

# SOLANO COUNTY WATER AGENCY



## BOARD OF DIRECTORS MEETING

### BOARD OF DIRECTORS:

**Chair:**  
*Director Dale Crossley*  
Reclamation District No. 2068

**Vice Chair:**  
*Supervisor Jim Spering*  
Solano County District 3

*Mayor Steve Young*  
City of Benicia

*Mayor Steve Bird*  
City of Dixon

*Mayor Harry Price*  
City of Fairfield

*Director Ryan Mahoney*  
Maine Prairie Water District

*Mayor Ron Kott*  
City of Rio Vista

*Supervisor Erin Hannigan*  
Solano County District 1

*Supervisor Monica Brown*  
Solano County District 2

*Supervisor John Vasquez*  
Solano County District 4

*Supervisor Mitch Mashburn*  
Solano County District 5

*Director J.D. Kluge*  
Solano Irrigation District

*Mayor Lori Wilson*  
City of Suisun City

*Mayor Ron Rowlett*  
City of Vacaville

*Mayor Robert McConnell*  
City of Vallejo

### GENERAL MANAGER:

*Roland Sanford*  
Solano County Water Agency

**DATE:** Thursday, January 13, 2022

**TIME:** 6:30 P.M.

**PLACE:** Virtual Meeting – Zoom Meeting

### Join Zoom Meeting:

<https://us02web.zoom.us/j/83191863504?pwd=UWhPZEVVbHU1bzRTWEliQkhFRGljQT09>

Meeting ID: 831 9186 3504/Passcode: 932913

One tap mobile: +16699009128,,83191863504#,,,932913#

Dial by your location: +1 669 900 9128 US

### 1. REMOTE MEETING

In Compliance with Government Code Section 54953(e) added by Assembly Bill 361, and consistent with the findings made by the Solano County Water Agency Board of Directors in accordance therewith, members of the Solano County Water Agency Board of Directors and members of the public will participate in this meeting by teleconference. Per AB 361, the Board is to reconsider the circumstances of the state of emergency and determine that: (i) the state of emergency continues to directly impact the ability of the members to meet safely in person; and/or (ii) State or local officials continue to impose or recommend measures to promote social distancing.

### 2. CALL TO ORDER

### 3. PLEDGE OF ALLEGIANCE

### 4. APPROVAL OF AGENDA

### 5. PUBLIC COMMENT

*If you wish to make a Public Comment, please contact the Secretary at: [cleee@scwa2.com](mailto:cleee@scwa2.com) to expedite the process, thank you. Public Comments may still be made during the virtual meeting without prior notice.*



6. **ELECTION OF OFFICERS AND APPOINTMENT OF EXECUTIVE COMMITTEE FOR 2022** *(estimated time: 10 minutes)*

7. **CONSENT ITEMS** *(estimated time: 5 minutes)*

- (A) Minutes: Approval of the Minutes of the Board of Directors meeting of December 9, 2021.
- (B) Expenditure Approvals: Approval of the December 2021 checking account register.
- (C) Quarterly Financial Reports: Approve the Income Statement and Balance Sheet of December 2021.
- (D) North Bay Aqueduct Alternate Intake: Adopt Resolution 2022-01 in support of North Bay Aqueduct Alternate Intake (aka Water +).
- (E) Contract with CBEC: Authorize General Manager to execute contract with CBEC for Putah South Canal hydraulic model development. Total cost not to exceed \$130,000.
- (F) Contract with USGS: Authorize General Manager to execute contract with United States Geological Survey for technical support of North Bay Aqueduct Alternate Intake Project. Total cost not to exceed \$78,613.

8. **BOARD MEMBER REPORTS** *(estimated time: 5 minutes)*

RECOMMENDATION: For information only.

9. **GENERAL MANAGER'S REPORT** *(estimated time: 5 minutes)*

RECOMMENDATION: For information only.

10. **SOLANO WATER ADVISORY COMMISSION REPORT** *(estimated time: 5 minutes)*

RECOMMENDATION: For information only.

11. **RESOLUTION OF APPRECIATION – RICH MAROVICH** *(estimated time: 10 minutes)*

RECOMMENDATION: Adopt Resolution 2022-02 honoring Rich Marovich, Putah Creek Streamkeeper, upon his retirement after 21 years of service.

12. **APPOINTMENT OF LEGISLATIVE AND WATER POLICY COMMITTEES FOR 2022** *(estimated time: 10 minutes)*

RECOMMENDATIONS: Appoint Legislative and Water Policy committees and adopt respective meeting calendars for 2022.

13. **APPOINTMENT OF LAKE BERRYESSA AD HOC COMMITTEE** *(estimated time: 10 minutes)*

RECOMMENDATION: Appoint ad hoc committee to review Napa County’s recreational development plans at and near Lake Berryessa.

14. **U.S. EPA AND U.S. ARMY CORPS OF ENGINEERS PROPOSED DEFINITION OF “WATERS OF THE UNITED STATES”** *(estimated time: 20 minutes)*

RECOMMENDATION: Authorize staff to submit comments on definition of “waters of the United States, following review and approval of staff comments by the Board’s Water Policy Committee.

15. **LEGISLATIVE UPDATES** *(estimated time: 10 minutes)*

RECOMMENDATIONS:

1. Hear report from Committee Chair on activities of the SCWA Legislative Committee.
2. Hear report from Bob Reeb of Reeb Government Relations, LLC.

16. **WATER POLICY UPDATES** *(estimated time: 10 minutes)*

RECOMMENDATIONS:

1. Hear report from staff on current and emerging Delta and Water Policy issues and provide direction.
2. Hear status report from Committee Chair on activities of the SCWA Water Policy Committee.
3. Hear report from Supervisors Vasquez and Mashburn on activities of the Delta Counties Coalition, Delta Protection Commission, and Delta Conservancy.
4. Hear report from Elizabeth Patterson on activities of the North Bay Watershed Association (see <https://www.nbwatershed.org> for additional information).

17. **TIME AND PLACE OF NEXT MEETING**

Thursday, February 10, 2022 at 6:30 p.m. at the SCWA offices.

