RECLAMATION DISTRICT NO. 1614

AGENDA FOR
REGULAR BOARD OF TRUSTEES MEETING
2:00 P.M. DECEMBER 5, 2022

AGENDA

1. Call to Order/Roll Call.
2. 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 5 minutes for general public comment and per agenda item in accordance with Resolution 2014-06.
3. Approval of Minutes of November 7, 2022, meeting of the Board.
4. Oath of Office. Administer Oath of Office to Trustee Gaines.
5. Presentation of Financial Status Report. Discussion and possible action.
6. Presentation of Engineer's Report. Discussion, direction, and possible action for following items:
    a. Rock Slope Protection Project
    b. Wisconsin Pump Station Project. Discussion and Direction regarding Project status.
7. SJAFCA Smith Canal Gate Project. Discussion and possible action regarding potential of increased velocities and scour in the area between the north cellular wall and RD 1614's levee through the remaining channel opening.
8. Resolution 2022-08. Adopt Resolution 2022-08 Declaring that an Emergency Situation Exists.
9. Letter of Map Revision. Discussion and possible action regarding Letter of Map Revision.
10. Presentation of Superintendent's Report; request for direction.
11. District Newsletter. Discussion and direction.
12. Report on Meetings Attended.
13. District Calendar.
    a. Next Meeting is January 2, 2023
14. Items for future meetings.
15. Correspondence. Discussion and direction.

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 Rhonda Olmo 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. The agenda is also available on the Reclamation District website at: http://www.rd1614.com/

16. Bills. Discussion and Possible Action to approve bills presented.

17. Report on San Joaquin Area Flood Control Agency's Smith Canal Gate Structure Project

18. 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 Rhonda Olmo 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. The agenda is also available on the Reclamation District website at: http://www.rd1614.com/

AGENDA PACKET
RECLAMATION DISTRICT 1614
DECEMBER 5, 2022

ITEM	COMMENTARY
1.	Self-explanatory.
2.	Self-explanatory.
3.	Please see attached.
4.	Please see attached.
5.	Please see attached.
6.	Please see attached.
7.	Self-explanatory.
8.	Please see attached.
9.	Self-explanatory.
10.	Please see attached.
11.	Self-explanatory.
12.	Self-explanatory.
13.	Please see attached.
14.	Self-explanatory.
15.	Self-explanatory.
16.	Please see attached.
17.	Please see attached.
18.	Self-explanatory.

ITEM 3

DRAFT MINUTES OF REGULAR MEETING OF BOARD OF TRUSTEES
FOR RECLAMATION DISTRICT 1614
HELD MONDAY, NOVEMBER 7, 2022

The November Regular Meeting of the Board of Trustees of Reclamation District 1614 was held on Monday, November 7, 2022, at the hour of 2:00 p.m.

Roll Call of Board Members and Staff:
President Kauffman, Trustee Christian Gaines, Trustee Dominick Gulli, Attorney Andy Pinasco, Engineer Chris Neudeck, District Secretary Rhonda Olmo, and District Superintendent Abel Palacio

The following members of the public were present: Chris Elias (SJAFCA), Paul Guerrero (landowner), Steve Klein (landowner)

Absent were: None

Item 1. Call to Order/Roll Call. President Kauffman called the meeting to order at 2:02 p.m.

Item 2. 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 5 minutes for general public comment and per agenda item in accordance with Resolution 2014-06.

Mr. Klein introduced himself and expressed his concerns over the amount of sedimentation that has occurred in the Smith Canal since the inception of the Smith Canal Gate Project. President Kauffman informed him that he could further discuss his concerns when it is time for the Engineer to give his report.

Item 3. Approval of Minutes of October 3, 2022, meeting of the Board. After review,

Regarding **Item 7 Wisconsin Pump Station – Approve Change Order No. 002 – Erosion Protection on Landside Levee Slope**: Trustee Gulli asked the District Secretary to add the wording "The Trustees and Engineer reviewed the Change Order and felt it wasn't necessary."

On a motion by Trustee Gulli, seconded by Trustee Gaines, the Trustees present voted unanimously to approve the October 3, 2022 minutes as amended by the following vote.

Ayes:	Gulli, Gaines, Kauffman
Noes:	None
Abstain:	None
Absent:	None

Item 4. Presentation of Financial Status Report. Discussion and possible action.

Rhonda Olmo provided a written and oral report of the District's revenues and expenditures. She reported the District is at 33% for their fiscal year. Attorney Pinasco reviewed the running totals from the General and Wisconsin Funds.

On a motion by Trustee Gulli, seconded by Trustee Gaines, the Trustees present voted unanimously to approve the Financial Report by the following vote.

Ayes:	Gaines, Kauffman, Gulli
Noes:	None
Abstain:	None
Absent:	None

Item 5. Budget. Approve Amendment to Fiscal Year 2022-2023 Budget.

Attorney Pinasco reviewed the proposed amendments that were premised on the Assessments being set at 90% for the District's Operation & Maintenance and for the Subvention Final Claim of $252,644.42. The amendment to the budget adjusted the Gross Income down to $851,460.22 with an amended total Net Income of $111,760.22. Attorney Pinasco's recommendation was to amend the budget accordingly and those numbers will be adjusted on the Financial Report by the District Secretary.

On a motion by Trustee Gulli, seconded by Trustee Gaines, the Trustees present voted unanimously to approve the amended budget for Fiscal year 2022-2023 by the following vote.

Ayes:	Gaines, Gulli, Kauffman
Noes:	None
Abstain:	None
Absent:	None

Item 6. Presentation of Engineer's Report. Discussion, direction, and possible action for following items:

a. **SJAFCA Smith Canal Gate Project – Discussion and possible action regarding 11/2/22 Correspondence**
b. **Wisconsin Pump Station No. 7 Project**

Mr. Neudeck provided a written and oral report on the following:

FROM ENGINEER'S REPORT:

I. SJAFCA SMITH CANAL GATE

A. Review correspondence from SJAFCA regarding the status of the Smith Canal Gate Project and their Contractor's schedule (Shimick Construction Co.), which has created a concern to SJAFCA related to the potential of increased velocities and scour in the area between north cellular wall and RD 1614's levee thru the remaining channel opening of approximately 65 feet in width.

EXHIBIT A: SJAFCA correspondence regarding the status of Smith Canal Gate dated 11/2/22.

SJAFCA's project construction manager Chris Neudeck provided an update on this project. He and the Trustees agreed that due to the apparent conflict of interest of Mr. Neudeck representing both RD 1614 and SJAFCA, he would only be representing SJAFCA while this topic is being discussed.

Mr. Neudeck explained that the project has been shut down from any 'in-water' work since October 15, 2022. SJAFCA had applied to the US Army Corps of Engineers (USACE) for a seasonal extension of permits so that 'in-water' work could continue through November of this year. In 2021, the project did receive such an extension, but not this year. The National Marine Fisheries Service (NMFS) is the one and only agency that asked the USACE not to extend this permit.

This inability to complete 'in-water' work in November results in SJAFCA not being able to remove the cofferdam and opening the installed and its soon to be tested gate. Without this gate being opened, all

flow in and out of Smith Canal can only move through the approximately 65-foot opening between the right-side levee of the San Joaquin River/Smith Canal and the approximately 80% completed dam. Although velocities in this opening are currently being monitored by Mr. Neudeck's engineers, Trustee Gulli is concerned about the potential of this flow damaging this levee, which could lead to a potential breach.

Mr. Neudeck explained the intention of the monitoring and after significant discussion with the Trustees committed to have the project's design engineers model the current conditions to estimate worst-case scenarios that may occur to the levee of concern at this 65-foot opening.

Mr. Elias, SJAFCA's Executive Director said that the SJAFCA Board of Directors have been informed of this situation. In addressing a question whether they were informed before their most recent October meeting, Mr. Elias would only say that his Board has been informed.

The Trustees and SJAFCA agreed that their plan moving forward consists of the following:

1. The construction manager would coordinate the monitoring and modelling work necessary allowing SJAFCA to present a case to the USACE and NMFS that at least the cofferdam removal portion of the in-water work needs to be complete ASAP. The coordination work may be completed within a week or two.

2. If SJAFCA is allowed to remove the cofferdam, RD 1614 will be satisfied with this result.

3. If SJAFCA is not allowed to remove the cofferdam, at its December 5th meeting RD 1614 will be prepared to declare an emergency condition related to this project and demand that SJAFCA with or without a permit remove this cofferdam to alleviate its concern regarding the current risks to the right levee of the San Joaquin River/Smith Canal.

In addition to the above discussion, Trustee Gaines and landowner Steve Klein expressed their concerns over the amount of sedimentation that has occurred in the Smith Canal since the inception of this project. The Atherton Cove area of the canal has seen significant deposition of sediment making some docks unusable. One possible project to alleviate this concern was to clean-out the culvert between Atherton Cove and the Smith Canal allowing for the Smith Canal out flows to encourage the downstream movement of these sediments.

II. WISCONSIN PUMP STATION NO. 7

A. Arnaudo has wrapped up their work plan for recirculation and pump testing. KSN is reviewing and will coordinate the pump testing with Arnaudo, Abel, and Control Point.

EXHIBIT B: Arnaudo Pump Test Submittal and KSN Inc. review comments.

Mr. Neudeck reviewed the Wisconsin Pump Station Recirculation Plan:

- Use form lumber to temporarily dam up the outfall structure.
- Remove two duckbills from the old pumps.
- Install two 36" and one 24" inflatable pipe plugs in the wet well's inlet pipes.
- Pump water from the river into the outfall structure until the wet well has enough water to maintain the required minimum submergence of 7'.

- Run each pump the desired duration for testing and add additional water from the river if needed once testing begins.

Trustee Gulli asked that the Board be made aware of when the pump testing will be scheduled so they can attend if available.

Item 7. Letter of Map Revision. Discussion and Possible Action regarding Letter of Map Revision for District.

Trustee Gulli reported that FEMA received his package and payment. He stated they have 90 days to respond. To date he has not heard from them.

Item 8. Presentation of Superintendent's Report; request for direction.

Mr. Abel Palacio provided an oral and written report. He stated all the pumps were inspected, tested and routine maintenance was performed during October. He provided a summary of his October activity.

- All Pump Stations are in good order.
- RTU batteries are being replaced to maintain the Alarm Agent system reliability.
- Worked with Holt Repair to clean debris, sediment plastic and other debris in the sump.
- All screen and rack systems were cleaned and debris was moved.
- Performed simulated tests on all pumps to ensure reliability during rain events.
- Filled and inspected all the oil reservoirs and adjusted oiler valves.
- Attended a 6 hour training class required per the Wisconsin Pump Station contract on electrical safety.
- Performed levee inspection. No problems to report.
- Emergency flood fighting equipment and supplies were inventoried and inspected for readiness.
- District boat was serviced.
- District truck was cleaned and serviced.

Item 9. District Newsletter. Discussion and direction.

The Trustees reviewed the draft Newsletter. After review, it was decided that Trustee Gulli will draft the wording for the CLOMAR and 200 year building restrictions. President Kauffman will provide the wording for the Wisconsin Pump Station, Rock Slope Protection (Riprap), District Levee Standards/Reminders and New Trustee. A new draft Newsletter will be provided at the next meeting.

Item 10. Report on Meetings Attended. Trustee Gulli attended the 2022 Preseason Flood Coordination Meeting in October.

Item 11. District Calendar.

a. **Next Meeting is December 5, 2022**

Item 12. Items for Future Meetings. Attorney Pinasco to prepare the RD 1614 Emergency Resolution for the SJAFCA Smith Canal Gate Project.

Item 13. Correspondence. August 25, 2022 letter from SJAFCA regarding the premature removal of dirt and riprap from the RD 1614 levee adjacent to the work site of the Smith Canal Gate Project prior to the issuance of the RD 1614 encroachment permit for the work.

Item 14. Bills. Discussion and Possible Action to approve bills presented.

After review,

Trustee Gaines made a motion to approve the October bills as presented. Trustee Gulli seconded the motion.

Ayes:	Gaines, Gulli, Kauffman
Noes:	None
Abstain:	None
Absent:	None

Item 15. Report on San Joaquin Area Flood Control Agency's Smith Canal Gate Structure Project. Refer to previous discussion.

This item was reported on under Item 6a above.

Item 16. Adjournment. Trustee Gaines made a motion to adjourn the meeting at 4:03 p.m. Trustee Gulli seconded the motion.

Ayes:	Gaines, Gulli, Kauffman
Noes:	None
Abstain:	None
Absent:	None

Secretary: The agenda for this meeting was posted at 3121 West March Lane, Suite 100, Stockton, California at least 72 hours preceding the meeting.

Respectfully submitted,

Rhonda L. Olmo
District Secretary

Reclamation District 1614
October 2022 Bills

NAME	INVOICE #	AMOUNT	TOTAL $	WARRANT #	CHECK #	SUBVENTION FUND
Kevin Kauffman		$100.00		6132		
			$100.00			
Christian Gaines		$50.00		6133		
			$50.00			
Dominick Gulli		$50.00		6134		
			$50.00			
Rhonda Olmo		$1,237.50		6135		
			$1,237.50			
Neumiller & Beardslee	333250	$1,979.56		6136		
			$1,979.56			
Kjeldsen, Sinnock, & Neudeck, Inc.	33792	$1,080.03		6137		
	33793	$545.00				
	33794	$48.75				
	33795	$260.00				
	33796	$65.00				
	33797	$1,620.00				
			$3,618.78			
Delk Pest Control	161248	$220.00		6138		
	164989	$220.00				
			$440.00			
Holt Repair & Mfg., Inc.	13075	$1,524.00		6139		
			$1,524.00			
BPM	46980	$316.33		6140		
			$316.33			

Reclamation District 1614
October 2022 Bills

Abel Palacio - October Payroll		$1,655.34			Direct Deposit	
			$1,655.34			
State of California Payroll Taxes - Oct.		$50.76				
			$50.76			
Federal Government Payroll Taxes - Oct.		$515.80				
			$515.80			
Sprint		$74.65			online	
			$74.65			
Comcast		$128.54			online	
			$128.54			
Visa		$552.72			online	
			$552.72			
PG&E		$163.23			online	
			$163.23			
	WARRANT TOTAL:		**$9,316.17**			
	CHECKING TOTAL:		**$3,141.04**			
	TOTAL BILLS PAID		**$12,457.21**			

ITEM 4

BEFORE THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN JOAQUIN
STATE OF CALIFORNIA

RESOLUTION

R-22-216

RESOLUTION APPOINTING THE PROPOSED QUALIFIED PERSON TO THE BOARD OF TRUSTEES FOR ONE RECLAMATION DISTRICT

WHEREAS, by 5 p.m. on the 54th day prior to the general election for Reclamation District 1614 (District), the number of nominees did not exceed the number of trustees to be elected and a petition signed by 5 percent of the voters requesting that an election be held was not presented to the Board of the District; and,

WHEREAS, pursuant to Section 50740 of the California Water Code, no election was held on Tuesday, November 8, 2022, in the District; and,

WHEREAS, on October 3, 2022, the District's Board met and by majority vote determined that the named individual set forth below is qualified to serve as a Trustee for the District; and,

WHEREAS, the District has submitted a written request for this Board of Supervisors' approval to appoint the named individual to the Board of Trustees in lieu of holding an election;

NOW, THEREFORE, in accordance with California Water Code Sections 50741 and 50742, this Board of Supervisors hereby appoints the following named individual as member to the Board of Trustees, for the District as listed below, for a 4-year term commencing on Friday, December 2, 2022 and terminating on Friday, December 4, 2026:

RECLAMATION DISTRICT 1614 (SMITH TRACT):
Board of Trustee, At Large: Christian Gaines

PASSED AND ADOPTED November 29, 2022, by the following vote of the Board of Supervisors, to wit:

AYES: **Villapudua, Miller, Patti, Rickman, Winn**

NOES: **None**

ABSENT: **None**

ABSTAIN: **None**

CHARLES WINN
Chairman, Board of Supervisors
County of San Joaquin
State of California

ATTEST: RACHÉL DeBORD
Clerk of the Board of Supervisors
County of San Joaquin
State of California

By _____
Deputy Clerk

THE FOREGOING IS A CORRECT COPY OF THE ORIGINAL ON FILE IN THIS OFFICE

ATTEST November 30, 20 22
Clerk of the Board of Supervisors
Of the County of San Joaquin, State of California

by: _____ Deputy

ITEM 5

RECLAMATION DISTRICT 1614
FINANCIAL REPORT MEETING DECEMBER 2022 MEETING
% OF FISCAL YEAR ELAPSED THROUGH END OF NOVEMBER - 41.66%

