed
860	Well Site	Open Space
861	Tank Site	Open Space
862	Springs and Other Water Sources	Open Space
870	Rivers and Lakes	Open Space
890	Parking Lots – Fee	Open Space - Developed
891	Parking Lots – No Fee	Open Space - Developed
892	Parking Garages	Commercial
900	Vacant Federal Lands	Open Space
901	Federal Buildings	Commercial
902	Military Installation	Commercial
903	Miscellaneous Federal Property	Commercial
910	Vacant State Lands	Open Space
911	State Buildings	Commercial
912	State Shops & Yards	Commercial
913	State Parks and Other Recreational Facilities	Open Space - Developed
914	State Schools, Colleges	School
916	Miscellaneous State Property	Commercial
920	Vacant County Land	Open Space
921	County Buildings	Commercial
923	County Parks and Other Recreational Facilities	Open Space
924	County Hospitals	Commercial
925	Miscellaneous County Property	Commercial
930	Vacant City Lands	Open Space
931	City Buildings	Commercial
932	City Shops and Yard	Commercial
933	City Parks and Other Recreational Facilities	Open Space
		•
934	Municipal Utility Prop. (reservoirs, sewer pipeline)	Open Space - Developed
935	Parking Lots – Garages	Open Space - Developed

936	Municipal Airports	Commercial
937	Miscellaneous City Property	Commercial
940	School District Properties	Commercial
941	Fire Districts	Commercial
942	Flood Control District Property	Open Space
943	Water District Property	Open Space
944	Miscellaneous District property	Open Space
950	Public Owned Land – Non- Taxable	Open Space
951	Public Owned Land – Taxable [Section 11]	Open Space

Appendix E

List of Parcels & FY 2025/26 Assessment Roll

(NOT PROVIDED AS PART OF THIS PUBLIC DRAFT PRELIMINARY ENGINEER'S REPORT BUT TO BE PROVIDED UNDER SEPARATE COVER WITH PRELIMINARY ENGINEER'S REPORT)

ITEM 11

SHORT TERM GOALS 2024

- 1. Renewal of District Assessment.
- 2. Participate in stakeholder groups. Status: Ongoing.
- 3. Work on slumping areas.
- 4. Monitor San Joaquin Feasibility Project.
- 5. Vegetation encroachments.
- 6. Annual Levee Inspection.
- 7. Repair/Maintenance of Gates on Crown of Southwest Levee.
- 8. Central Valley Flood Protection Plan.
- 9. Revise District Website.
- 10. Approve Emergency Operations Plan Update.
- 11. All-Weather Road Resurfacing.
- 12. Review and analysis of Levee Standards.

LONG TERM GOALS

- 1. Raising Elevation of Southwest Levee.
- 2. Sediment Removal Project.

ITEM 12

RD 1608: MASTER CALENDAR

JANUARY

FEBRUARY

- Annual Review of Trustee Compensation
- Send out Form 700s, remind Trustees of April 1 filing date

MARCH

- Yearly Employee Evaluations
- Spring Newsletter
- Review Insurance Proposal (Renews April)

APRIL

- April 1: Form 700s due
- Notify School District of Vegetation Control

MAY

- Draft Budget
- Planning of Levee Tour
- Annual CEQA Exemption
- Subventions Resolution

JUNE

- June 15: Provide notice/make available to the public, documentation/materials regarding determination of Appropriations (15 days prior to meeting at which Appropriations will be adopted) (*Government Code* §7910).
- Approve Audit Contract for expiring fiscal year
- Adopt the Final Budget

JULY

Adopt Resolution for setting Appropriations and submit to County Assessor's Office.

AUGUST

- August 1: Deadline to certify assessments for tax-roll and deliver to County (duration of current assessment: FY 2025).
- Send handbills for collection of assessments for public entity-owned properties
- In election years, opening of period for secretary to receive petitions for nomination of Trustees (75 days from date of election.) (*Cal. Wat. Code* §50731.5)
- Submit End of the Year Financial Report.

SEPTEMBER

- In election years, last legal deadline to post notice that petitions for nomination of Trustees may be received (7 days prior to close of closure.) (*Cal. Wat. Code* §50731.5).
- In election years, closing of acceptance of petitions for nomination of Trustees (54 days from date of election.) (*Cal. Wat. Code* §50731.5).
- Letter to Property owners on levee regarding levee standards and permit requirements
- Review Local Agency Biennial Notice Due early October (even years)

OCTOBER

- Publish Notice of Election, odd numbered years (once per week, 4 times, commencing at least 1 month prior to election.)
- Fall Newsletter.
- Update District Information Sheet.
- Review District Emergency Supplies
- Emergency Plan Review in 2022 (every three years thereafter)
- Deadline to Notify Insurance of Non-Participation in JPRIMA for Subsequent Year

NOVEMBER

• Election: to be held first Tuesday after first Monday of each odd-numbered year.