***The Full Board of Directors packet with background materials for each agenda item can be viewed on the Agency’s website at <https://www.scwa2.com/governance/board-meetings-agendas-minutes/>***

Any materials related to items on this agenda distributed to the Board of Directors of Solano County Water Agency less than 72 hours before the public meeting are available for public inspection at the Agency’s offices located at the following address: 810 Vaca Valley Parkway, Suite 203, Vacaville, CA 95688. Upon request, these materials may be made available in an alternative format to persons with disabilities.

# SOLANO COUNTY WATER AGENCY

## MEMORANDUM



Action Item No. 2022-##  
Agenda Item No. 6

**TO: Board of Directors**

**FROM: Roland Sanford, General Manager**

**DATE: January 5, 2022**

**SUBJECT: Elections of Officers and Appointment of Executive Committee for 2022**

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At the January Board of Directors meeting the Board will elect a Chair and Vice Chair for the 2022 calendar year. The Chair and Vice Chair for 2021 were Director Crossley and Supervisor Spering, respectively. Past practice has been that the Chair and Vice Chair positions rotate among the three general Board member categories: County Board of Supervisors, Mayors, and Agricultural District Directors. If past practice follows, in 2022 a County Supervisor would be the Chair and a City Mayor would be Vice Chair.

The Executive Committee is appointed by the newly elected Chair. The Executive Committee reviews the Board Agenda prior to Board meetings with the General Manager and handles other tasks as requested by the Board of Directors, such as reviewing the Agency's proposed budget. The Executive Committee is made up of the Chair, Vice-Chair, and three other Board members – a Mayor, a County Supervisor, and an Agricultural District Director. The 2021 Executive Committee members were as follows:

**2021 Executive Committee**  
Chairman, Director Dale Crossley  
Vice Chairman, Supervisor Jim Spering  
Mayor Ron Rowlett  
Supervisor Mitch Mashburn  
Ag District Director J.D. Kluge

810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688  
Phone (707) 451-6090 • FAX (707) 451-6099  
www.scwa2.com



If past practice is followed the 2022 Executive Committee would be comprised of:

**2022 Executive Committee**

Chair – County Supervisor

Vice Chair – Mayor

County Supervisor

Ag District Director

Mayor

If you have any questions, please contact me at 455-1103.

## **Past SCWA Executive Committees**

### **2021**

Supervisor Mitch Mashburn, Chair  
Supervisor Jim Spering, Vice Chair  
Director Dale Crossley  
Mayor Ron Rowlett  
Director J.D. Kluge

### **2020**

Mayor Ron Kott, Chair  
Director Crossley, Vice Chair  
Mayor Elizabeth Patterson  
Supervisor Skip Thomson  
Director Lance Porter

### **2019**

Supervisor Skip Thomson, Chair  
Mayor Ron Kott, Vice Chair  
Mayor Elizabeth Patterson  
Supervisor Jim Spering  
Director John Kluge

### **2018**

Director John Kluge, Chair  
Supervisor Skip Thomson, Vice Chair  
Mayor Pete Sanchez  
Supervisor Jim Spering  
Director Ryan Mahoney

### **2017**

Mayor Pete Sanchez, Chair  
Director John Kluge, Vice Chair  
Mayor Norman Richardson  
Supervisor Skip Thomson  
Director Ryan Mahoney

### **2016**

Supervisor Erin Hannigan, Chair  
Mayor Pete Sanchez, Vice Chair  
Mayor Jack Batchelor  
Supervisor Jim Spering  
Director John Kluge

### **2015**

Director Dale Crossley, Chair  
Supervisor Erin Hannigan, Vice Chair  
Mayor Jack Batchelor  
Supervisor Jim Spering  
Mayor Harry Price

**2014**

Mayor Harry Price, Chair  
Director Dale Crossley, Vice Chair  
Mayor Jack Batchelor  
Supervisor Jim Spering  
Supervisor Erin Hannigan

**2013**

Supervisor Jim Spering, Chair  
Mayor Harry Price, Vice Chair  
Mayor Jack Batchelor  
Director Dale Crossley  
Supervisor Erin Hannigan

# CONSENT ITEMS



**SOLANO COUNTY WATER AGENCY  
BOARD OF DIRECTORS MEETING MINUTES  
MEETING DATE: December 9, 2021**

The Solano County Water Agency Board of Directors met this evening via Zoom teleconferencing, in deference to the ongoing State and County COVID-19 “shelter in place” directives. Present were:

Mayor Steve Young, City of Benicia  
Mayor Steve Bird, City of Dixon  
Mayor Harry Price, City of Fairfield  
Mayor Ronald Kott, City of Rio Vista  
Mayor Ron Rowlett, City of Vacaville  
Mayor Robert McConnell, City of Vallejo  
Mayor Lori Wilson, City of Suisun City  
Supervisor Erin Hannigan, Solano County District 1  
Supervisor Monica Brown, Solano County District 2  
Supervisor Jim Spering, Solano County District 3  
Supervisor John Vasquez, Solano County District 4  
Supervisor Mitch Mashburn, Solano County District 5  
Director Sean Favero, Maine Prairie Water District  
Director Dale Crossley, Reclamation District No. 2068  
Director Derrick Lum, Solano Irrigation District

**CALL TO ORDER**

The meeting was called to order by Chair Crossley at 6:30 pm.

**REMOTE MEETING**

In Compliance with Government Code Section 54953(e) added by Assembly Bill 361, and consistent with the findings made by the Solano County Water Agency Board of Directors in accordance therewith, members of the Solano County Water Agency Board of Directors and members of the public participated in this meeting by teleconference. Per AB 361, the Board is to reconsider the circumstances of the state of emergency and determine that: (i) the state of emergency continues to directly impact the ability of the members to meet safely in person; and/or (ii) State or local officials continue to impose or recommend measures to promote social distancing. The Board unanimously approved-by roll call vote-that both (i) and (ii) to be true and to continue the meeting by teleconference.

**APPROVAL OF AGENDA**

On a motion by Mayor Kott and a second by Mayor Price the Board unanimously approved – by roll call vote - the agenda.

**PUBLIC COMMENT**

Rich Marovich, Putah Creek Streamkeeper, stated that he will be retiring at the end of the December, after 21 years of service. He expressed his appreciation for the Board’s support during his tenure and noted that the habitat restoration efforts supported by the Board have resulted in the doubling of bird populations in the vicinity of Lower Putah Creek, thousands of salmon successfully spawning in Lower Putah Creek after a multi-decade absence, and the removal of hundreds of tons of trash. Several Board members congratulated Rich on his contributions to Lower Putah Creek and wished him well in retirement.