	Budget Item	Budget Amount	Expended MTD	Expended YTD	% YTD
	GENERAL FUND				
	Administrative				
G1	Annual Audit	$ 7,500.00	$0.00	$0.00	0.00%
G2	Public Communication & Noticing	5,000.00	$0.00	$660.00	13.20%
G3	Election Expense	30,000.00	$0.00	$1,072.44	3.57%
G4	Superintendent	50,000.00	$2,066.88	$14,160.51	28.32%
G4a	Secretary	16,000.00	$1,223.75	$6,325.00	39.53%
G5	Workers' Compensation	2,500.00	$0.00	$809.50	32.38%
G6	Trustee Fees	4,000.00	$200.00	$900.00	22.50%
G7	County Assessment Administration	8,000.00	$0.00	$0.00	0.00%
G7A	General Assessment Administration (Engineers)	5,000.00	$0.00	$7,109.99	142.20%
G8	Office Supplies	700.00	$26.35	$868.95	124.14%
G9	Communication (phones, radios, etc.)	4,000.00	$203.16	$1,017.45	25.44%
G12	Education/Memberships	5,000.00	$0.00	$2,203.00	44.06%
G13	Non Management Staff	7,500.00	$0.00	$0.00	0.00%
G13A	LOMR		$0.00	$8,250.00	0.00%
	TOTAL	**$145,200.00**	**$3,720.14**	**$43,376.84**	**29.87%**
	Consultants				
G14	General Engineering	$ 30,000.00	$0.00	$9,932.73	33.11%
G15	General Legal	30,000.00	$1,150.00	$14,478.98	48.26%
	TOTAL	**$ 60,000.00**	**$1,150.00**	**$24,411.71**	**40.69%**
	Property & Equipment				
G16	Operation & Maintenance	$ 3,000.00	$0.00	$18.38	0.61%
G16A	District Vehicle Expenses	3,500.00	$1,024.27	$1,606.34	45.90%
G17	Acquisitions	0.00	$0.00	$0.00	0.00%
G18	Flood Fight Supplies	0.00	$0.00	$0.00	0.00%
	TOTAL	**$ 6,500.00**	**$1,024.27**	**$1,624.72**	**25.00%**
	Other				
G19	Insurance	$ 15,000.00	$0.00	$15,499.76	103.33%
	TOTAL	**$ 15,000.00**	**$0.00**	**$15,499.76**	**103.33%**
	TOTAL GENERAL FUND	**$ 226,700.00**	**$ 5,894.41**	**$ 84,913.03**	
	RECURRING EXPENSES				
	Levee				
R1	General Maintenance	$ 15,000.00	$0.00	$3,825.00	25.50%
R1A	Engineering - General	25,000.00	$0.00	$5,092.69	20.37%
R1C	Riprap and Levee Repair	350,000.00	$0.00	$30,116.48	8.60%
R1D	DWR 5 Year Plan	0.00	$0.00	$0.00	0.00%
	TOTAL	**$ 390,000.00**	**$0.00**	**$39,034.17**	**10.01%**
	Drainage				
R2	Electricity	$ 15,000.00	$999.71	$3,569.75	23.80%
R3	Sump Clearing	30,000.00	$1,470.59	$5,409.59	18.03%
R4	Plant O&M	75,000.00	$0.00	$4,787.44	6.38%
R4A	Pest Control	3,000.00	$220.00	$1,100.00	36.67%
R5	Wisconsin Pump Station Design	0.00	$0.00	$175.00	0.00%
R6	Wisconsin Pump Station Construction	0.00	$0.00	$27,094.01	0.00%
	TOTAL	**$ 123,000.00**	**$2,690.30**	**$42,135.79**	**34.26%**
	TOTAL RECURRING EXPENSES	**$ 513,000.00**	**$ 2,690.30**	**$ 81,169.96**	
	TOTAL EXPENSE BUDGET	**$ 739,700.00**	**$ 8,584.71**	**$ 166,082.99**	

INCOME

Anticipated				
Assessment - Existing	$ 346,725.80	$1,748.82	($2,136.56)	-0.62%
Assessment - Wisconsin	97,090.00	$31,778.60	$31,778.60	32.73%
Interest	5,000.00	$5,982.00	$9,275.00	185.50%
Property Tax	150,000.00	$0.00	$948.25	0.63%
Subvention Reimbursement	252,644.42	$0.00	$0.00	0.00%
2019-2020 DWR 5-Year Plan	0.00	$0.00	$0.00	0.00%
Delta Grant II - Flood Fight Supplies	0.00	$0.00	$0.00	0.00%
TOTAL	**$ 851,460.22**	**$39,509.42**	**$39,865.29**	**4.68%**
TOTAL NET INCOME (LOSS)	**$ 111,760.22**			

O&M Fund Balance (as of 11/30/2022)	**$2,085,485.50**
Wisconsin Fund Balance (as of 11/30/2022)	**$31,781.60**
Proposed Expenses	**$8,584.71**
TOTAL CASH	**$ 2,108,682.39**
Checking Account Balance (as of 11/30/2022)	**$7,070.96**
TOTAL CASH ON HAND	**$ 2,115,753.35**

Wisconsin Pump Station Costs: $869,828.86
See attached for details.

TRANSFER NUMBER	TRANSFER DATE	TRANSFER AMOUNT	INTEREST TO DATE	TOTAL AMOUNT DUE WITH INTEREST
1	1/5/2022	$492,918.87	$ 1,267.25	$494,186.12
2	1/5/2022	$231,315.14	$ 594.69	$231,909.83
3	2/3/2022	$66,386.00	$ 143.77	$66,529.77
4	5/3/2022	$7,058.20	$ 4.21	$7,062.41
5	6/7/2022	$47,436.70	$ 13.30	$47,450.00
7	10/4/2022	$22,670.51	$ 20.22	$22,690.73
Subtotals		$867,785.42	$ 2,043.44	**$869,828.86**

ITEM 6

RECLAMATION DISTRICT NO. 1614
SMITH TRACT

BOARD OF TRUSTEES MEETING
MONDAY, DECEMBER 5, 2022
2:00 PM
ENGINEER'S REPORT

I. SJAFCA SMITH CANAL GATE

A. Review correspondence from SJAFCA regarding the status of the Smith Canal Gate Project and follow up investigation associated with the potential of increased velocities and scour in the area between north cellular wall and RD 1614's levee thru the remaining channel opening of approximately 65 feet in width.

EXHIBIT A: SJAFCA correspondence regarding the status of Smith Canal Gate dated 12/1/22

II.ROCK SLOPE PROTECTION PROJECT (2022-2023)

A. Review candidate properties for Rock Slope Protection and Beaver Damage repairs along Smith Canal.

EXHIBIT B: Summary & Photos of RSP potential sites and Beaver damage sites.

III. WISCONSIN PUMP STATION NO. 7

A. Arnaudo is planning on performing the pump testing post this coming week post the recent storms allowing the system to fill up with surface run-off. KSN will coordinate the pump testing with Arnaudo, Abel, and Control Point.

EXHIBIT A

SAN JOAQUIN AREA
FLOOD CONTROL AGENCY

December 1, 2022

Honorable Kevin Kauffman, President
Reclamation District No. 1614
P.O. Box 4807
Stockton, CA 95204

Follow-up status of Smith Canal Gate Project relative to channelization of water between unfinished North Cellular Wall and Reclamation District No. 1614's (RD 1614) Smith Tract Levee along the Stockton Golf and Country Club

Dear President Kauffman,

This letter serves as a follow-up to our previous letter dated November 2, 2022, which described the concern related to the potential of increased velocities and scour in the area between the North Cellular Wall and the RD 1614 levee. In the November 2, 2022, letter, SJAFCA described the implementation of a proactive plan to monitor the conditions through the channel opening. This current letter summarizes the results of that monitoring effort and responses to issues raised in your November 7, 2022, Board of Trustees Meeting where SJAFCA's November 2, 2022, letter was reviewed and discussed.

First, continuous monitoring of velocities within the channel opening has been occurring by CBEC Engineers (CBEC) since November 3, 2022. The results of this velocity monitoring have indicated that normal tidal inflow and outflow through the channel are generally less than 2 feet per second (fps) along the north bank of RD 1614's levee. Nominal differences in the velocity profiles were found as ships were moving along the Stockton Deep Water Ship Channel. Velocity differences were considerably less than originally anticipated. Overall, these velocity results are well below velocity thresholds that indicate the potential for scour. **EXHIBIT 1** is an email from CBEC that summaries the results of velocity monitoring and is hereby enclosed.

Second, bathymetric surveys have been performed in the area by eTrac surveyors over the last two months on October 6, 2022, October 27, 2022, and November 14, 2022. The results of these surveys have confirmed that very minimal change to topography has occurred along the channel bottom and levee toe during this time, and there is no evidence to indicate that erosion has occurred because of the narrow channel opening. **EXHIBIT 2** is an exhibit which provides a comparison of the bathymetric survey results performed on October 27, 2022, and November 14, 2022, and is hereby enclosed.

Finally, an evaluation of potential flow velocities, beyond that of the direct measurement of actual velocities, to consider potential extreme tide and runoff conditions, has been performed by R&F

Engineering. A 2-dimensional HEC-RAS hydraulic model was developed, and three scenarios were simulated, including a 100-year tidal event with all interior pump stations feeding Smith Canal simultaneously active and flowing at capacity. The highest velocities were consistently seen at the tip of the North Cellular Wall. Velocities decreased in areas further removed from the end of the North Cellular Wall and remained below 1.0 fps along the RD 1614 levee in all modeled scenarios. **EXHIBIT 3** is the technical memorandum prepared by R&F Engineering that summarizes the modeling results and is hereby enclosed.

In summary, the velocity monitoring and bathymetric surveys performed to date have shown that no erosion is currently occurring and that measured velocities are below scour-potential velocity thresholds. Furthermore, modeling efforts have demonstrated that future high-water / high-flow scenarios will not lead to adverse velocities along the RD 1614 levee.

SJAFCA will continue to observe flow conditions around the project and the RD 1614 levee and plans to react accordingly. We hope that these implemented measures will alleviate and address any concerns regarding the RD 1614 levee. Please contact me if you have any further questions.

Sincerely,

CHRIS ELIAS
EXECUTIVE DIRECTOR

cc: Andy Pinasco, General Counsel, RD 1614
Christopher H. Neudeck, KSN
Juan Neira, SJAFCA

Attachment – 3 Exhibits

R&F ENGINEERING

Evaluation of Potential Flow Velocities near the Smith Canal Gate Project

Prepared for: San Joaquin Area Flood Control Agency (SJAFCA)

Date: November 18, 2022

Prepared by: Mike Rossiter, PE and Michael Pantell, PE

Introduction

The San Joaquin Area Flood Control Agency (SJAFCA) recently completed the 2022 construction season for the Smith Canal Gate Project. The Project includes a gate structure with interlocking cellular sheet pile walls on both sides that extend across the mouth of Smith Canal from Dad's Point towards Reclamation District 1614 (RD 1614). As of the end of the 2022 construction season, the cellular wall has been installed across Smith Canal to a point approximately 100 feet south of RD1614. Figure 1 summarizes the project location and current extents of construction.

At the request of SJAFCA, R&F Engineering, Inc. completed a hydraulic analysis to evaluate potential flow velocities in the areas around the partially completed structure. This report outlines the methods and results of the analysis.

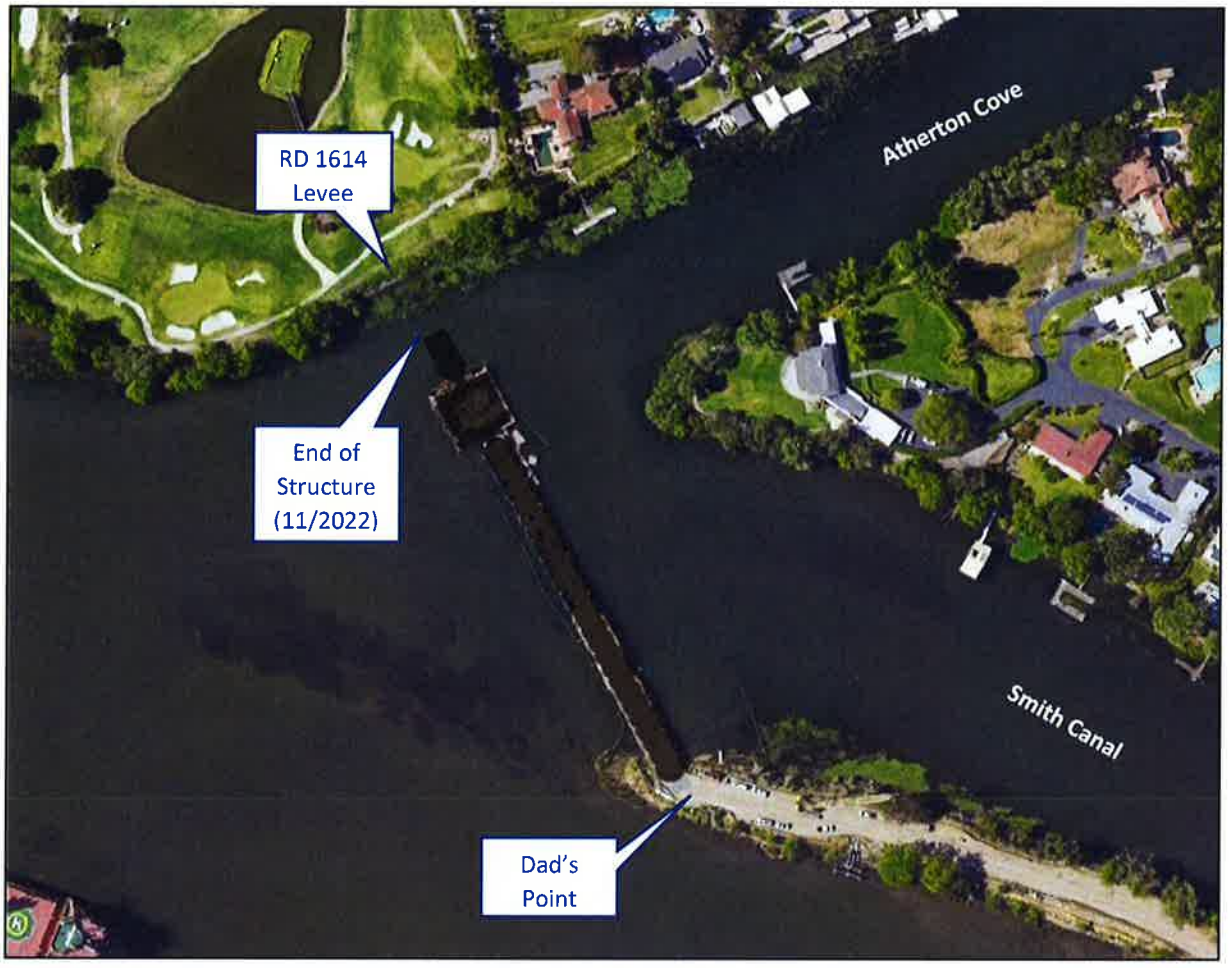


Figure 1. Current Construction Status of Smith Canal Gate Project

Hydraulic Model Setup

A hydraulic model was developed to evaluate flow velocities in Smith Canal using the Hydrologic Engineering Center River Analysis Software (HEC-RAS) Version 6.3.1. The HEC-RAS model was set up as a two-dimensional (2D) model which is suitable for evaluating flows in multiple directions within the channel. The following subsections describe the development of the HEC-RAS model used for this analysis.

Terrain

The terrain data necessary to develop a 2D model was obtained from multiple sources.

A previous hydraulic modeling study in 2016[1] developed a HEC-RAS model that utilized bathymetric and topographic data. The bathymetric data used in this previous study was

[1] Peterson Brustad, Inc. (2016). *Smith Canal Gate Structure Velocity Analysis*.

collected in 2015[2] and included the entire extents of Smith Canal as well as surrounding areas of the San Joaquin River channel that are adjacent to the Smith Canal Gate Project. For the above-water topography, LiDAR data was used which was collected in 2009[3]. This data was available at 3-foot grid cell resolution and was incorporated into the R&F HEC-RAS model.