DECEMBER

- New Trustee(s) take office, outgoing Trustee(s) term(s) end on first Friday of each odd-numbered year.
- Provide updated version of electronic copies of properties within District

Term of Current Board Members:

Name	Term Commenced	Term Ends
Dan MacDonnell	2021	First Friday of Dec 2025
Dottie Lofstrom	2023	First Friday of Dec 2027
Michael Panzer	2023	First Friday of Dec 2027

Assessment Expires 6/30/2025 Emergency Operation Plan Review – June 2022 Reclamation District Meetings

First Wednesday of each month, at 8:00 A.M. at the offices of:
 Neumiller & Beardslee
 3121 W. March Lane, Suite 100
 Stockton, California 95219

ITEM 14

Reclamation District 1608 Bills for Approval - October 2, 2024, Board Meeting

NAME	Date	INVOICE #	AMOUNT	TOTAL \$	WARRANT#	CHECK #	RATIFICATION
Michael Panzer (10/2/24 Board Mtg)	10/2/2024	Trusteee Fee	\$299.92				
				\$299.92	6844		
Dan MacDonnell (10/2/24 Board Mtg)	10/2/2024	Trustee Fee	\$299.92				
24(20, 2, 2 . 204.46)	10/2/2024	Trustee ree	Ş233.32	\$299.92	6845		
				Ų	0013		
Dottie Lofstrom (10/2/24 Special Board Mtg)	10/2/2024	Trustee Fee	\$299.92				
				\$299.92	6846		
Elvia Trujillo (September Services)	10/2/2024	Secretary Fee	\$1,363.90				
		·	. ,	\$1,363.90	6347		
PG&E (Stone River)	9/19/2024	2999432760-8	\$24.77				
rual (Stone River)	3/13/2024	2999432700-8	\$24.77	\$24.77	6348		
				724.77	0348		
Neumiller & Beardslee	9/24/2024	350263	\$2,228.64				
				\$2,228.64	6849		
Kjeldsen Sinnock & Neudeck, Inc.	9/20/2024	38640	\$1,694.75				
,	9/20/2024	38641	\$4,615.46				
	9/20/2024	38642	\$148.50				
	9/20/2024	38643	\$445.50				
	9/20/2024	38644	\$3,961.85				
	9/20/2024	38645	\$187.50				
	9/20/2024	38746	\$307.25				
				\$11,360.81	6850		
DOD Colf Storage	0/24/2024	196 24/25	¢1 000 00				
B&R Self Storage	9/24/2024	186-24/25	\$1,000.00	\$1,000.00	6851		
Transfer to Sediment Removal Proj Fund	10/2/2024	For Registered Warrant #6455	\$27,925.00				
				\$27,925.00			
Bank of Stockton	10/7/2024	Registered Warrant #6455	\$27,925.00				
(Payment of Registered Warrant 6455)				\$27,925.00	RW6455		

Reclamation District 1608 Bills for Approval - October 2, 2024, Board Meeting

		T		T		
State Compensation Insurance Fund	8/30/2024	100003211220	\$1,197.58	\$1,197.58	e-Check	
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , ,		
Bank of Stockton Visa	9/18/2024	7/27/24 - 8/27/24	\$4,319.39	\$4,319.39	Online	
State of California Payroll Taxes		8/31/24 and 9/15/24 Payroll	\$833.98	\$833.98	Online	
Federal Government Payroll Taxes		8/31/24 and 9/15/24 Payroll	\$3,870.01	\$3,870.01	Online	
Joe L. Bryson (Payroll)	8/30/2024	8/1/24 - 8/31/24	\$5,935.50	\$5,935.50	Direct Deposit	
Roger Lamarra (Payroll)	8/30/2024	8/16/24-8/31/24	\$884.74	\$884.74	Direct Deposit	
Roger Lamarra (Payroll)	9/13/2024	9/1/24-9/15/24	\$641.77	\$641.77	Direct Deposit	
Joe C. Godinez Sr. (Payroll)	8/30/2024	9/16/24-9/31/24	\$662.87	\$662.87	1633	
California State Disbursement Unit	8/30/2024	Child Support	\$330.00	\$330.00	ADP Processed	
(J Godinez Sr. Income Withholding)						
Joe C. Godinez Sr. (Payroll)	9/13/2024	9/1/24-9/15/24	\$540.00	\$540.00	1634	
California State Disbursement Unit	9/13/2024	Child Support	\$330.00	\$330.00	ADP Processed	
(J Godinez Sr. Income Withholding)						
Cash V. Lucero	8/30/2024	8/16/24-8/31/24	\$1,444.69	\$1,444.69	Direct Deposit	
		WARRANT TOTAL:		\$44,802.88		
		CHECKING TOTAL:		\$20,990.53		
		TOTAL BILLS PAID		\$65,793.41		

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