Max Stevenson, the incoming Putah Creek Streamkeeper, introduced himself to the Board and expressed his desire to continue, and expand on the habitat restoration efforts initiated by Mr. Marovich.

**CONSENT ITEMS**

On a motion by Mayor Rowlett and a second by Mayor Price the Board unanimously approved – by roll call vote – the following consent items:

- (A) Minutes
- (B) Expenditure Approvals
- (C) State Water Project Tolling Agreement Amendment

### **BOARD MEMBER REPORTS**

Director Crossley reported that he attended the ACWA and Farm Bureau annual meetings last week.

### **GENERAL MANAGER'S REPORT**

The General Manager had no additions to the written report.

### **SOLANO WATER ADVISORY COMMISSION**

In addition to the meeting notes included in the Board's Agenda packet, Kyle Ochendusko, City of Benicia Deputy Public Works Director and Chair of the Solano Water Advisory Commission, reported that Commission members have been discussing the Department of Water Resources (DWR) initial 2022 water supply allocation for State Water Project and the ongoing and projected impacts of drought.

### **LAKE BERRYESSA BOATER OUTREACH**

Assistant General Manager Chris Lee introduced Senior Water Resources Specialist Sabrina Colias, who manages the Lake Berryessa Mussel Education and Prevention Program (Mussel Prevention Program). Ms. Colias introduced three interns who worked on the Mussel Prevention Program in 2021; Philip Maillard, Freedom Evans, and Deepka Tewari. Mr. Maillard, Mr. Evans, and Ms. Tewari collectively described the purpose of the Mussel Prevention Program – to prevent Zebra and/or Quagga mussels from infesting Lake Berryessa – and provided background information on the biology of Zebra and Quagga mussels, as well as their potential negative impacts – ecological, recreation, and water management infrastructure - to freshwater bodies such as Lake Berryessa. During the presentation the three interns described how boats are inspected prior to their launching in Lake Berryessa, as well as the procedures for decontaminating boats that are found or suspected of being infested with Zebra or Quagga mussels.

Ms. Colias noted that the scope of the Mussel Prevention Program has expanded in recent years, but that due to staffing limitations and other logistical considerations, such as limited cell service, not all boats launching at Lake Berryessa are inspected for invasive mussels. She reported that in 2021 over 11,000 boats were screened as part of the Mussel Prevention Program, with nearly 100 boats receiving in-depth inspections, and approximately 12 boats ultimately requiring decontamination prior to launching.

Ms. Colias noted that the Mussel Prevention Program's online presence has expanded in recent years and that social media is proving to not only be an effective public outreach tool, but also providing useful information regarding boater demographics – such as where across the United States boats launching at Lake Berryessa originate from.

Following a summary of boater demographics, the presentation shifted to the ongoing search for a suitable permanent boat decontamination site. Mr. Scott Sheldon of Terra Realty, who has been assisting Water Agency staff with the identification of potentially suitable properties, summarized the pros and cons of the various properties investigated to date. He observed that perhaps the most promising sites are along the Highway 128 corridor at or near Winters, not only because of favorable site characteristics, such as suitable drainage and access, but also because social media data obtained to date indicate the majority of boats launching at Lake Berryessa pass through Winters on Highway 128. Mr. Sheldon noted that a second permanent boat decontamination site located to the west or northwest of Lake Berryessa would be desirable, as it would be more accessible to boaters originating from Napa, Sonoma or Lake county.

The discussion of potentially a second permanent boat decontamination site lead to a discussion of Napa County's role in the Mussel Prevention Program. Water Agency staff reported that while Napa County staff have been supportive of the Mussel Prevention Program, at least in concept, Napa County as a whole as shown little interest in actively participating in the Mussel Prevention Program or otherwise assisting with invasive mussel infestation prevention efforts at Lake Berryessa or the City of Napa's Lake Hennessy, located in the adjacent watershed to Lake Berryessa. Several Board members observed that Napa County is seeking to increase tourism at Lake Berryessa and therefore has a vested interest in avoiding Zebra and/or Quagga mussel infestations.

Supervisor Spering reported that he will be arranging a meeting with his counterparts in Napa County to discuss the need for Napa’s involvement in the Mussel Prevention Program. Board members suggested that a committee be established in January to formulate a plan for engaging Napa County, not only in regards to the Mussel Prevention Program, but also other issues of mutual interest or concern regarding management of the Lake Berryessa resorts and Napa County’s plans to increase tourism at Lake Berryessa.

There was no Board action taken following the presentation.

**LEGISLTATIVE UPDATES**

Director Crossley stated that the Legislative Committee reviewed the 2021-2022 legislative platform, updated a few sections and are looking for new pictures for the handout. Once complete, it will be brought to the full Board for consideration of approval at the January meeting.

**WATER POLICY UPDATES**

- 1. Staff had nothing to report regarding emerging Delta and Water Policy issues.
- 2. General Manager Sanford reported that the Water Policy Committee will meet next week and discuss the proposed Lake Berryessa resorts as well as the new federal register ruling on the definition of Waters of the United States.
- 3. Supervisor Mashburn reported that the Delta Counties Coalition (DCC) met with State Natural Resources Secretary Crowfoot to discuss new legislation that basically exempts the state from CEQA on some of their Delta projects. They will produce a memo that will state that they will at least use the “good neighbor” checklist by DCC for their community outreach on these projects.
- 4. There were no additions to the North Bay Watershed Association meeting notes.

**TIME AND PLACE OF NEXT MEETING**

Thursday, January 13, 2022, at 6:30 p.m., SCWA offices in Vacaville.

**ADJOURNMENT**

This meeting of the Solano County Water Agency Board of Directors was adjourned at 7:48 p.m.

\_\_\_\_\_  
Roland Sanford  
General Manager & Secretary to the  
Solano County Water Agency

ACTION OF  
SOLANO COUNTY WATER AGENCY

DATE: January 13, 2022

SUBJECT: Expenditures Approval

RECOMMENDATIONS:


Approve expenditures from the Water Agency checking accounts for December 2021.

FINANCIAL IMPACT:

All expenditures are within previously approved budget amounts.