In addition, Kjeldsen Sinnock & Neudeck (KSN) provided updated bathymetric data at 1-foot resolution which was collected on October 27, 2022 for areas in Smith Canal and the San Joaquin River that are immediately surrounding the current extents of the gate structure.

This 2022 bathymetric dataset was stitched together with the 2009 LiDAR data and 2015 bathymetric data to create the baseline terrain used for the R&F HEC-RAS model. All terrain data is in the North American Vertical Datum 1988 (NAVD-88) - feet.

This terrain was modified in HEC-RAS to include the current extents of the constructed Smith Canal Gate Project. A surveyed footprint of the portion of the cellular wall and gate structure that has been installed to date was provided by KSN. This footprint was incorporated into the model terrain using the structure's design top elevation of 15 ft-NAVD88.

2D Model Mesh

The model geometry includes a 2D gridded mesh that covers the Smith Canal channel and the portion of the San Joaquin River that is adjacent to the Smith Canal Gate Project. Cell sizes in the 2D mesh were set at 40-feet for the majority of the model, but were decreased to 5-foot cell sizes near the area of the channel that is between the end of the current structure and the RD 1614 levee to provide a more detailed evaluation of flows in this area (Figure 2). Breaklines were added along the cellular structure and at locations necessary to properly capture the high points in the terrain. A Manning's n value of 0.035 was used for grid cells within the modeled channels, and an n-value of 0.1 was used to represent grid cells along vegetated channel banks.

[2] Moffat & Nichol (2015). *Smith Canal Gate Hydrodynamic Modeling Alignment and Gate Width Evaluation.*
[3] DWR (2009). *Central Valley Floodplain Evaluation and Delineation Program LiDAR Topography.*

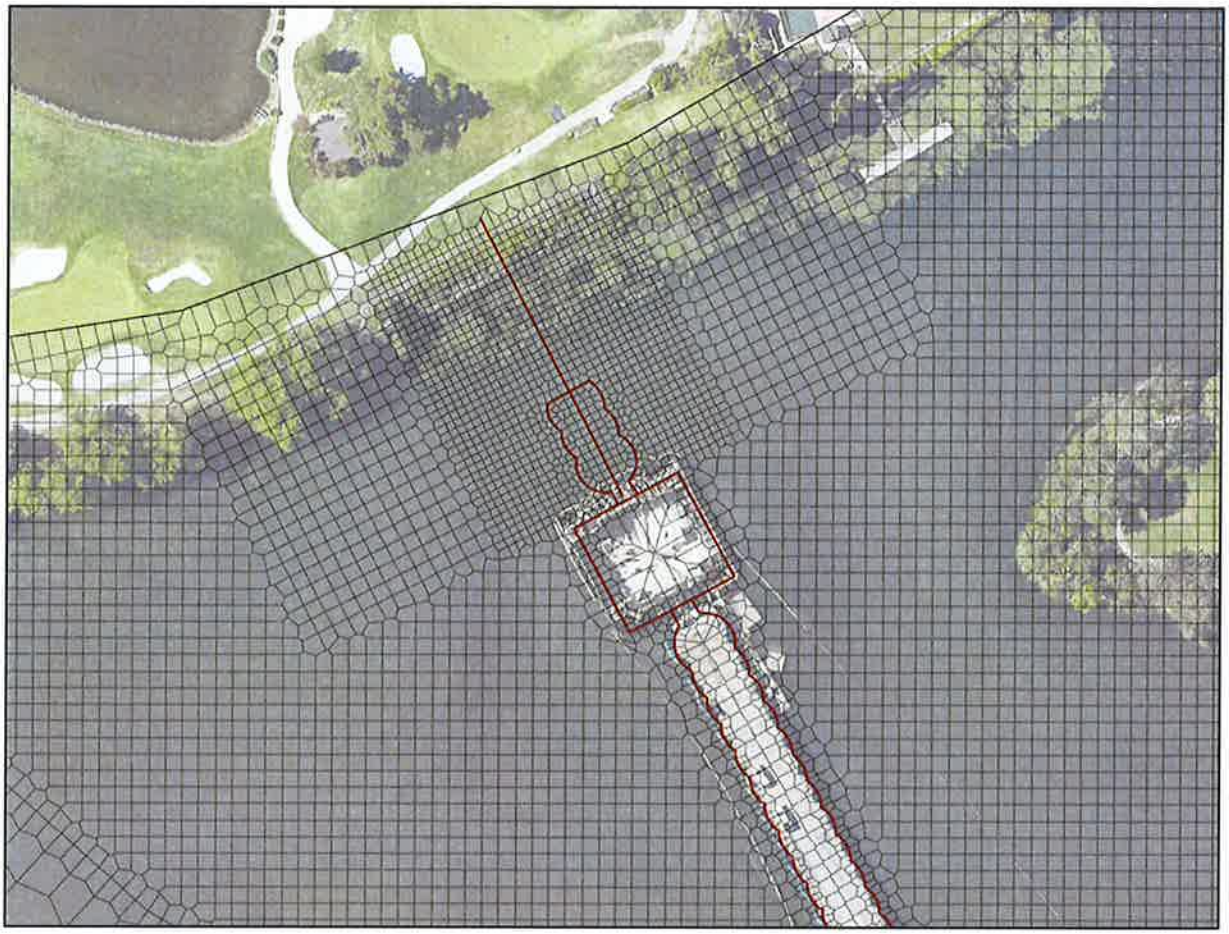


Figure 2. Model Geometry Near Smith Canal Gate Project

Interior Drainage Pump Stations

Nine (9) interior drainage pump stations are located along Smith Canal and pump into the channel during heavy rainfall events. To test any impact that the pumped inflows might have on velocities in and around Smith Canal, these interior drainage pump stations were added into the HEC-RAS model as inflow boundary conditions.

The inflow nodes assumed constant peak discharges to be flowing into Smith Canal at each of the pump station locations. Table 1 summarizes the peak flow used for each pump station.

Table 1. Capacities of Smith Canal interior drainage pump stations.

Pump Station	Flow (cfs)
Buena Vista North	12.3
Lake	6.0
Franklin	34.0
Plymoth	31.9
Gardena	12.5
Moreing	12.3
Yosemite	240.8
Buena Vista South	69.3
Ryde	37.4
Total	**456.5**

Modeled Scenarios

A stage hydrograph was used to represent the HEC-RAS model's tidal boundary conditions and was modified based on the scenarios discussed below.

Three (3) tidal scenarios were modeled for this analysis.

1. 100-Year Tidal Event
2. Constant Tidal Stage
3. Water Year 2022 Tidal Conditions

Scenario 1: 100-Year Tidal Event

A tidal event with a 100-year recurrence interval was used as the basis for this scenario. A peak water surface elevation of 9.4 ft-NAVD was used to represent a 100-year tidal event which is based on stage frequency analyses conducted at the Burns Cutoff and Rindge Pump gage stations[4].

The shape of the stage hydrograph used for this scenario was based on an evaluation completed as part of the 2016 *Smith Canal Gate Structure Velocity Analysis*[1] which identified the average difference between the daily maximum and minimum tides at the Rindge Pump and Burns Cutoff gage stations between 1985 to 2010 to be 5.1 feet. A 24-hour tidal hydrograph was applied and scaled to reach the minimum and maximum tides in one cycle. The stage hydrograph used to model this scenario had a tide cycle that fluctuated between 4.3 ft-NAVD88 and 9.4 ft-NAVD88 within approximately 7 hours as shown in Figure 3.

[4] Peterson Brustad, Inc. (2010). *San Joaquin River Delta Base Flood Elevation Refinement Stage Frequency Analysis.*

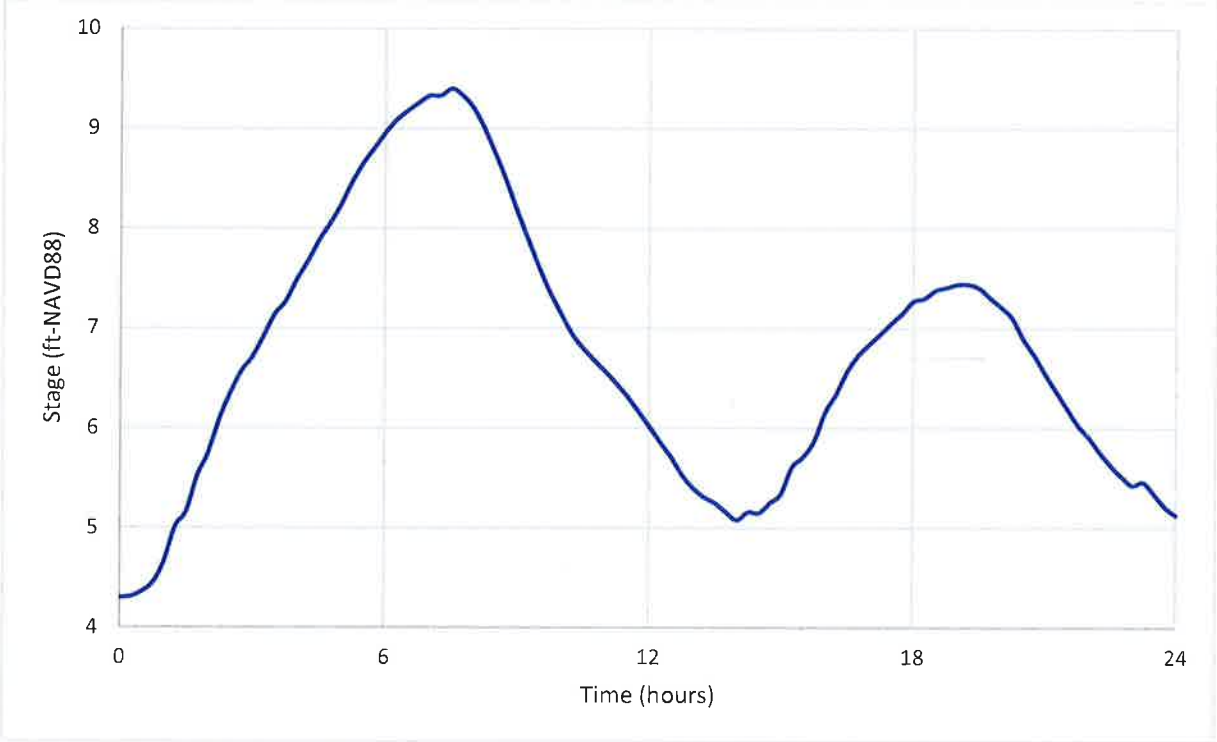


Figure 3. 100-year tidal stage hydrograph.

In addition, this scenario assumed all interior drainage pump stations were active and flowing at capacity into Smith Canal.

Scenario 2: Constant Tidal Stage

Scenario 2 sought to isolate the impact that the interior drainage pumps might have on water velocities in and around Smith Canal. A constant downstream tidal condition was held for this scenario and the interior drainage pumps were cycled on to evaluate velocities coming from the pumped flows. A range of constant tidal stages were modeled for this scenario between 2.0- and 9.0 ft-NAVD88 to identify a worst-case scenario for velocities caused by the pumped inflows.

Scenario 3: Water Year 2022 Tidal Conditions

Scenario 3 modeled the observed stage records from the nearby Rindge Pump gage station[5] for Water Year (WY) 2022 (10/1/2021 to 9/30/2022) (Figure 4). The purpose of this extended simulation was to evaluate varying sets of rising and receding limbs on the stage hydrograph that would have the potential to create high velocities.

[5] DWR (2022). San Joaquin River at Rindge Pump, Station B95620. Water Data Library. https://wdl.water.ca.gov/WaterDataLibrary/StationDetails.aspx?Station=B95620&source=map.

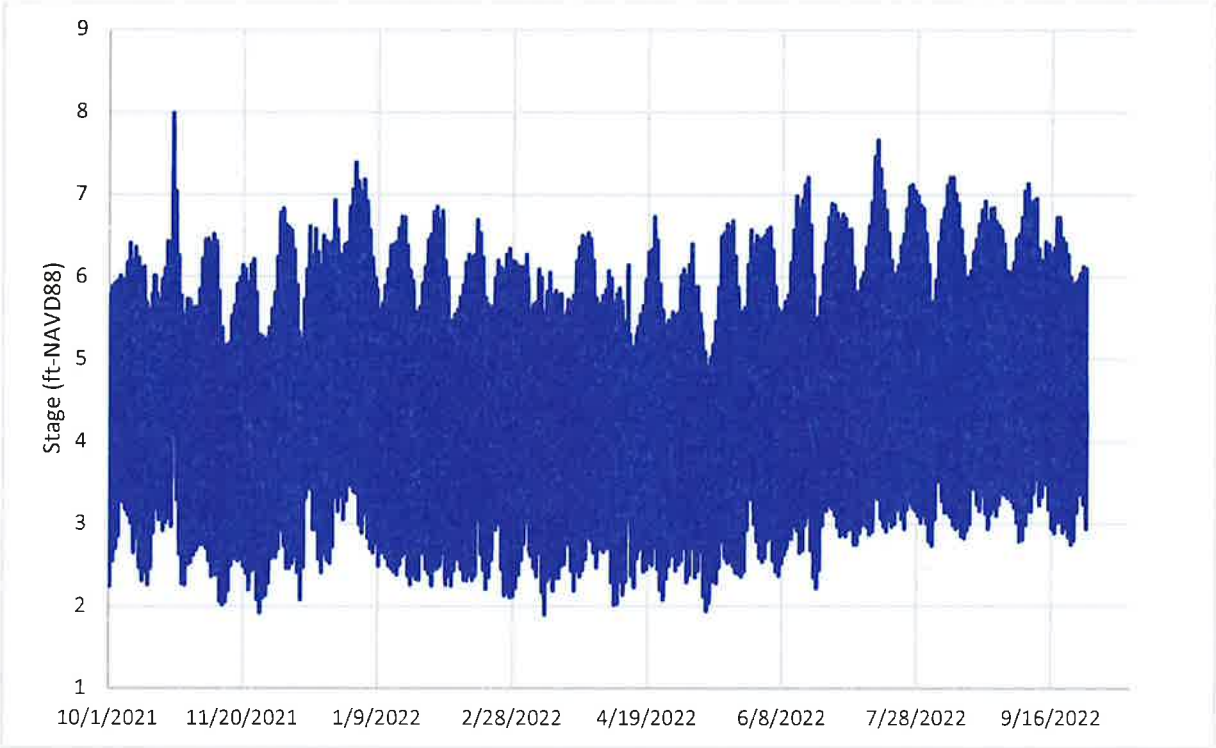


Figure 4. Observed stages at Rindge Pump gage station for Water Year 2022.

To remain conservative, this scenario assumed all interior drainage pump stations were active and flowing at capacity into Smith Canal during the entirety of the WY 2022 simulation.

Results

Scenario 1: 100-Year Tidal Event

A 100-year tidal scenario produced a maximum velocity in Smith Canal of 3.3 ft/s for a small area at the end point of the constructed cellular wall (see Figure 5). Velocities decrease as you move further away from that point and are less than 1 ft/s along the RD1614 levee under the 100-year tidal scenario.

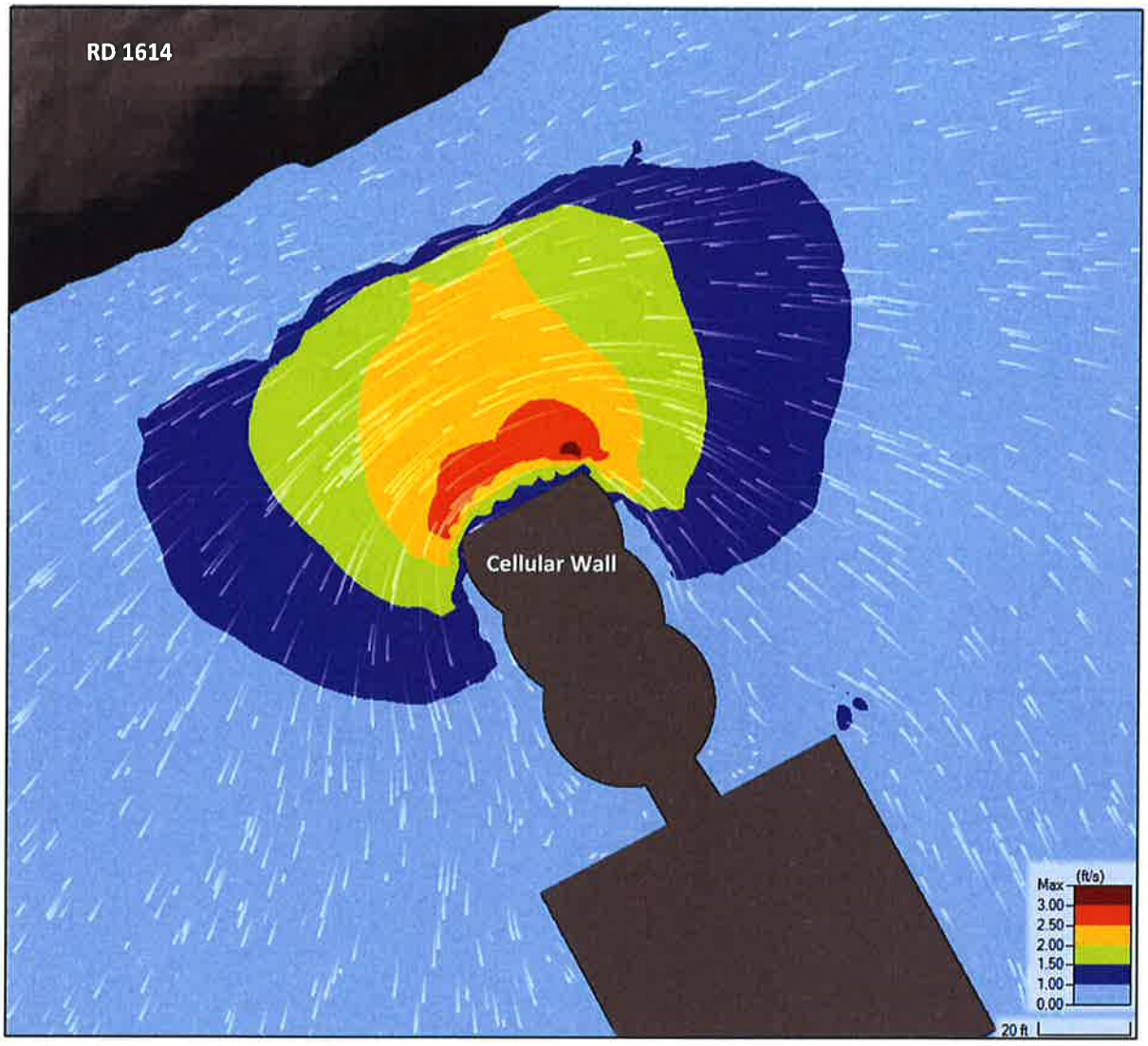


Figure 5. Maximum water velocities during a simulated 100-year tidal event (Scenario 1).

Scenario 2: Constant Tidal Stage

In Scenario 2, the tidal stages were held constant while the Smith Canal interior drainage pumps were assumed to be actively pumping at capacity into the channel. Several different tidal stage elevations ranging between 2.0 ft-NAVD88 and 9.0 ft-NAVD88 were evaluated to confirm the tidal stage that would result in the highest velocities. It was confirmed that the lower tidal stages caused higher velocities of the interior drainage flow through the Smith Canal channel. When downstream tidal stages were held at 2.0 ft-NAVD88 velocities around the corner of the cellular wall peaked at 2.2 ft/s (see Figure 6), whereas when tidal stages were held at 9.0 ft-NAVD88 velocities peaked at 0.9 ft/s.

Similar to Scenario 1, the maximum velocity was seen in a small area at the end point of the constructed cellular wall, and velocities decrease as you move further away from that point. In all downstream tidal stages modeled under Scenario 2, velocities remained below 1.0 ft/s along the RD 1614 levee.

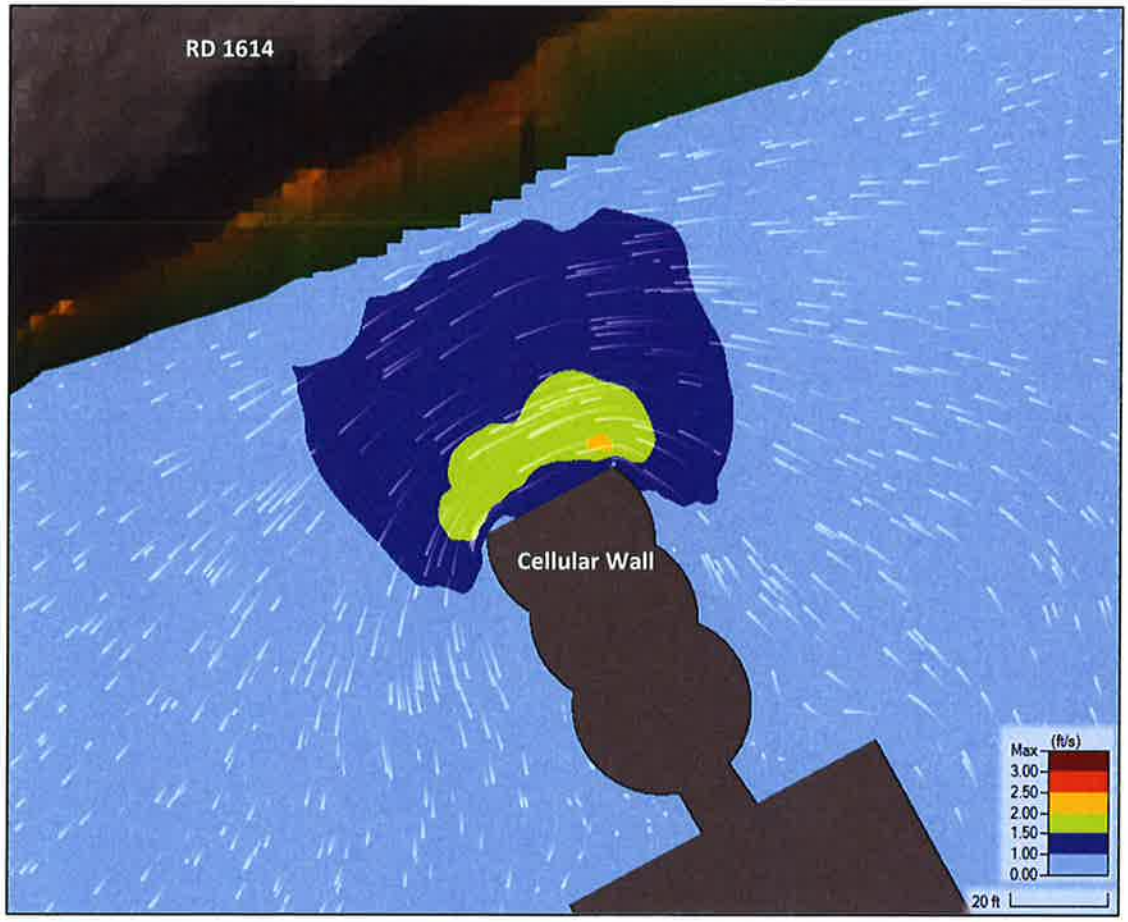


Figure 6. Maximum water velocities for a simulation with tIdal stages held at 2.0 ft-NAVD88 and Smith Canal interior drainage pumps flowing at capacity (Scenario 2).

Scenario 3: Water Year 2022 Tidal Conditions

For Scenario 3, an observed stage hydrograph spanning all of WY 2022 was simulated. Maximum velocities around the cellular wall peaked at 3.7 ft/s (Figure 7). Similar to Scenarios 1 and 2, the maximum velocity was seen in a small area at the end point of the constructed cellular wall, and velocities decrease as you move further away from that point. Under WY 2022 tidal conditions, velocities remained below 1.0 ft/s along the RD 1614 levee.

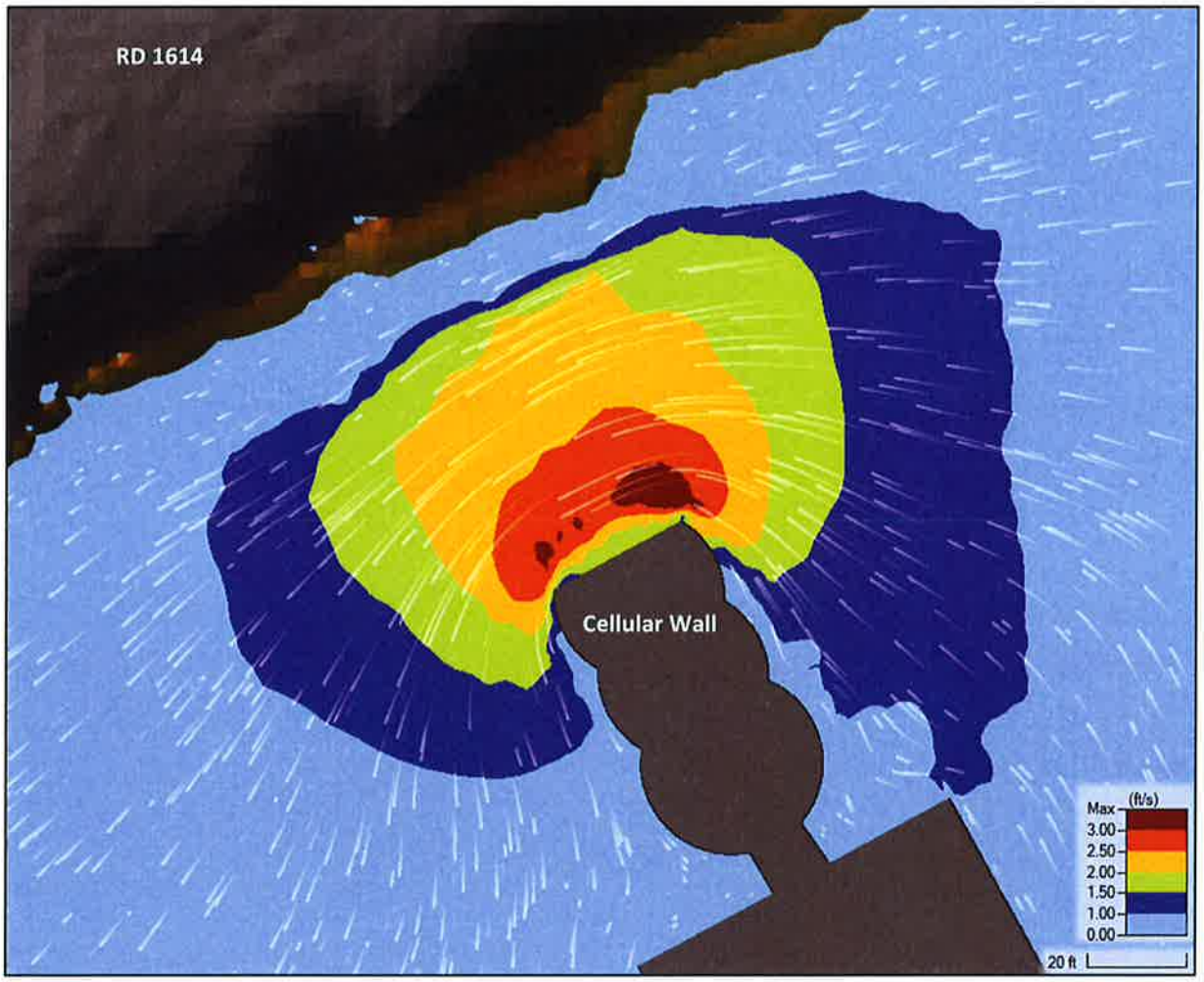


Figure 7. Maximum water velocities for a simulated WY 2022 tidal hydrograph (Scenario 3).

Summary

A 2-dimensional hydraulic model was used to evaluate water velocities in the vicinity of the constructed portion of the Smith Canal Gate Project and a variety of hydraulic scenarios were simulated. The highest velocities were consistently seen at the end point of the constructed cellular wall. Velocities ranged from 3.1 ft/s to 3.7 ft/s in this localized area for the modeled scenarios. Velocities were lower in areas further removed from the end of the cellular wall and remained below 1.0 ft/s along the RD1614 levee in all modeled scenarios.

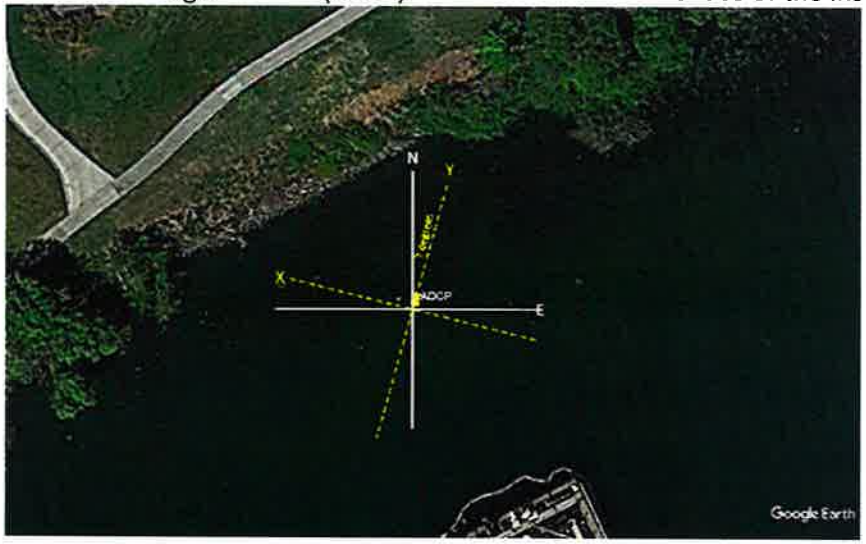
Christopher H. Neudeck

From: Greg Shellenbarger <g.shellenbarger@cbecoeng.com>
Sent: Tuesday, November 29, 2022 9:59 PM
To: Christopher H. Neudeck; Dave C. Carr
Cc: Chris Bowles; Scott Wright
Subject: ADCP data from Smith Canal to 11/28

Hi Chris and Dave,

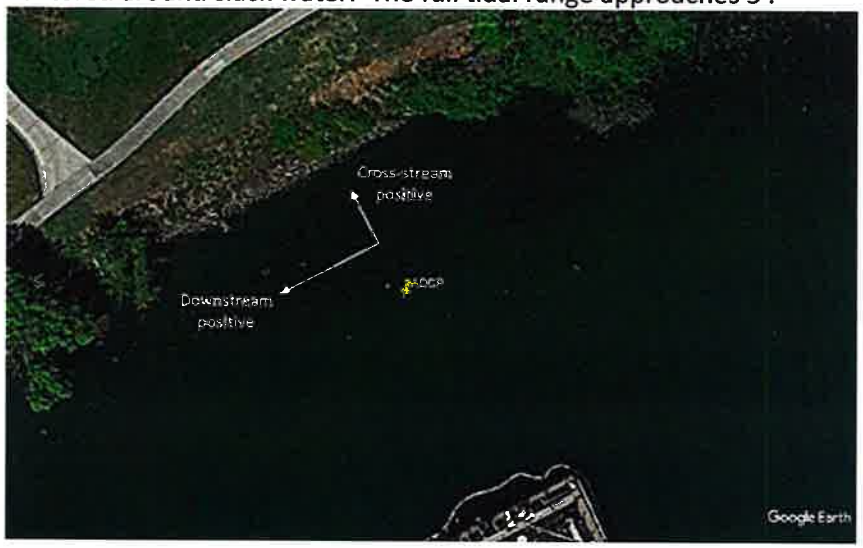
Here are some plots for the Smith Canal ADCP data running from 11/3 - 11/28. There are many different ways to look at the data, so we are providing a couple of different views that I think will be useful to discuss with SJAFCA. We do need to spend some more time fully understanding and processing the data (we have roughly 100 bins in the horizontal profile and collected more than 6000 measurements), but these plots should provide a decent overview of the field conditions.