BACKGROUND:

The Water Agency auditor has recommended that the Board of Directors approve all expenditures (in arrears). Attached is a summary of expenditures from the Water Agency’s checking accounts for December 2021. Additional backup information is available upon request.

Recommended:   
Roland Sanford, General Manager

<input type="checkbox"/>	Approved as Recommended	<input type="checkbox"/>	Other (see below)	<input type="checkbox"/>	Continued on next page
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Modification to Recommendation and/or other actions:

I, Roland Sanford, General Manager and Secretary to the Solano County Water Agency, do hereby certify that the foregoing action was regularly introduced, passed, and adopted by said Board of Directors at a regular meeting thereof held on January 13, 2022, by the following vote:

Ayes:

Noes:

Abstain:

Absent:

Roland Sanford  
General Manager & Secretary to the  
Solano County Water Agency

## SOLANO COUNTY WATER AGENCY

## Cash Disbursements Journal

For the Period From Dec 1, 2021 to Dec 31, 2021

Filter Criteria includes: Report order is by Check Number. Report is printed in Detail Format.

Date	Check #	Account ID	Line Description	Debit Amount	Credit Amount
12/7/21	36662V	2020U 1020SC	Invoice: NOE-WIMMER OFFICE OF PLANNING AND RESEARCH	50.00	50.00
12/7/21	36883	2020SC 1020SC	Invoice: 235828 A & L WESTERN AGRICULTURAL LABS	36.00	36.00
12/7/21	36884	2020SC 2020SC 2020SC 1020SC	Invoice: 13621 Invoice: 13998 Invoice: 14000 ZACHARIAH WILKERSON	11,316.64 23,195.04 16,252.20	50,763.88
12/7/21	36885	2020SC 1020SC	Invoice: 3090 AG INNOVATIONS	27,908.63	27,908.63
12/7/21	36886	2020SC 1020SC	Invoice: EXP REIMB NOV 2021 JEFF BARICH	81.00	81.00
12/7/21	36887	2020SC 2020SC 1020SC	Invoice: BA7809 Invoice: BA7821 BLANKINSHIP & ASSOCIATES, INC.	3,285.48 3,025.00	6,310.48
12/7/21	36888	2020SC 1020SC	Invoice: MUS INSP MAY-OCT 21 BETTY BRITAIN	4.00	4.00
12/7/21	36889	2020SC 1020SC	Invoice: SE04319 BSK ASSOCIATES	873.00	873.00
12/7/21	36890	2020SC 1020SC	Invoice: 11232021AA CARPORTS AND MORE	13,313.52	13,313.52
12/7/21	36891	2020SC 1020SC	Invoice: 1719919 COUNTY OF YOLO	25.50	25.50
12/7/21	36892	2020SC 2020SC 1020SC	Invoice: 5522741-0001 Invoice: 5506619-0002 NORCAL RENTAL GROUP, LLC	335.93 8,616.45	8,952.38
12/7/21	36893	2020U 1020SC	Invoice: NOV 2021 JAMES B. DEROSE	4,952.15	4,952.15
12/7/21	36894	2020SC 1020SC	Invoice: MUS INS MAY-OCT 21 CINDY DUNLAP	251.00	251.00
12/7/21	36895	2020SC 1020SC	Invoice: 8590450 TIAA BANK	1,378.45	1,378.45
12/7/21	36896	2020SC 1020SC	Invoice: 5303 EYASCO, INC.	36,033.54	36,033.54
12/7/21	36897	2020SC 1020SC	Invoice: 97251 FREMOUW ENVIRONMENTAL SERVICES, INC.	562.54	562.54
12/7/21	36898	2020SC 1020SC	Invoice: NOV 2021 MARK E. GRISMER PHD PE	2,000.00	2,000.00
12/7/21	36899	2020SC 2020SC 2020SC 2020SC 2020SC 2020SC 2020SC 2020SC 2020SC 2020SC 1020SC	Invoice: 9507050 Invoice: 5221178 Invoice: 5241187 Invoice: 9221537 Invoice: 4201704 Invoice: 3010715 Invoice: 3012149 Invoice: 1027021 Invoice: 9520869 Invoice: 5027676 HOME DEPOT CREDIT SERVICE	514.52     185.32 71.24 260.55 97.72 759.87	409.78 398.47 83.65 23.76     973.56
12/7/21	36900	2020SC	Invoice: MUSS MAY -OCT 2021	332.00	

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Date	Check #	Account ID	Line Description	Debit Amount	Credit Amount
		1020SC	JACQUE BRITTAI		332.00
12/7/21	36901	2020SC	Invoice: 179248	255.00	
		2020SC	Invoice: 180108	30,591.36	
		1020SC	LSA ASSOCIATES, INC.		30,846.36
12/7/21	36902	2020SC	Invoice: NOV 2021	51.00	
		1020SC	MILLENNIUM TERMITE & PEST		51.00
12/7/21	36903	2020SC	Invoice: 10/21/21-11/18/21	30.03	
		1020SC	PACIFIC GAS & ELECTRIC CO,		30.03
12/7/21	36904	2020SC	Invoice: EXP REIM AUG 2021	13.50	
		1020SC	JUSTIN PASCUAL		13.50
12/7/21	36905	2020SC	Invoice: 928633	15.54	
		2020SC	Invoice: 929205	110.89	
		2020SC	Invoice: 929476	20.68	
		2020SC	Invoice: 930110	105.09	
		2020SC	Invoice: 930638	111.46	
		1020SC	BOB PISANI & SON		363.66
12/7/21	36906	2020SC	Invoice: MUSSEL MAY- OCT 2021	1,114.00	
		1020SC	BERRYESSA SMI OPCO L		1,114.00
12/7/21	36907	2020SC	Invoice: 01170703	120.05	
		1020SC	RECOLOGY HAY ROAD		120.05
12/7/21	36908	2020SC	Invoice: 000463	55.61	
		1020SC	SAM'S CLUB		55.61
12/7/21	36909	2020SC	Invoice: 1130212111	3,198.75	
		1020SC	SHANDAM INC.		3,198.75
12/7/21	36910	2020U	Invoice: NOV 2021	2,668.18	
		1020SC	SOLANO COUNTY FLEET MANAGEMENT		2,668.18
12/7/21	36911	2020SC	Invoice: 19	50,577.27	
		1020SC	SOLANO RESOURCE CONSERVATION DISTRICT		50,577.27
12/7/21	36912	2020SC	Invoice: CALL#155	324.00	
		1020SC	CHARLES LOMELI, TAX COLLECTOR		324.00
12/7/21	36913	2020SC	Invoice: MUS INS MAY-OCT 2021	175.00	
		1020SC	GINA SOUZA		175.00
12/7/21	36914	2020SC	Invoice: 73407	313.12	
		2020SC	Invoice: 73416	97.60	
		1020SC	SUISUN VALLEY FRUIT GROWERS AS		410.72
12/7/21	36915	2020SC	Invoice: 200566943	67.62	
		1020SC	TRACTOR SUPPLY CREDIT PLAN		67.62
12/7/21	36916	2020SC	Invoice: 240	5,254.61	
		2020SC	Invoice: 239	5,530.76	
		2020SC	Invoice: 242	150.00	
		2020SC	Invoice: 241	7,875.55	
		2020SC	Invoice: 243	3,799.24	
		1020SC	TRPA FISH BIOLOGISTS		22,610.16
12/7/21	36917	2020SC	Invoice: KATHLEEN BEISTEL	1,000.00	
		1020SC	KATHLEEN BEISTEL		1,000.00
12/7/21	36918	2020SC	Invoice: PAUL MARKIEWITZ 1	1,000.00	
		1020SC	PAUL MARKIEWITZ		1,000.00
12/7/21	36919	2020SC	Invoice: PAUL MARTINEZ	1,000.00	
		1020SC	PAUL MARTINEZ		1,000.00