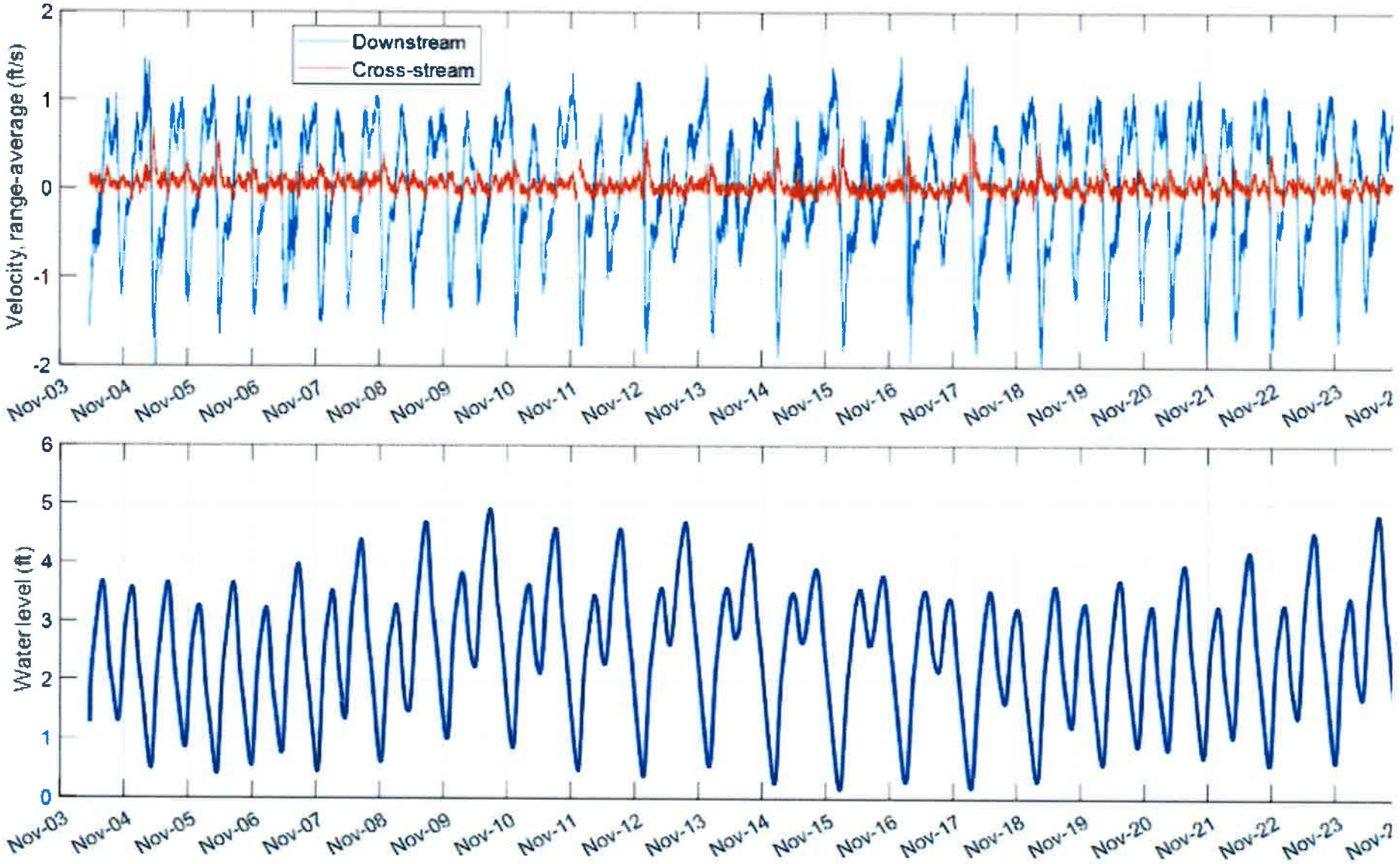
Here is the rough location (DGPS) of the instrument. The face of the instrument is pointed in the y-direction and is about 7 degrees East of North.



The image below shows the positive directions for the first plot. This first plot shows the time series of the data collected so far, with the top plot showing the channel-wise and cross-channel velocities and the bottom plot showing the stage. For the top plot, positive velocities are ebb-directed (roughly to the west), and positive cross-stream velocities are roughly to the north. These are averaged velocities over the entire horizontal profile, and data are collected every 5

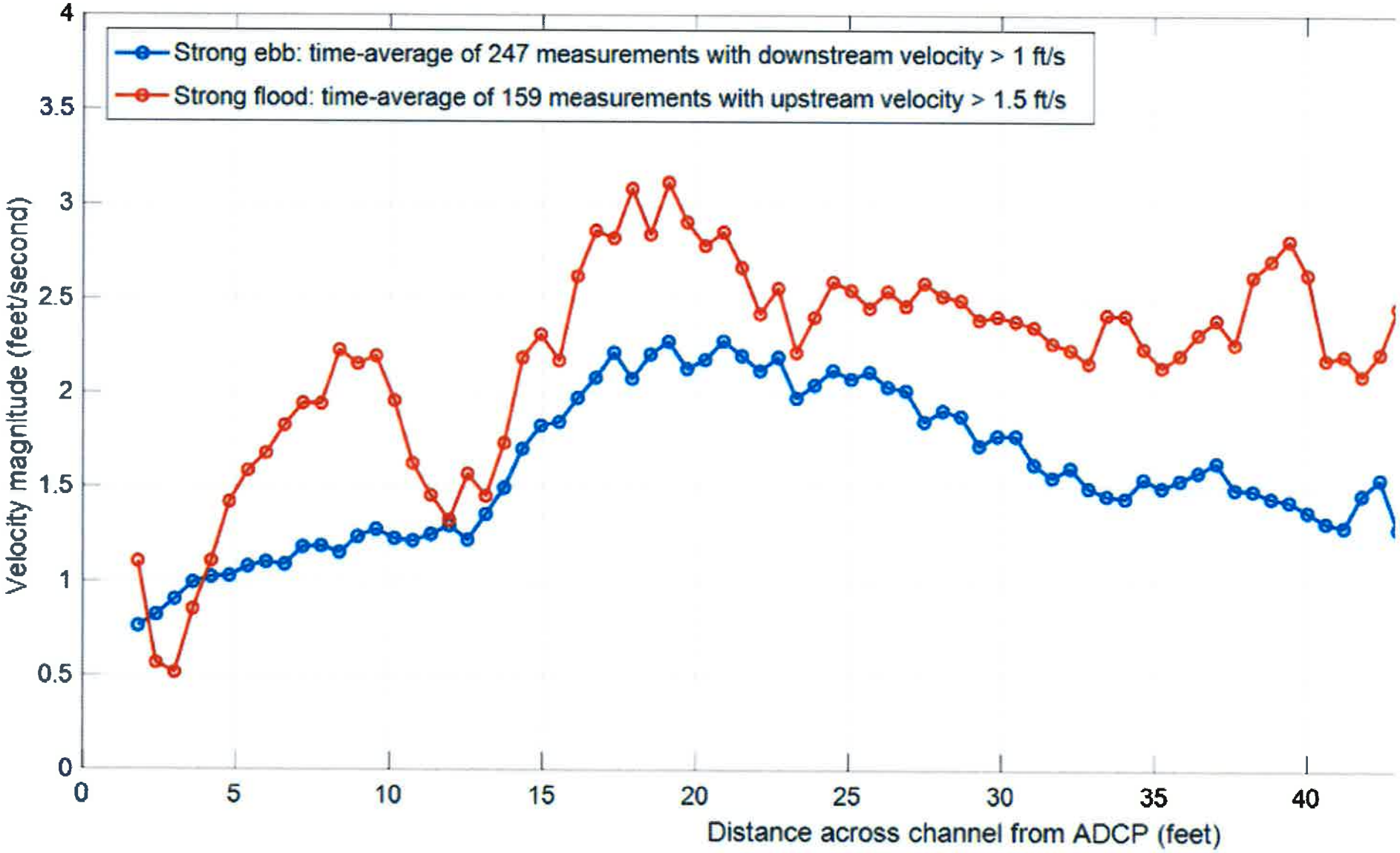
minutes. One interesting item we noted is that the peak ebb and flood velocities occur within about 30 mins of slack tide. Slack tide does occur at maximum and minimum stage (the tide behaves like a standing wave in this location), but peak velocities in both directions happen over roughly an hour-long period centered around slack water. The full tidal range approaches 5'.



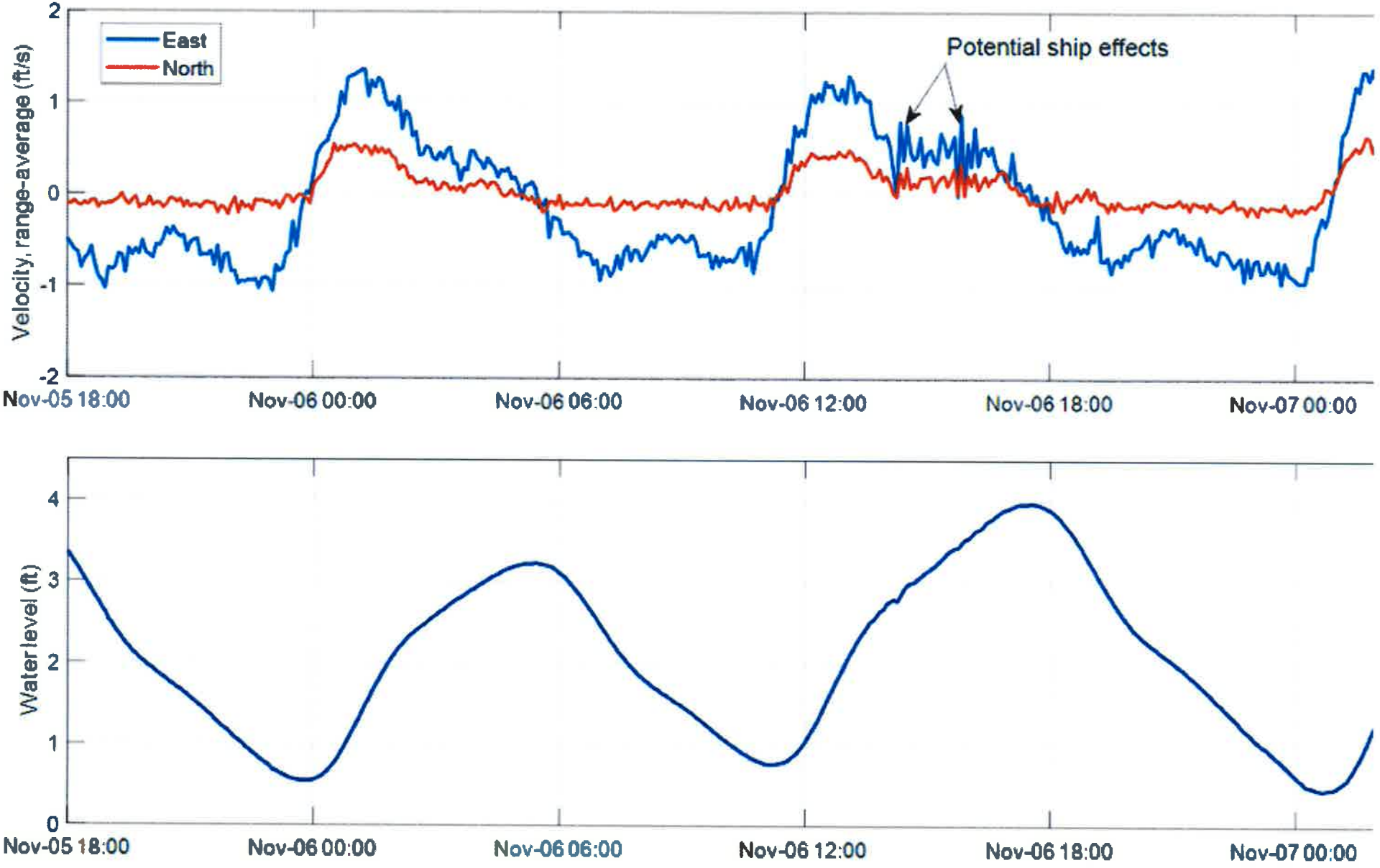


The next plot displays the averaged horizontal profile data for strong ebb and strong flood periods. On the x-axis, 0' is at the instrument and ~57' is the bank on the north side of the channel. The horizontal bin size is 20 cm. These data represent the strongest flow/highest velocity fractions of the 6112 measurements collected. The ebb velocities include any velocity >1 ft/s, and the flood velocities include any measurements >1.5 ft/s. The included ebb velocities represent about 4% of the entire data set, and the flood velocities represent just under 3% of all measurements. Overall, averaged flood velocities exceed the ebb velocities across most of the channel (except within the first 5' of the instrument). The averaged ebb velocities never exceed 2.5 ft/s with the highest velocities

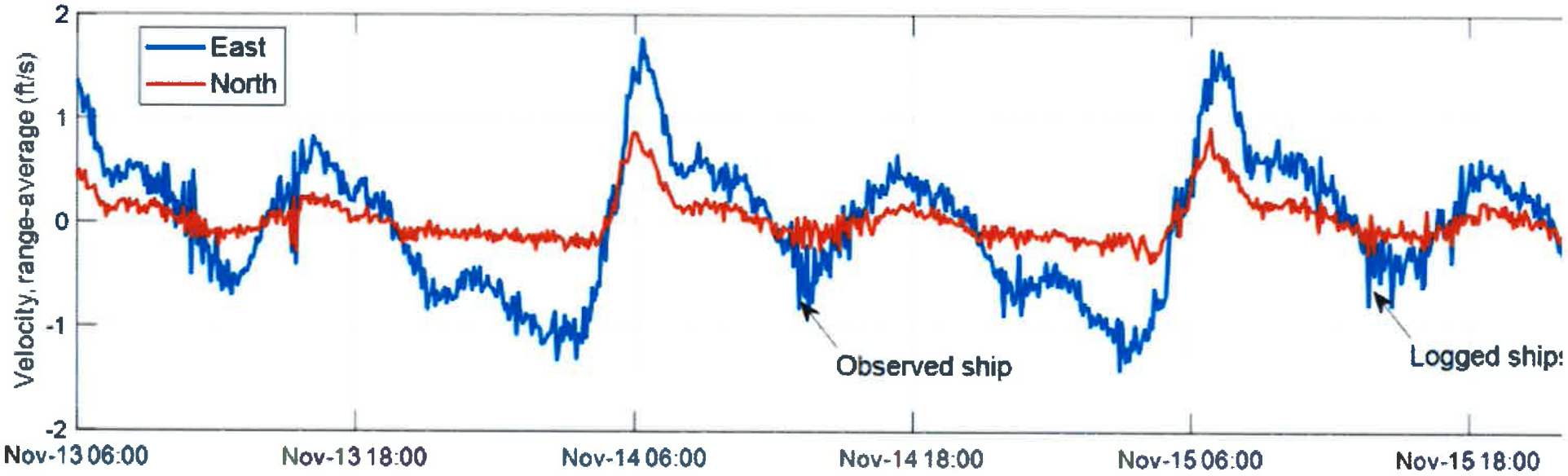
about 1/3 of the way across the channel from the instrument. The highest averaged flood velocities occur in about the same location as the ebb velocities, but the peak flood velocities are over 3 ft/s and can approach 2.5 ft/s within a few feet of the bank (or more appropriately, the 'bank' as seen by the instrument). These data suggest that the ebb velocities impinging the bank as water turns 90 degrees to exit Smith Canal are much less of a concern than the flood velocities.

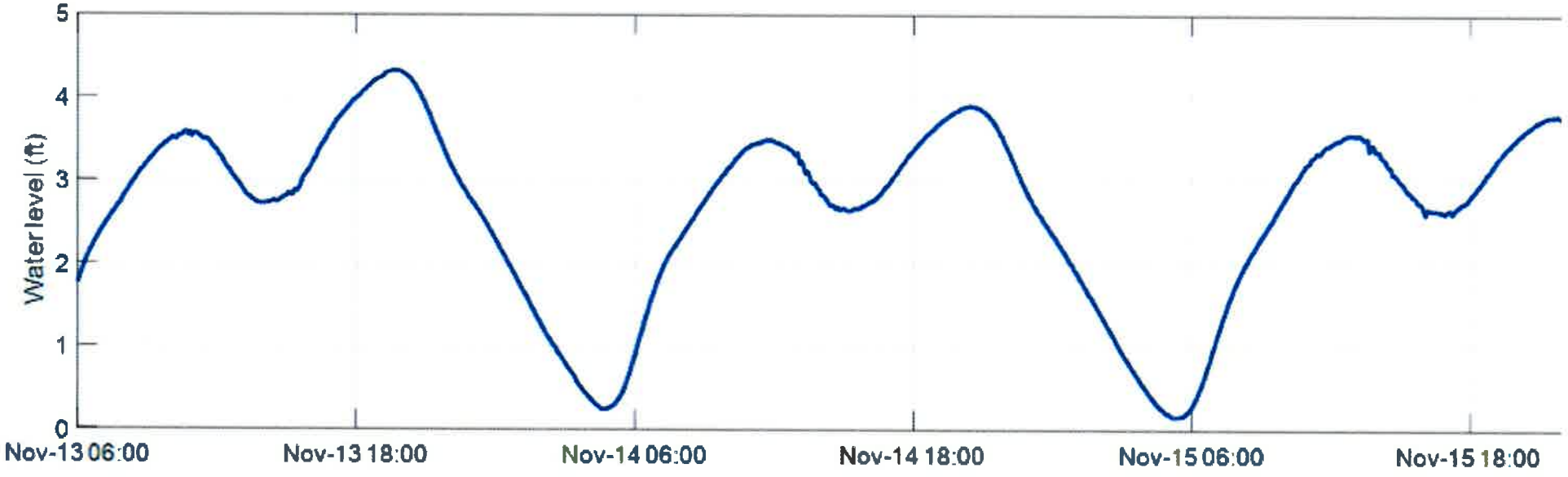


The next set of plots shows the effects of ship passings on the channel-averaged velocities. The top plot identifies two ship passings (based on the port's ship log) on 6 November, and the second plot shows observed and log-based ship passings on 14-15 November. Overall, the ship passings don't alter the recorded velocities by much (<0.5 ft/s), but they do increase the velocity variability with an impact that can last tens of minutes. We assume that the passings are generating some long-period waves that are sloshing around in the ship channel and propagating into the mouth of Smith Canal.


East
North
Potential ship effects
Velocity, range-average (ft/s)
2
1
0
-1
-2
Nov-05 18:00
Nov-06 00:00
Nov-06 06:00
Nov-06 12:00
Nov-06 18:00
Nov-07 00:00
Water level (ft)
4
3
2
1
0
Nov-05 18:00
Nov-06 00:00
Nov-06 06:00
Nov-06 12:00
Nov-06 18:00
Nov-07 00:00

40





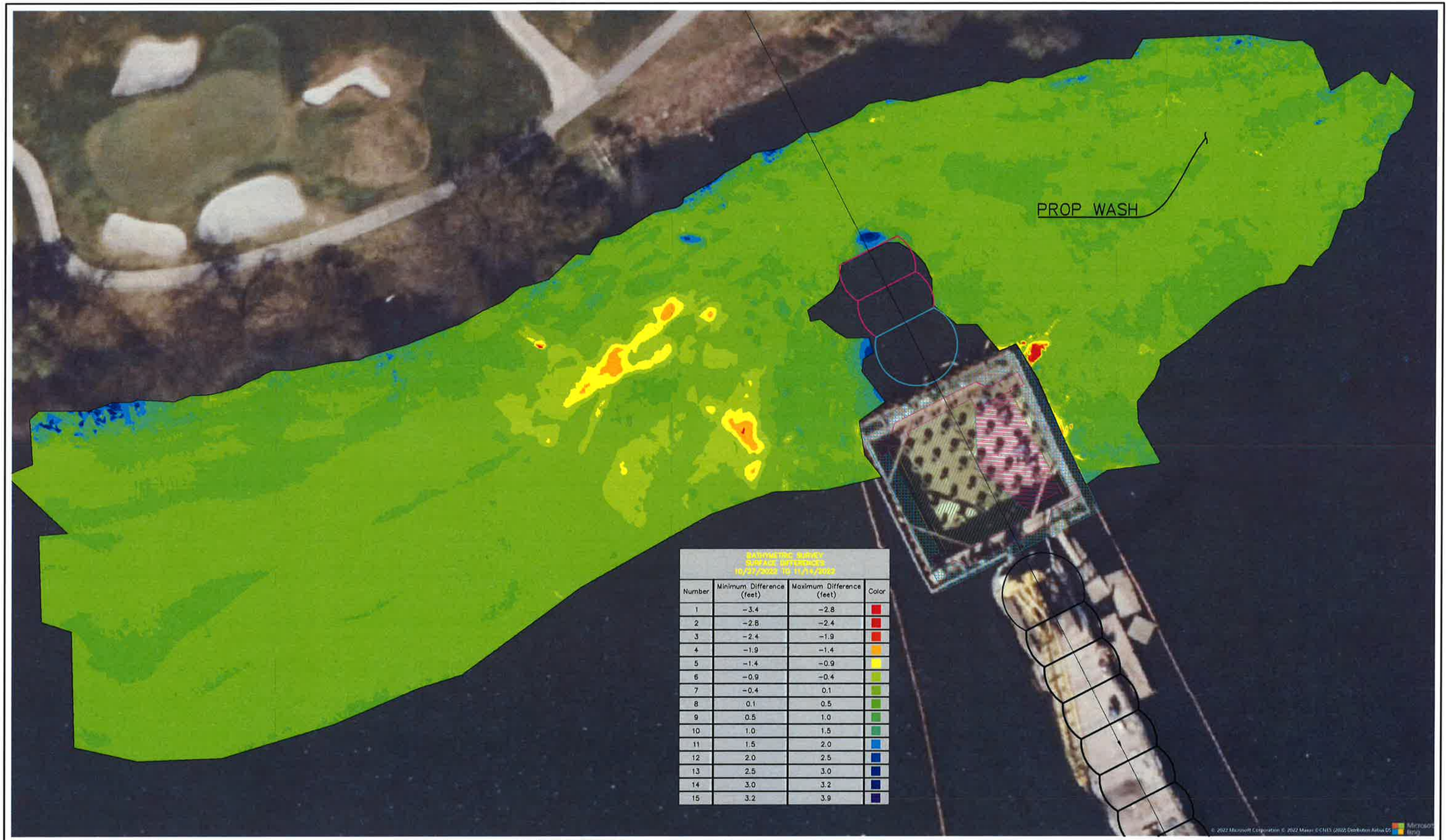
Please let us know if you have questions. I will be in the field all-day Wednesday but available by phone most of the day. Scott Wright (CCed on this email) has the data and developed the plots, so he could potentially provide you with additional plots and context if needed.

There is a lot going on with these data - we look forward to a more in-depth exploration.

Thanks,
Greg

Greg Shellenbarger MS, Eng.
Ecohydrologist/Field Services Manager

cbec, inc. eco engineering
2544 Industrial Blvd | West Sacramento, CA 95691
916.231.6052 | main
916.743.6869 | mobile
public dropbox
cbecoeng.com
g.shellenbarger@cbecoeng.com



FILE SPEC: P:\2091_SJAFCA_IDIQ\0066_Smith_Canal_Gate_Constr_Mgmt\07_Survey\300_Bathymetric\eTrac\WorkingCompare\221115-eTrac-Compare.dwg
PLOT DATE: Nov 30, 2022 - 11:11am

811 Know what's below. Call before you dig.

SUBMITTAL	
%	Date

NORTH ORIENTATION

NO.	DESCRIPTION	DATE	APPR.

DESIGN BY EEA
DRAWN BY KFN
CHECK BY CHN
HORIZONTAL DATUM CCS83, ZONE 3
VERTICAL DATUM NAVD88

DRAWING SCALE
1"=20'
ORIGINAL DRAWING SCALE
0 ½" 1"

KSN inc. KJELDSEN SINNOCK NEUDECK
CIVIL ENGINEERS & LAND SURVEYORS
www.ksninc.com
711 N. Pershing Avenue
Stockton, CA 95203
209-946-0268
1550 Harbor Blvd., Suite 212
West Sacramento, CA 95691
916-403-5900

SMITH CANAL GATE
PROGRESS BATHYMETRIC SURVEY

NOVEMBER 14, 2022
BATHYMETRIC SURVEY

DATE
NOVEMBER 2022
SHEET IDENTIFICATION
V-101
SHEET 1 OF 1
KSN PROJECT FILE NO.
20903066

EXHIBIT B

Candidates for RSP on Smith Canal & Verified Beaver Activity Locations

Address	APN	Prop Length	Owner	Phone #	Notes
~~3076 Canal Drive~~	~~121-110-150-000~~	~~62.37~~	~~Theodore Swaney~~		~~Requested RSP last year and received it during placement of Ambler's Club rock~~
3056 Canal Drive	121-310-110-000	77.99	Sally Bella		
3042 Canal Drive	121-310-100-000	74	Robert & Gae Stewart		
3028 Canal Drive	121-210-090-000	74	Colleen Joy		
3014 Canal Drive	121-310-080-000	74	Richard Kinzey		
2920 Canal Drive	121-290-050-000	72.5	Lan Kam Lee		
2374 Canal Drive	123-054-060-000	60	Wiley & Kathleen Bashaw		Requested but no follow up last year
2468 Canal Drive	123-040-230-000	70	Frank Sannella		
2364 Canal Drive	123-054-0500-000	60	Reklai Salazar		
2286 Canal Drive	123-300-230-000	50.27	Robert Norman		
2072 Canal Drive	123-100-180-000	95.4	Ernest & Belinda Tufft		
2060 Canal Drive	123-110-580-000	69.69	Andre Erasmo Osorno		
2050 Canal Drive	123-110-570-000	69.68	Bonita Bailey		BEAVER ACTIVITY OBSERVED BY NICK CATRINA
2038 Canal Drive	123-110-560-000	69.685	Joseph Walker		
2026 Canal Drive	123-110-550-000	69.685	James & Sara Larson		
1990 Canal Drive	123-110-520-000	59.73	Justin Cornman		
1982 Canal Drive	123-110-510-000	59.73	Rodney Alvarado		Requested RSP but doesn't want to sign anything
1968 Canal Drive	123-110-490-000	59.73	William & Jean Pitsker		requested RSP but not all the way up slope
1960 Canal Drive	123-110-480-000	59.73	Inmas Vallesteros		small area available though Inmas requested rock - need WS photo
1954 Canal Drive	123-110-470-000	59.73	Gary Dean & Robin Roda		neighbor Inmas said neighbors here not interested in RSP
1948 Canal Drive	123-110-460-000	59.72	Jin Wu		NO TRESSPASSING signs, Appears abandoned but isn't, no POC
1848 Tuxedo Ave	123-202-110-000	100	Randall Sutphin		Burned out house w/squatter who has boat docked at the dilipidated two-story dock
1842 Tuxedo Ave	123-202-040-000	50.005	Lowell Beghtel		
1826 Tuxedo Ave	123-202-050-000	50.005	Terry McDonald		
1768 Tuxedo Ave	123-204-020-000	100.01	William & Julie Dunning		
1640 Tuxedo Ave	123-280-050-000	120	Ollie Parrish		BEAVER ACTIVITY OBSERVED BY NICK CATRINA
1616 Tuxedo Ave	123-212-270-000	150	Naomi Hoblitzell		BEAVER ACTIVITY OBSERVED BY NICK CATRINA
1608 Tuxedo Ave	123-212-050-000	50	William McMullin		BEAVER ACTIVITY OBSERVED BY NICK CATRINA
1600 Tuxedo Ave	123-212-060-000	50	Gregory Dart		
1542 Tuxedo Ave	123-212-080-000	75	Ramona Barrows		
1534 Tuxedo Ave	123-212-290-000	75	Yue Chyn Coffman		
1466 Tuxedo Ave	123-212-130-000	50	Christopher & Elizabeth Wills		
1448 Tuxedo Ave	123-212-310-000	100	Leslie Low		

Candidates for RSP on Smith Canal & Verified Beaver Activity Locations

Address	APN	Prop Length	Owner	Phone #	Notes
2472 Country Club Blvd	123-040-250-000	119.6	John & Renee Chambers		DOES NOT want rock, asked when Dino did the neighboring Legion Hall in 2022
2000 Carlton Ave	123-100-450-000	95.3	Thomas & Nancy Schock		
2003 Grange Ave	123-204-080-000	71.61	Waybe & Lydia Fulton		
2010 Lake Dr	123-120-120-000	80	Richard & Ramona Flores		BEAVER ACTIVITY OBSERVED BY NICK CATRINA
2011 Lake Dr	123-120-130-000	71.5	Gary Frisch		Requested RSP, but has no room due to all wood deck covering entire slope that homeowner doesn't want moved
2024 Idaho Ave	121-100-180-000	185.6	William Van Dyke		Does not want RSP as long as he's alive becase he's the Beaver Guy
2000 Mission Rd	123-202-120-000	100.01	Larry Garman		Received RSP windrow last year
2848 Via Milano Pl	121-270-010-000	68.42	Smith Canal LLC	209.608.1111	POC: Tom Dutilli. Was interested last year but went cold, Tracey Glaves reference
2840 Via Milano Pl	121-270-020-000	61.5	Smith Canal LLC	209.608.1111	POC: Tom Dutilli. Was interested last year but went cold, Tracey Glaves reference
2832 Via Milano Pl	121-270-030-000	57.34	Smith Canal LLC	209.608.1111	POC: Tom Dutilli. Was interested last year but went cold, Tracey Glaves reference
2820 Via Milano Pl	121-270-040-000	61.5	Smith Canal LLC	209.608.1111	POC: Tom Dutilli. Was interested last year but went cold, Tracey Glaves reference
2814 Via Milano Pl	121-270-050-000	61.5	Smith Canal LLC	209.608.1111	POC: Tom Dutilli. Was interested last year but went cold, Tracey Glaves reference
2806 Via Milano Pl	121-270-060-000	61.35	Smith Canal LLC	209.608.1111	POC: Tom Dutilli. Was interested last year but went cold, Tracey Glaves reference
3216 Moering Ct	121-100-610-000	215.42	Willard & Laverne Collins		BEAVER ACTIVITY OBSERVED BY NICK CATRINA - RSP already in place: Beaver gnawed on floating boat garage post

∑ = 3,411

% of Non-RSP Length	
Via Milano Pl	11%
Misc Prop	21%
Tuxedo Ave	28%
Canal Dr	39%

Beaver Activity

Interested in RSP from last year

Reclamation District 1614 Monthly Waterside Inspection Report

Personnel present: Abel Palacio (RD 1614 Superintendent), Aaron Lickingteller (KSN)

Inspection conducted: Thursday, November 17, at 1:00pm –3:30pm. Low tide occurred between 7:00am – 8:00am (0.1 feet) and high tide occurred at 2:00pm (3.1 feet).

Nick Catrina performed a Beaver survey on the District levee in July and located six sites displaying beaver activity. These sites are located on the following properties:

1. 3216 Moering Court: Willard & Laverne Collins;
2. 2050 Canal Drive: Bonita Bailey;
3. 1640 Tuxedo Ave: Ollie Parrish (two beaver signs);
4. 1608 Tuxedo Ave: William McMullin;
5. 1616 Tuxedo Ave: Naomi Hoblitzell

Additional beaver sign was observed during the boat inspection at 2010 Lake Drive, which consisted of fresh teeth marks on a tree next to the District pump station fence immediately west of said property. Nick's Beaver Survey Results are included in this report.

1506 and 1510 Tuxedo Ave

1610 Tuxedo Ave (photo 2 of 2)

1826 Tuxedo Ave

2060 Canal Drive

2354 Canal Drive

ANIMAL DAMAGE CONTROL
Nick Catrina
209 602-6905

RECLAMATION DISTRICT 1614
SMITH CANAL
STOCKTON, CA
LEVEE SURVEY PERFORMED JULY 12, 2022
FOR BEAVER DEN IDENTIFICATION/LOCATION

Location 1
N 37.95860°
W 121.34490°

Post chewed by beaver.

Location 2
N 37.96332°
W 121.32603°

Beaver den under tree has caused tree to topple

ANIMAL DAMAGE CONTROL

Nick Catrina
209 602-6905

Location 5
N37.96568°
W 121.31708°

Location 6
N 37.96562°
W121.31712°

ITEM 8

RECLAMATION DISTRICT NO. 1614

RESOLUTION 2022-08

RESOLUTION OF THE BOARD OF TRUSTEES OF RECLAMATION DISTRICT NO. 1641 DECLARING THAT AN EMERGENCY SITUATION EXISTS

WHEREAS, commencing on December 5, 2022, the prospect of increased channel velocities and scour in the area between north cellular wall of the partially completed Smith Canal Gate Project and the right-side levee within Reclamation District 1614 – Smith Tract (District) is a high level of concern for its integrity; and

WHEREAS, any damage to a District levee constitutes a clear and imminent danger to life and property within the District.

NOW, THEREFORE, BE IT RESOLVED, AND IT IS HEREBY RESOLVED, by the Board of Trustees of Reclamation District 1614 that:

1. As of Monday, December 5, 2022, an emergency condition exists within the District and along the District's levees due to the prospect of increased channel velocities and scour in the area between north cellular wall of the partially completed Smith Canal Gate Project and the right-side levee within Reclamation District 1614, which requires the District to proceed immediately with all work necessary at the earliest possible time to prevent the possible failure to its levee and flooding of the District.