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Date	Check #	Account ID	Line Description	Debit Amount	Credit Amount
12/7/21	36920	2020SC 1020SC	Invoice: ANNIE WARMAN ANNIE WARMAN	1,000.00	1,000.00
12/7/21	36921	2020SC 1020SC	Invoice: 19163 VTS SALES LLC	193.88	193.88
12/7/21	36922	2020SC 1020SC	Invoice: 9893769259 VERIZON WIRELESS	1,749.17	1,749.17
12/7/21	36923	2020SC 1020SC	Invoice: 151688 WOOD RODGERS, INC.	2,355.00	2,355.00
12/14/21	36924	2020SC 1020SC	Invoice: 0678418 ACWA JOINT POWERS INSURANCE AUTHORITY	1,857.12	1,857.12
12/14/21	36925	2020SC 1020SC	Invoice: EXP REIM OCT-NOV '21 KATHERINE ASHLEY	127.00	127.00
12/14/21	36926	2020SC 1020SC	Invoice: DEC 2021 BOD MTG STEVEN BIRD	100.00	100.00
12/14/21	36927	2020SC 1020SC	Invoice: P264566 CDW GOVERNMENT, INC.	5,383.70	5,383.70
12/14/21	36928	2020SC 2020SC 1020SC	Invoice: DEC 2021 EXEC COMM Invoice: DEC 2021 BOD MTG DALE CROSSLEY	100.00 100.00	200.00
12/14/21	36929	2020SC 1020SC	Invoice: 94149909 ENVIRONMENTAL SYSTEMS RESEARCH INSTITUT	2,700.00	2,700.00
12/14/21	36929V	2020SC 1020SC	Invoice: 94149909 ENVIRONMENTAL SYSTEMS RESEARCH INSTITUT	2,700.00	2,700.00
12/14/21	36930	2020SC 1020SC	Invoice: MUSSEL INSP FY2021 AMBER GARCIA	352.00	352.00
12/14/21	36931	2020SC 1020SC	Invoice: 380-0005147 GHD, INC.	2,595.02	2,595.02
12/14/21	36932	2020SC 1020SC	Invoice: 2021-59 IN COMMUNICATIONS	1,588.75	1,588.75
12/14/21	36933	2020SC 1020SC	Invoice: NOV 2021 LEG MTG JOHN D. KLUGE	100.00	100.00
12/14/21	36934	2020SC 1020SC	Invoice: IN-1211110599 LA RANCHERA	2,890.00	2,890.00
12/14/21	36935	2020SC 1020SC	Invoice: 63100718762 LES SCHWAB TIRE CENTER	688.44	688.44
12/14/21	36936	2020SC 1020SC	Invoice: DEC 2021 BOG MTG MITCH MASHBURN	100.00	100.00
12/14/21	36937	2020SC 1020SC	Invoice: DEC 2021 BOD MTG ROBERT MCCONNELL	100.00	100.00
12/14/21	36938	2020SC 2020SC 1020SC	Invoice: COVID EXP JUNE 21 Invoice: EXP REIM JUNE 2021 PATE, THOMAS	225.00 39.20	264.20
12/14/21	36939	2020SC 1020SC	Invoice: 1018435676 PITNEY BOWES	61.11	61.11
12/14/21	36940	2020SC 1020SC	Invoice: 1509 DOUG NOLAN	1,000.00	1,000.00

## SOLANO COUNTY WATER AGENCY

## Cash Disbursements Journal

For the Period From Dec 1, 2021 to Dec 31, 2021

Filter Criteria includes: Report order is by Check Number. Report is printed in Detail Format.