2. The District President, District Engineer, and/or District Superintendent, acting alone or in concert with others be hereby authorized and directed to acquire such materials and equipment and to enter into contracts necessary and appropriate to meet the emergency needs of the District caused by the increased channel velocities and scour in the area between north cellular wall of the partially completed Smith Canal Gate Project and the right-side of the levee of the District in accordance with District Standards and Policies.

PASSED AND ADOPTED by the Board of Trustees of Reclamation District No. 1614 at a meeting thereof held on this 5th day of December, 2022, by the following vote, TO WIT:

AYES:
NOES:
ABSTENTION:
ABSENT:

Signatures on following page

RECLAMATION DISTRICT NO. 1614
A Political Subdivision of the
State of California

By:_____
KEVIN KAUFFMAN, PRESIDENT

ATTEST:

_____
RHONDA L. OLMO, SECRETARY

CERTIFICATION

I, RHONDA L. OLMO , Secretary of Reclamation District No. 1614, do hereby certify that the foregoing is a full, true and correct copy of a resolution of Reclamation District No. 1614 duly passed and adopted at a regular meeting of the Board of Trustees thereof held on the 5th day of December, 2022.

Dated: _____, 2022.

_____
RHONDA OLMO, SECRETARY
Reclamation District No. 1614

ITEM 10

RD 1614 Superintendent's Report

10/29/2022

November 2022

During the Month of November 2022, all district pumps were inspected, tested. Routine maintenance was performed . The focus of this month's activity was to prepare for the coming rainy season, levee inspection and to identify potential properties for rock slope placement . Below is a summary of this month's maintenance and inspection activity for the month.

Pump Station : All pump stations are in good condition. Weekly inspections were completed as well as preventative and corrective maintenance on pumps . The batteries that provide backup power for the RTU's (Remote Terminal Units) are at end of life and I have been replacing them as I go out to inspect the pump station.

Levee inspection : A levee inspection was performed and the findings of that inspection can be found in the attached secondary report . I have been working with Aaron Lickingleller of KSN to identify potential rock slope sites at various properties. Noteworthy to mention is that several locations of beaver damage to property and trees have been spotted and are noted on the attached report. At least 1 beaver den has been identified . The properties where the beaver dens and damage occur seem to also be prime candidates for rock slope placement. I am requesting to have Nick Catrina of Animal Damage Control remove the beavers. In the next few days Aaron Lickingteller and I will be visiting these properties to talk to the property owners to let them know of the beaver problem and potential damage the beavers can cause to the levee system . We will also see if we can get the property owner to allow access to their property for the rock placement at a future time.

.

This concludes My report .

Respectfully Abel Palacio - District Superintendent RD1614

Reclamation District 1614 Monthly Waterside Inspection Report

Personnel present: Abel Palacio (RD 1614 Superintendent), Aaron Lickingteller (KSN)

Inspection conducted: Thursday, November 17, at 1:00pm –3:30pm. Low tide occurred between 7:00am – 8:00am (0.1 feet) and high tide occurred at 2:00pm (3.1 feet).

Nick Catrina performed a Beaver survey on the District levee in July and located six sites displaying beaver activity. These sites are located on the following properties:

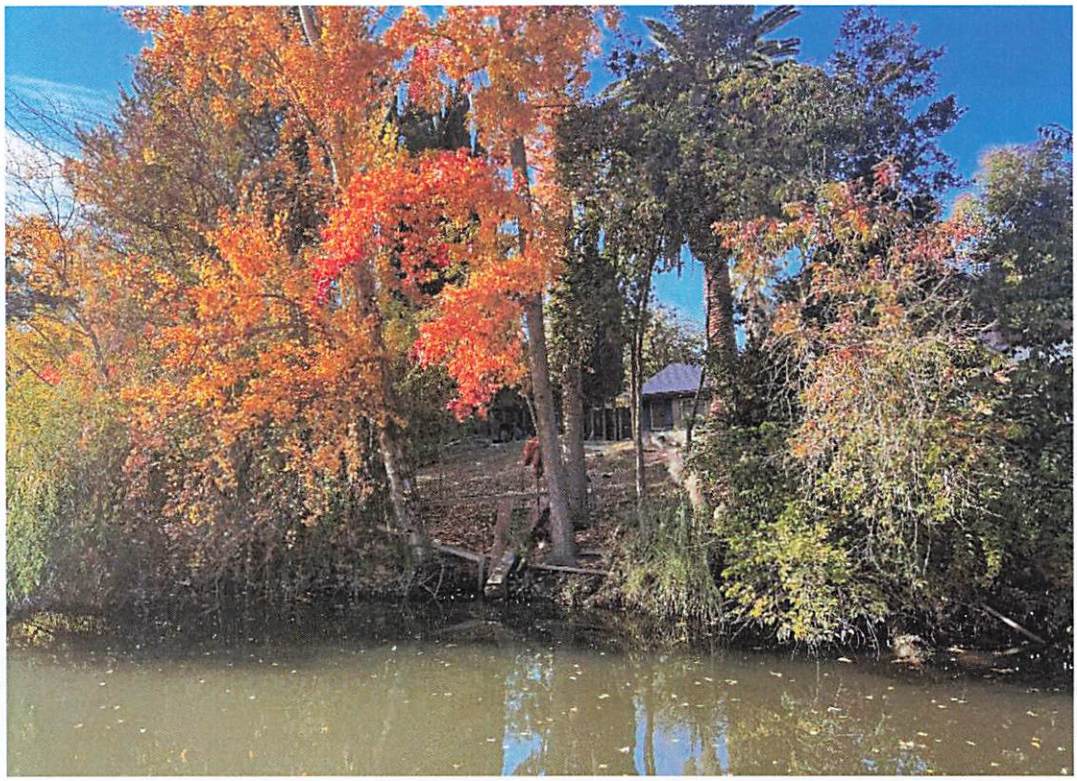
1. 3216 Moering Court: Willard & Laverne Collins;
2. 2050 Canal Drive: Bonita Bailey;
3. 1640 Tuxedo Ave: Ollie Parrish (two beaver signs);
4. 1608 Tuxedo Ave: William McMullin;
5. 1616 Tuxedo Ave: Naomi Hoblitzell

Additional beaver sign was observed during the boat inspection at 2010 Lake Drive, which consisted of fresh teeth marks on a tree next to the District pump station fence immediately west of said property. Nick's Beaver Survey Results are included in this report.

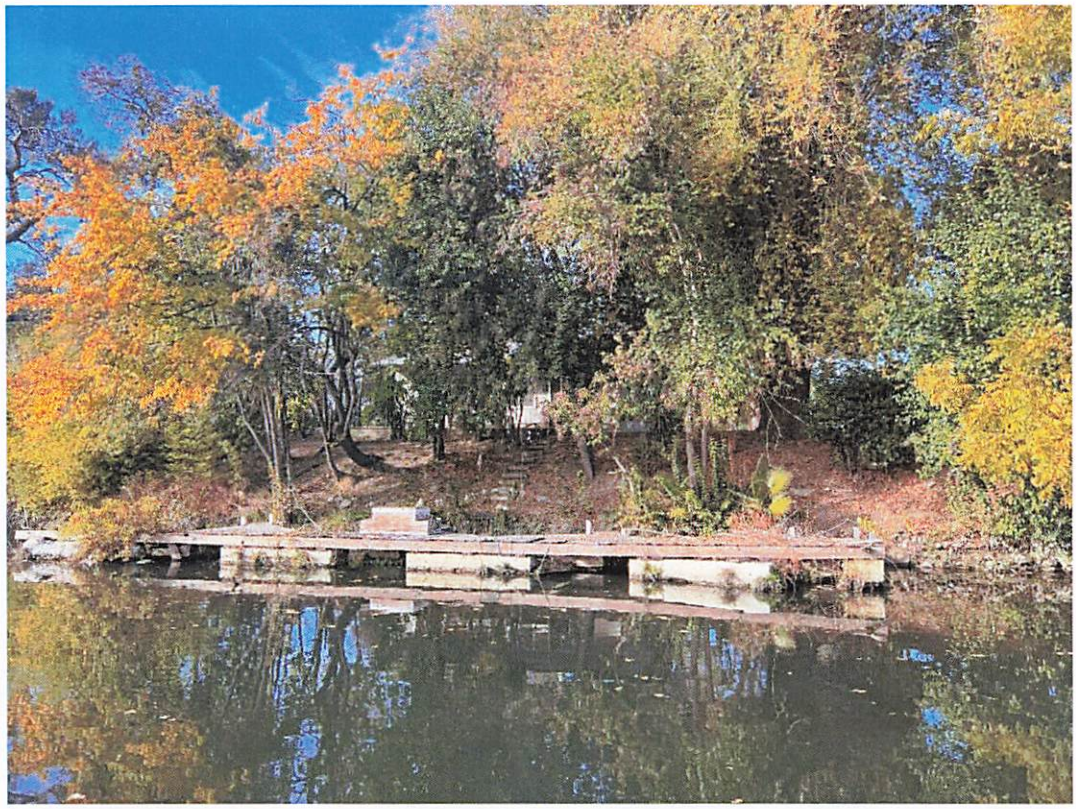
1506 and 1510 Tuxedo Ave

1534 Tuxedo Drive

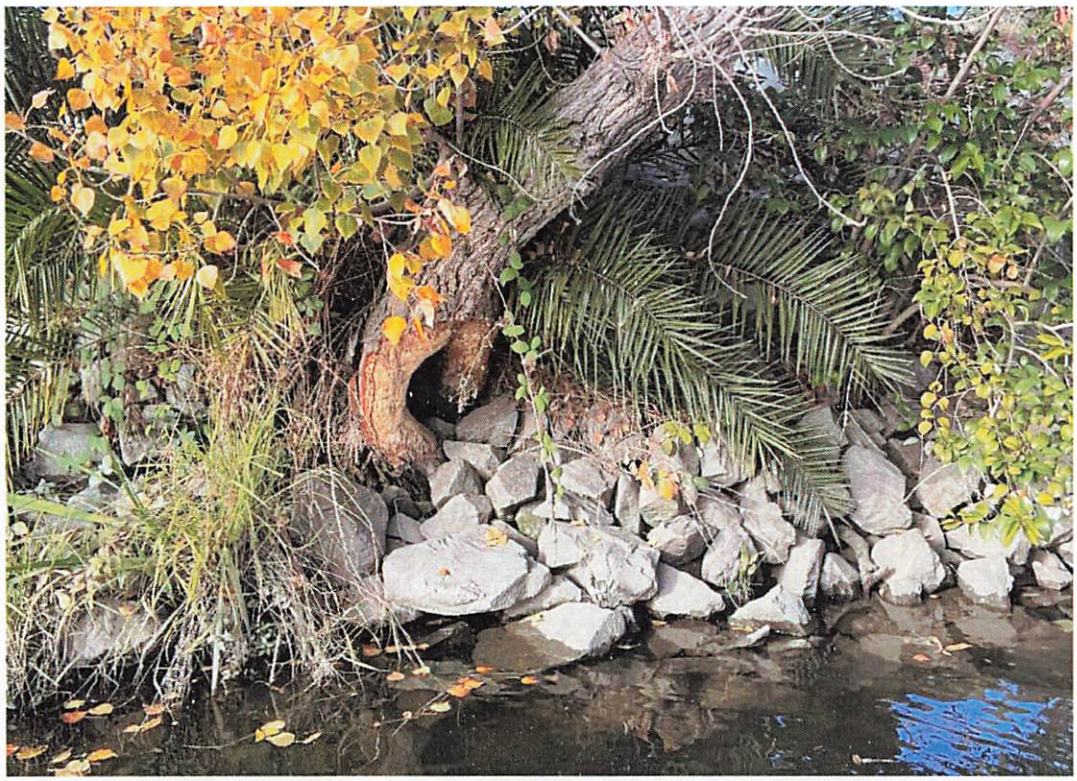
1610 Tuxedo Ave (photo 1 of 1). Multiple sites of beaver sign were found by Nick Catrina on this property.



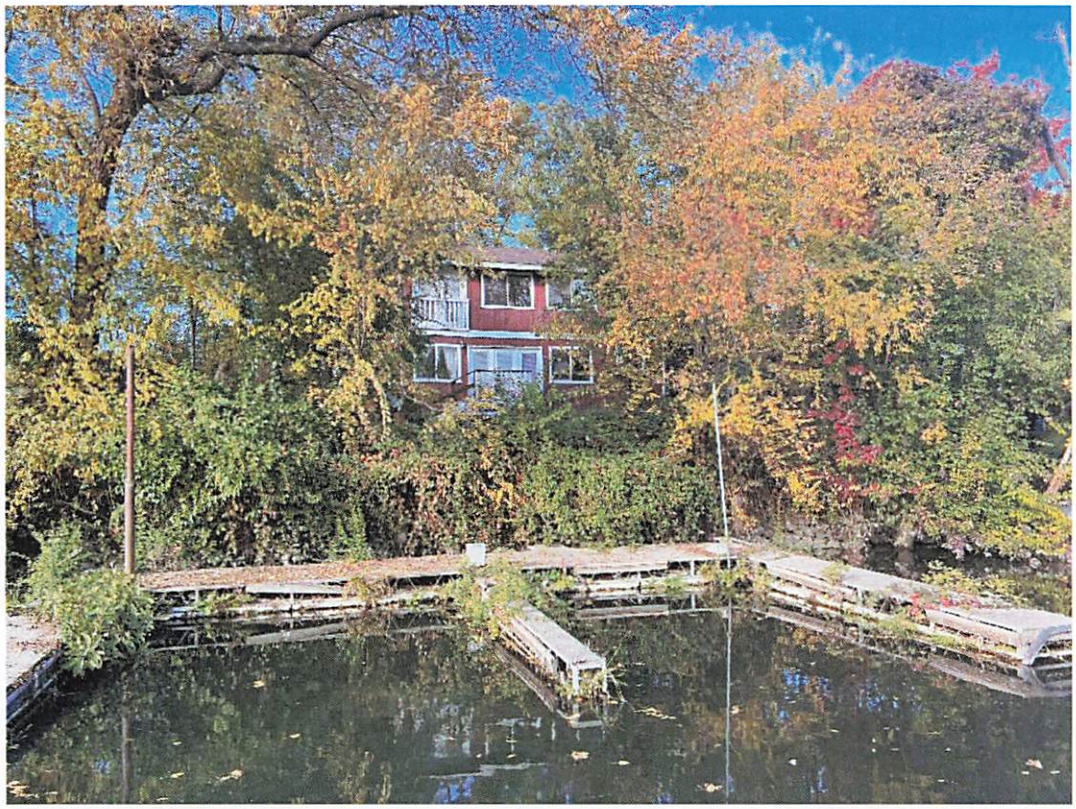
1610 Tuxedo Ave (photo 2 of 2)