Date	Check #	Account ID	Line Description	Debit Amount	Credit Amount
12/14/21	36941	2020SC 1020SC	Invoice: DEC 2021 BOD MTG RON ROWLETT	100.00	100.00
12/14/21	36942	2020SC 1020SC	Invoice: 3915102 SHELDON(Energy Services)	17.18	17.18
12/14/21	36943	2020SC 2020SC 1020SC	Invoice: DEC 2021 EXEC COMM Invoice: DEC 2021 BOD MTG JAMES SPERING	100.00 100.00	200.00
12/14/21	36944	2020SC 1020SC	Invoice: 20788 STERLING MAY EQUIPMENT CO.	26.98	26.98
12/15/21	36944V	2020SC 1020SC	Invoice: 20788 STERLING MAY EQUIPMENT CO.	26.98	26.98
12/14/21	36945	2020SC 1020SC	Invoice: 40 THINKING GREEN CONSULTANTS	527.80	527.80
12/14/21	36946	2020SC 1020SC	Invoice: DEC 2021 BOD MTG JOHN VASQUEZ	100.00	100.00
12/14/21	36947	2020SC 1020SC	Invoice: OSV000002626807 VERIZON CONNECT	285.00	285.00
12/14/21	36948	2020SC 1020SC	Invoice: DEC 2021 BOD MTG STEVE YOUNG	100.00	100.00
12/28/21	36949	2020SC 1020SC	Invoice: 112021 BELIA MARTINEZ	800.00	800.00
12/28/21	36950	2020SC 2020SC 2020SC 2020SC 1020SC	Invoice: BA7865 Invoice: BA7864 Invoice: BA7863 Invoice: BA7862 BLANKINSHIP & ASSOCIATES, INC.	1,687.46 1,071.25 1,107.50 1,420.00	5,286.21
12/28/21	36951	2020SC 1020SC	Invoice: 27829716 CANON FINANCIAL SERVICES, INC.	994.43	994.43
12/28/21	36952	2020SC 1020SC	Invoice: 5087628981 CINTAS CORPORATION	129.55	129.55
12/28/21	36953	2020SC 2020SC 1020SC	Invoice: 0000001409001 Invoice: 0000001409000 DEPT OF FORESTRY & FIRE PROTECTION	907.76 453.88	1,361.64
12/28/21	36954	2020N 2020SC 2020SC 1020SC	Invoice: 22-128-V NOV 2021 Invoice: 21-026-T DEC 2021 Invoice: 21-024-O DEC 2021 DEPARTMENT OF WATER RESOURCES	62,766.00 505,924.00 244.00	568,934.00
12/28/21	36955	2020N 1020SC	Invoice: US01U000837765 ERNST & YOUNG U.S. LLP	1,579.00	1,579.00
12/28/21	36956	2020SC 1020SC	Invoice: 94149909 ENVIRONMENTAL SYSTEMS RESEARCH INSTITUT	2,700.00	2,700.00
12/28/21	36957	2020SC 2020SC 2020N 1020SC	Invoice: 101721 Invoice: 101722 Invoice: 101782 HERUM/ CRABTREE/ SUNTAG	322.32 1,813.05 8,828.57	10,963.94
12/28/21	36958	2020SC 1020SC	Invoice: CL05366 INTERSTATE OIL COMPANY	214.16	214.16



## SOLANO COUNTY WATER AGENCY

## Cash Disbursements Journal

For the Period From Dec 1, 2021 to Dec 31, 2021

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Date	Check #	Account ID	Line Description	Debit Amount	Credit Amount
12/28/21	36959	2020SC	Invoice: 63100719773	1,994.96	
		2020SC	Invoice: 63100721405	1,217.39	
		1020SC	LES SCHWAB TIRE CENTER		3,212.35
12/28/21	36960	2020SC	Invoice: 577719	100.00	
		1020SC	M&M SANITARY LLC		100.00
12/28/21	36961	2020SC	Invoice: DEC 2021 WAT POL	100.00	
		1020SC	ROBERT MCCONNELL		100.00
12/28/21	36962	2020SC	Invoice: 635671	155.79	
		1020SC	MEEKS		155.79
12/28/21	36963	2020SC	Invoice: 3105215926	508.02	
		1020SC	PITNEY BOWES		508.02
12/28/21	36964	2020SC	Invoice: PLANTS	1,120.76	
		1020SC	PUTAH CREEK COUNCIL		1,120.76
12/28/21	36965	2020SC	Invoice: 48520217	269.20	
		2020SC	Invoice: 48521355	102.01	
		1020SC	RECOLOGY VACAVILLE SOLANO		371.21
12/28/21	36966	2020SC	Invoice: 34-JAN-2022	9,500.00	
		1020SC	REEB GOVERNMENT RELATIONS, LLC		9,500.00
12/28/21	36967	2020SC	Invoice: 12828	46.86	
		1020SC	REGIONAL GOVERNMENT SERVICES AUTHORITY		46.86
12/28/21	36968	2020SC	Invoice: WCP-223	9,466.60	
		1020SC	RICHARD HEATH & ASSOCIATES, INC.		9,466.60
12/28/21	36969	2020SC	Invoice: 2021 DONATION	500.00	
		1020SC	SALMONID RESTORATION FEDERATION		500.00
12/28/21	36970	2020SC	Invoice: 0029820	12,917.92	
		2020SC	Invoice: 0029819	187.62	
		2020SC	Invoice: 0029824	142,252.64	
		2020SC	Invoice: 0029823	52,408.43	
		1020SC	SOLANO IRRIGATION DISTRICT		207,766.61
12/28/21	36971	2020SC	Invoice: 3012355	1,289.60	
		1020SC	SOMACH, SIMMONS & DUNN		1,289.60
12/28/21	36972	2020SC	Invoice: 006492990046JAN 2022	2,364.41	
		1020SC	STANDARD INSURANCE COMPANY		2,364.41
12/28/21	36973	2020SC	Invoice: 2976069041	78.37	
		2020SC	Invoice: 2985078701	50.99	
		1020SC	STAPLES		129.36
12/28/21	36974	2020SC	Invoice: 24201	285.45	
		1020SC	SUMMERS ENGINEERING CO., INC.		285.45
12/28/21	36975	2020SC	Invoice: 2021-12-SCWA	14,643.01	
		1020SC	SUSTAINABLE SOLANO		14,643.01
12/28/21	36976	2020SC	Invoice: 2021-01172	11,016.44	
		1020SC	TERRA REALTY ADVISORS, INC.		11,016.44
12/28/21	36977	2020SC	Invoice: 01-62908841	7,106.25	
		2020SC	Invoice: 01-61354158	1,176.00	
		2020SC	Invoice: 01-61773111	960.00	
		2020SC	Invoice: 01-61354343	1,053.00	
		1020SC	THE REGENTS OF THE UNIVERSITY OF CA		10,295.25

## SOLANO COUNTY WATER AGENCY

## Cash Disbursements Journal

For the Period From Dec 1, 2021 to Dec 31, 2021

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Date	Check #	Account ID	Line Description	Debit Amount	Credit Amount
12/28/21	36978	2020SC 1020SC	Invoice: QASSIM ASSAD QASSIM ASSAD	320.00	320.00
12/28/21	36979	2020SC 1020SC	Invoice: BARBARA SMITH BARBARA SMITH	460.00	460.00
12/28/21	36980	2020SC 1020SC	Invoice: DENISE POWELL DENISE POWELL	1,000.00	1,000.00
12/28/21	36981	2020SC 1020SC	Invoice: DIRCK HAARBERG DIRCK HAARBERG	327.00	327.00
12/28/21	36982	2020SC 1020SC	Invoice: SANDRA MCCLINTON SANDRA MCCLINTON	549.00	549.00
12/28/21	36983	2020SC 1020SC	Invoice: MAURA MCLOUGHLIN MAURA MCLOUGHLIN	1,000.00	1,000.00
12/28/21	36984	2020SC 1020SC	Invoice: RUTH CRUZ RUTH CRUZ	874.00	874.00
12/28/21	36985	2020SC 1020SC	Invoice: 20788 VTS SALES LLC	26.98	26.98
12/28/21	36986	2020SC 1020SC	Invoice: 426523 VEGA AMERICAS, INC.	2,354.96	2,354.96
12/28/21	36987	2020SC 1020SC	Invoice: 9894388667 VERIZON WIRELESS	993.62	993.62
12/28/21	36988	2020SC 2020SC 2020SC 2020SC 2020SC 1020SC	Invoice: 1-B Invoice: 3-B Invoice: 4-B Invoice: 2-B Invoice: 5-B VICTOR PAUL CLAASSEN	7,394.16 5,657.20 9,599.76 3,686.96 8,248.16	34,586.24
12/28/21	36989	2020SC 1020SC	Invoice: 0001319449 VACAVILLE REPORTER/VALLEJO TIMES HERALD	90.70	90.70
12/28/21	36990	2020SC 1020SC	Invoice: 2017-309 WATERSMART INNOVATIONS	2,500.00	2,500.00
12/28/21	36991	2020SC 1020SC	Invoice: 1487 WILSON PUBLIC AFFAIRS	3,500.00	3,500.00
12/28/21	36992	2020SC 1020SC	Invoice: 36963 CAL.NET INC. (WAS WINTERS BROADBAND)	595.00	595.00
12/25/21	ASHLEY NOV 2021	2020SC 1020SC	Invoice: ASHLEY NOV 2021 UMPQUA BANK	261.57	261.57
12/25/21	COLIAS NOV 2021	2020SC 1020SC	Invoice: COLIAS NOV 2021 UMPQUA BANK	967.38	967.38
12/25/21	CRUZ NOV 2021	2020SC 1020SC	Invoice: CRUZ NOV 2021 UMPQUA BANK	177.17	177.17
12/25/21	CUETARA NOV 2021	2020SC 1020SC	Invoice: CUETARA NOV 2021 UMPQUA BANK	2,214.25	2,214.25
12/1/21	EFT	2020SC 1020SC	Invoice: DEC 2021 HEALTH CALPERS	22,830.97	22,830.97
12/3/21	EFT	2020SC 1020SC	Invoice: 61888 ONEPOINT HUMAN CAPITAL MANAGEMENT LLC	487.90	487.90
12/2/21	EFT	2020SC	Invoice: SIP PPE 11.27.21	8,741.88	

## SOLANO COUNTY WATER AGENCY

## Cash Disbursements Journal

For the Period From Dec 1, 2021 to Dec 31, 2021

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Date	Check #	Account ID	Line Description	Debit Amount	Credit Amount
		2020SC	Invoice: PPE 11.27.2021	11,291.69	
		2020SC	Invoice: PEPRA PPE 11.27.2021	5,119.70	
		1020SC	CALPERS		25,153.27
12/13/21	EFT	2020SC	Invoice: 76628361	2,576.42	
		1020SC	WEX BANK		2,576.42
12/10/21	EFT	2020SC	Invoice: 24398050	137.50	
		1020SC	PAYCHEX		137.50
12/11/21	EFT	2020SC	Invoice: PPE 12.11.2021	11,291.69	
		2020SC	Invoice: PEPRA PPE 12.11.21	5,251.80	
		2020SC	Invoice: SIP PPE 12.11.21	7,812.80	
		1020SC	CALPERS		24,356.29
12/17/21	EFT	2020SC	Invoice: 62322	98.60	
		1020SC	ONEPOINT HUMAN CAPITAL MANAGEMENT LLC		98.60
12/27/21	EFT	2020SC	Invoice: 11/10/21-12/9/21	1,785.77	
		1020SC	PACIFIC GAS & ELECTRIC CO,		1,785.77
12/30/21	EFT	2020SC	Invoice: 62496	68.00	
		1020SC	ONEPOINT HUMAN CAPITAL MANAGEMENT LLC		68.00
12/30/21	EFT	2020SC	Invoice: 62527	98.60	
		1020SC	ONEPOINT HUMAN CAPITAL MANAGEMENT LLC		98.60
12/29/21	EFT	2020SC	Invoice: PEPRA PPE 12.25.2021	4,709.71	
		2020SC	Invoice: PPE 12.25.2021	11,291.70	
		2020SC	Invoice: SIP PPE 12.25.2021	7,576.51	
		1020SC	CALPERS		23,577.92
12/11/21	EFT 12.11.2021	6012AC	EMPLOYER LIABILITIES PPE 12.11.2021	1,713.44	
		2024AC	EMPLOYEE LIABILITIES PPE 12.11.2021	19,012.66	
		1020SC	PAYROLL TAXES		20,726.10
12/25/21	EFT 12.25.2021	6012AC	EMPLOYER LIABILITIES PPE 12.25.2021	1,534.34	
		2024AC	EMPLOYER LIABILITIES PPE 12.25.2021	18,285.71	
		1020SC	PAYROLL TAXES		19,820.05
12/30/21	EFT 12.30.2021 BOD	6012AC	BOD 2021 - PAYROLL PROCESSING TAXES ONLY	2,606.02	
		1020SC	PAYROLL TAXES		2,606.02
12/25/21	FEHRENKAMP NOV 2021	2020SC	Invoice: FEHRENKAMP NOV 2021	110.00	
		1020SC	UMPQUA BANK		110.00
12/25/21	FOWLER NOV 2021	2020SC	Invoice: FOWLER NOV 2021	539.88	
		1020SC	UMPQUA BANK		539.88
12/25/21	HYER NOV 2021	2020SC	Invoice: HYER NOV 2021	115.59	
		1020SC	UMPQUA BANK		115.59
12/25/21	JONES NOV 2021	2020SC	Invoice: JONES NOV 2021	15.12	
		1020SC	UMPQUA BANK		15.12
12/25/21	LEE NOV 2021	2020SC	Invoice: LEE NOV 2021	1,110.03	
		1020SC	UMPQUA BANK		1,110.03
12/25/21	MAROVICH NOV 2021	2020SC	Invoice: MAROVICH NOV 2021	585.16	
		1020SC	UMPQUA BANK		585.16
12/25/21	PASCUAL NOV 2021	2020SC	Invoice: PASCUAL NOV 2021	233.74	
		1020SC	UMPQUA BANK		233.74