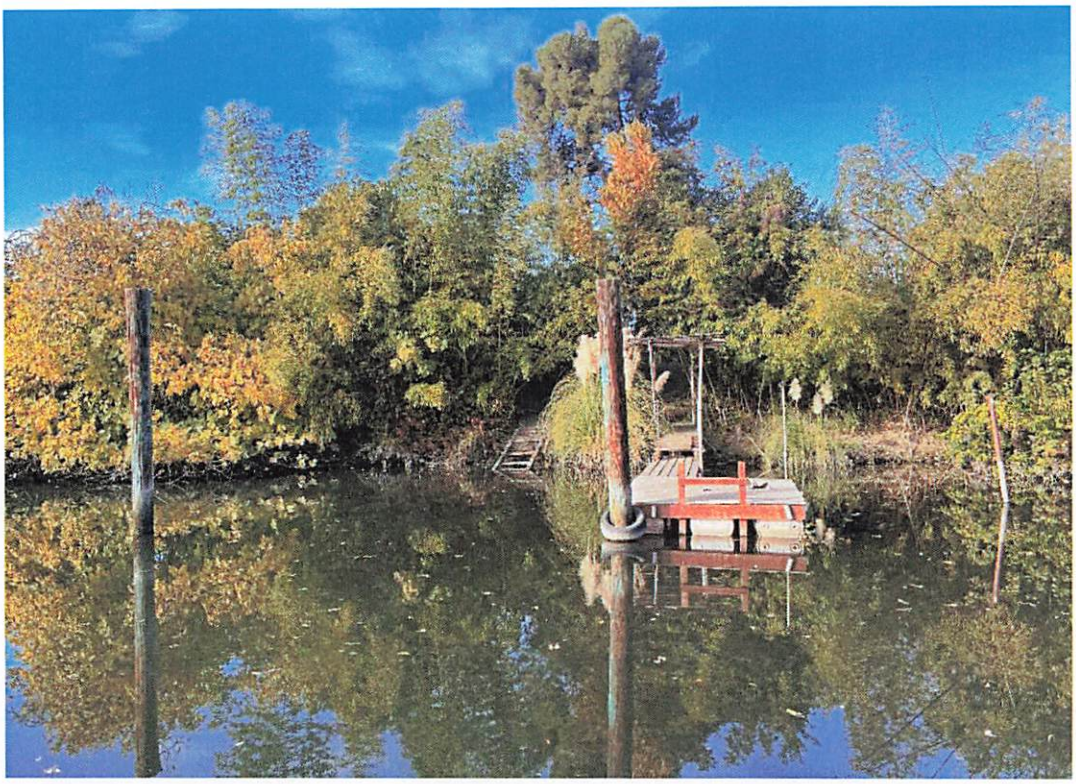
1826 Tuxedo Ave



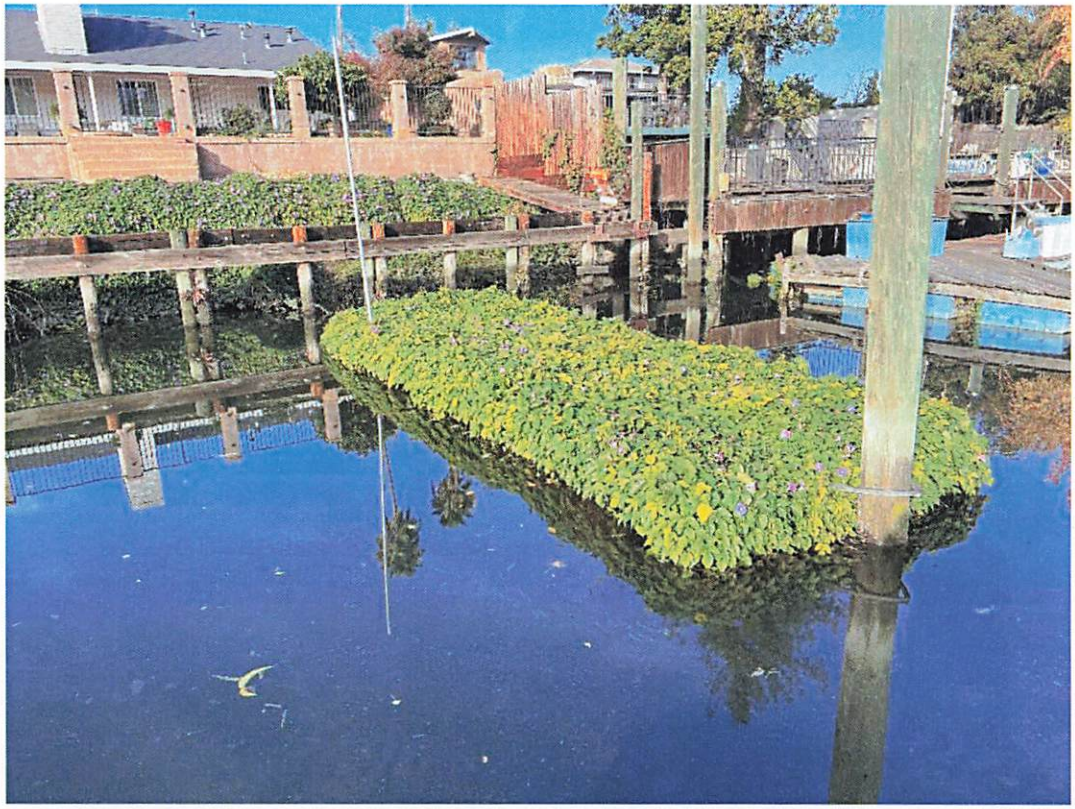
2010 Lake Drive: Obvious beaver sign located next to the District Pump Station fence.



2011 Mission Rd



2060 Canal Drive



2354 Canal Drive

ANIMAL DAMAGE CONTROL

Nick Catrina
(209) 602-6905

RECLAMATION DISTRICT 1614
SMITH CANAL
STOCKTON, CA
LEVEE SURVEY PERFORMED JULY 12, 2022
FOR BEAVER DEN IDENTIFICATION/LOCATION

LOCATION	LATITUDE	LONGITUDE
1	N 37.95860°	W 121.34490°
2	N 37.96332°	W 121.32603°
3	N 37.96575°	W 121.31773°
4	N 37.96552°	W 121.31778°
5	N 37.96568°	W 121.31708°
6	N 37.96562°	W 121.31712°

ANIMAL DAMAGE CONTROL

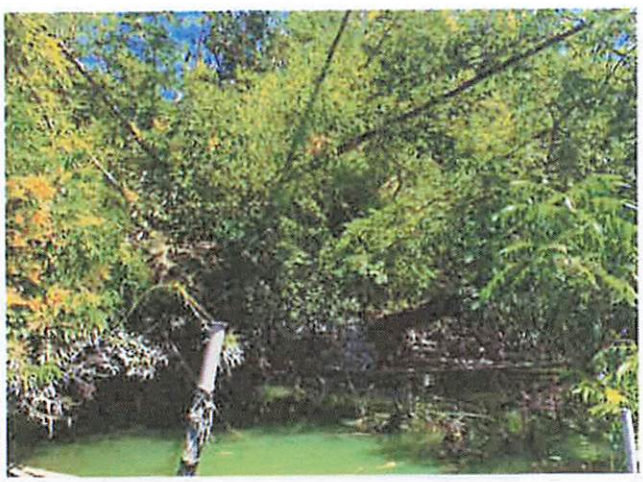
Nick Catrina
209 602-6905

RECLAMATION DISTRICT 1614
SMITH CANAL
STOCKTON, CA
LEVEE SURVEY PERFORMED JULY 12, 2022
FOR BEAVER DEN IDENTIFICATION/LOCATION

Location 1
N 37.95860°
W 121.34490°

Post chewed by beaver.

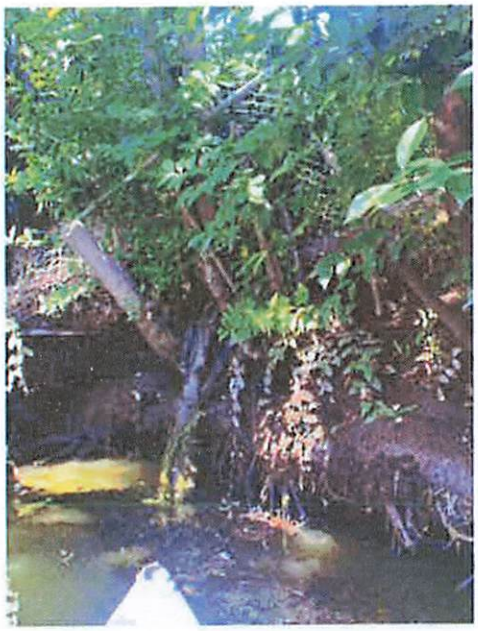
Location 2
N 37.96332°
W 121.32603°



Beaver den under tree has caused tree to topple

ANIMAL DAMAGE CONTROL
Nick Catrina
209 602-6905

Location 3
N 37.96575°
W121.31773°

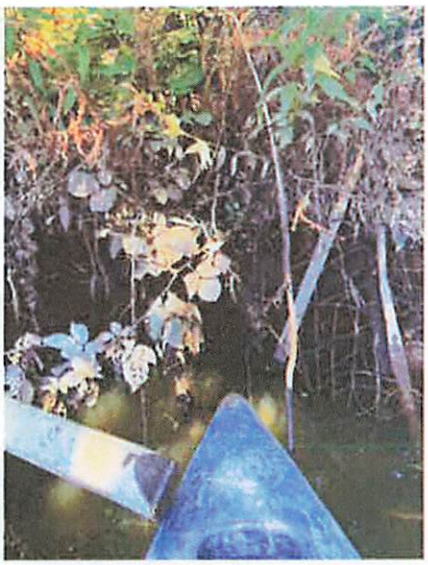


Location 4
N 37.96552°
W 121.31778°

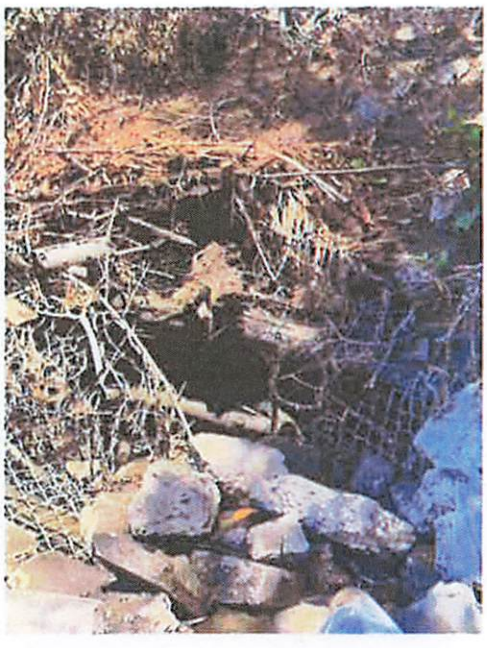
ANIMAL DAMAGE CONTROL

Nick Catrina
209 602-6905

Location 5
N37.96568°
W 121.31708°



Location 6
N 37.96562°
W121.31712°



ITEM 13

RD 1614: MASTER CALENDAR

JANUARY

FEBRUARY

- Send out Form 700s, remind Trustees of April 1 filing date
- Update Document Retention Policy

MARCH

- Evaluation Review of Employees

APRIL

- April 1: Form 700s due
- Biannual Town Hall Meeting

MAY

- Draft Budget

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
- Adopted Annual Budget.
- Reminder that Liability Insurance Expires Annually the end of July.
- Adopt Annual CEQA Exemption for levee maintenance

JULY

- Adopt Resolution for setting Appropriations and submit to County Assessor's Office.
- Adopt Resolution Establishing Annual Assessments.

AUGUST

- August 1: Deadline to certify assessments for tax-roll and deliver to County (duration of current assessment: no expiration).
- 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)
- Employee Embezzlement Policy Expires this Month.
- Renewal of Insurance
  (Crime policy does not come up for renewal until 8/26/2020)

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).
- Review Status of Encroachment Permit request from Randy Pierson for fence at corner of Del Rio Ave and Kirk Ave.

OCTOBER

- Publish Notice of Election, even numbered years (once per week, 4 times, commencing at least 1 month prior to election).
- Newsletter
- Biannual Town Hall Meeting.

NOVEMBER

- Election: to be held date selected by Board each even-numbered year.

DECEMBER

- New Trustee(s) take office, outgoing Trustee(s) term(s) end on first Friday of each even-numbered year.
- Follow up on Smith Canal Proposition 218 Reimbursement for costs advanced to SJAFCA.
- Election of Board officers (Election years)

Term of Current Board Members:

Name	Term Commenced	Term Ends
Christian Gaines	First Friday 12/2018	First Friday of 12/2022
Kevin Kauffman	First Friday 12/2020	First Friday of 12/2024
Dominick Gulli	First Friday 12/2020	First Friday of 12/2024

No Expiration on Assessment

Emergency Operations Plan Review – September 2022.

Reclamation District Meetings

- **First Monday of each month, at 2:00 P.M.**
  at the offices of
  Neumiller &Beardslee
  3121 W. March Lane, Suite 100
  Stockton, California 95219

ITEM 16

Reclamation District 1614
November 2022 Bills

NAME	INVOICE #	AMOUNT	TOTAL $	WARRANT #	CHECK #	SUBVENTION FUND
Kevin Kauffman		$100.00		6141		
			$100.00			
Christian Gaines		$50.00		6142		
			$50.00			
Dominick Gulli		$50.00		6143		
			$50.00			
Rhonda Olmo		$1,223.75		6144		
			$1,223.75			
Neumiller & Beardslee	334546	$1,150.00		6145		
			$1,150.00			
Delk Pest Control	168010	$220.00		6146		
			$220.00			
Reclamation District 1614 - Replenish Checking Account		$25,000.00		6147		
			$25,000.00			
Abel Palacio - November Payroll		$1,527.11			Direct Deposit	
			$1,527.11			
State of California Payroll Taxes - Nov.		$46.01				
			$46.01			
Federal Government Payroll Taxes - Nov.		$493.76				
			$493.76			
Sprint		$74.62			online	
			$74.62			
Comcast		$128.54			online	
			$128.54			

Reclamation District 1614
November 2022 Bills

Visa		$2,521.21			online	
			$2,521.21			
PG&E		$999.71			online	
			$999.71			
	WARRANT TOTAL:		**$27,793.75**			
	CHECKING TOTAL:		**$5,790.96**			
	TOTAL BILLS PAID		**$33,584.71**			

ITEM 17

SAN JOAQUIN AREA
FLOOD CONTROL AGENCY

December 1, 2022

Honorable Kevin Kauffman, President
Reclamation District No. 1614
P.O. Box 4807
Stockton, CA 95204

Follow-up status of Smith Canal Gate Project relative to channelization of water between unfinished North Cellular Wall and Reclamation District No. 1614's (RD 1614) Smith Tract Levee along the Stockton Golf and Country Club

Dear President Kauffman,

This letter serves as a follow-up to our previous letter dated November 2, 2022, which described the concern related to the potential of increased velocities and scour in the area between the North Cellular Wall and the RD 1614 levee. In the November 2, 2022, letter, SJAFCA described the implementation of a proactive plan to monitor the conditions through the channel opening. This current letter summarizes the results of that monitoring effort and responses to issues raised in your November 7, 2022, Board of Trustees Meeting where SJAFCA's November 2, 2022, letter was reviewed and discussed.

First, continuous monitoring of velocities within the channel opening has been occurring by CBEC Engineers (CBEC) since November 3, 2022. The results of this velocity monitoring have indicated that normal tidal inflow and outflow through the channel are generally less than 2 feet per second (fps) along the north bank of RD 1614's levee. Nominal differences in the velocity profiles were found as ships were moving along the Stockton Deep Water Ship Channel. Velocity differences were considerably less than originally anticipated. Overall, these velocity results are well below velocity thresholds that indicate the potential for scour. **EXHIBIT 1** is an email from CBEC that summaries the results of velocity monitoring and is hereby enclosed.

Second, bathymetric surveys have been performed in the area by eTrac surveyors over the last two months on October 6, 2022, October 27, 2022, and November 14, 2022. The results of these surveys have confirmed that very minimal change to topography has occurred along the channel bottom and levee toe during this time, and there is no evidence to indicate that erosion has occurred because of the narrow channel opening. **EXHIBIT 2** is an exhibit which provides a comparison of the bathymetric survey results performed on October 27, 2022, and November 14, 2022, and is hereby enclosed.

Finally, an evaluation of potential flow velocities, beyond that of the direct measurement of actual velocities, to consider potential extreme tide and runoff conditions, has been performed by R&F

Engineering. A 2-dimensional HEC-RAS hydraulic model was developed, and three scenarios were simulated, including a 100-year tidal event with all interior pump stations feeding Smith Canal simultaneously active and flowing at capacity. The highest velocities were consistently seen at the tip of the North Cellular Wall. Velocities decreased in areas further removed from the end of the North Cellular Wall and remained below 1.0 fps along the RD 1614 levee in all modeled scenarios. **EXHIBIT 3** is the technical memorandum prepared by R&F Engineering that summarizes the modeling results and is hereby enclosed.

In summary, the velocity monitoring and bathymetric surveys performed to date have shown that no erosion is currently occurring and that measured velocities are below scour-potential velocity thresholds. Furthermore, modeling efforts have demonstrated that future high-water / high-flow scenarios will not lead to adverse velocities along the RD 1614 levee.

SJAFCA will continue to observe flow conditions around the project and the RD 1614 levee and plans to react accordingly. We hope that these implemented measures will alleviate and address any concerns regarding the RD 1614 levee. Please contact me if you have any further questions.

Sincerely,

CHRIS ELIAS
EXECUTIVE DIRECTOR

cc: Andy Pinasco, General Counsel, RD 1614
Christopher H. Neudeck, KSN
Juan Neira, SJAFCA

Attachment – 3 Exhibits