## SOLANO COUNTY WATER AGENCY

## Cash Disbursements Journal

For the Period From Dec 1, 2021 to Dec 31, 2021

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12/25/21	PATE NOV 2021	2020SC 1020SC	Invoice: PATE NOV 2021 UMPQUA BANK	34.98	34.98
12/25/21	WILLINGMYRE NOV 202	2020SC 1020SC	Invoice: WILLINGMYRE NOV 2021 UMPQUA BANK	9.99	9.99
	Total			<u>1,366,542.95</u>	<u>1,366,542.95</u>

ACTION OF  
SOLANO COUNTY WATER AGENCY

DATE: January 13, 2022

SUBJECT: Financial Report Approval

RECOMMENDATIONS:


Approve the quarterly Income Statement and Balance Sheet for the period ending December 2021.

FINANCIAL IMPACT:

All revenues and expenditures are reported within previously approved budget amounts.

BACKGROUND:

The Water Agency auditor has recommended that the Board of Directors receive quarterly financial reports. Attached are the Income Statement and the Balance Sheet of the Water Agency for the period ending December 2021. Additional backup information is available upon request.

  
Recommended: \_\_\_\_\_  
Roland Sanford, General Manager

<input type="checkbox"/>	Approved as Recommended	<input type="checkbox"/>	Other (see below)	<input type="checkbox"/>	Continued on next page
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Modification to Recommendation and/or other actions:

I, Roland Sanford, General Manager and Secretary to the Solano County Water Agency, do hereby certify that the foregoing action was regularly introduced, passed, and adopted by said Board of Directors at a regular meeting thereof held on January 13, 2022 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

\_\_\_\_\_  
Roland Sanford  
General Manager & Secretary to the  
Solano County Water Agency

SOLANO COUNTY WATER AGENCY  
Year to Date Income Statement  
Compared with Budget and Last Year  
For the Six Months Ending December 31, 2021

		Current Year Actual	Current Year Budget	Variance Amount	Variance Percent	Last Year Actual	Change from Last Year	Percent Change
Revenues								
4001G	SECURED	\$ 45,722.25	\$ 94,000.00	(48,277.75)	(51.36)	\$ 57,458.00	(11,735.75)	(20.42)
4001N	SECURED	7,576,790.68	14,700,010.00	(7,123,219.32)	(48.46)	7,156,505.29	420,285.39	5.87
4001SC	SECURED	4,358,432.90	8,700,000.00	(4,341,567.10)	(49.90)	4,248,431.78	110,001.12	2.59
4001U	SECURED	594,388.70	1,200,000.00	(605,611.30)	(50.47)	569,744.22	24,644.48	4.33
4002G	UNSECURED	4,350.42	3,500.00	850.42	24.30	3,638.72	711.70	19.56
4002N	UNSECURED	351,403.03	355,000.00	(3,596.97)	(1.01)	347,544.88	3,858.15	1.11
4002SC	UNSECURED	305,672.65	295,000.00	10,672.65	3.62	299,249.39	6,423.26	2.15
4002U	UNSECURED	39,169.09	36,000.00	3,169.09	8.80	40,138.00	(968.91)	(2.41)
4004G	CURRENT SUPPLEMENTAL	1,237.38	1,000.00	237.38	23.74	1,102.03	135.35	12.28
4004N	CURRENT SUPPLEMENTAL	157,833.50	238,800.00	(80,966.50)	(33.91)	72,474.72	85,358.78	117.78
4004SC	CURRENT SUPPLEMENTAL	110,312.79	120,000.00	(9,687.21)	(8.07)	51,984.97	58,327.82	112.20
4004U	CURRENT SUPPLEMENTAL	11,151.80	16,000.00	(4,848.20)	(30.30)	8,890.47	2,261.33	25.44
4100N	WATER SALES	430,500.00	1,560,100.00	(1,129,600.00)	(72.41)	430,500.00	0.00	0.00
4100SC	WATER SALES	48,066.00	83,000.00	(34,934.00)	(42.09)	32,232.00	15,834.00	49.13
4102N	COST OF POWER TO PUMP NBA	0.00	50,000.00	(50,000.00)	(100.00)	0.00	0.00	0.00
4103N	CONVEYANCE SETTLEMENT	0.00	100,000.00	(100,000.00)	(100.00)	0.00	0.00	0.00
4110N	NAPA MAKE WHOLE	156,000.00	312,000.00	(156,000.00)	(50.00)	156,000.00	0.00	0.00
4120N	SWP ADJUSTMENTS	297,793.00	256,000.00	41,793.00	16.33	255,933.00	41,860.00	16.36
4402WC	INTEREST - MONEY MGMT	5.30	40.00	(34.70)	(86.75)	19.27	(13.97)	(72.50)
4403SC	INTEREST - CHECKING	64.59	250.00	(185.41)	(74.16)	122.27	(57.68)	(47.17)
4404G	INTEREST - LAIF - GREEN VALLEY	107.17	325.00	(217.83)	(67.02)	149.69	(42.52)	(28.41)
4404N	INTEREST - LAIF - SWP	8,155.32	26,000.00	(17,844.68)	(68.63)	12,932.39	(4,777.07)	(36.94)
4404SC	INTEREST - LAIF - SP	3,479.28	23,000.00	(19,520.72)	(84.87)	11,351.31	(7,872.03)	(69.35)
4404U	INTEREST - LAIF - ULATIS	2,396.60	8,300.00	(5,903.40)	(71.13)	4,126.09	(1,729.49)	(41.92)
4405G	INTEREST - CAMP - GREEN VALLEY	26.56	325.00	(298.44)	(91.83)	159.03	(132.47)	(83.30)
4405N	INTEREST - CAMP - SWP	2,175.97	27,000.00	(24,824.03)	(91.94)	13,739.38	(11,563.41)	(84.16)
4405SC	INTEREST - CAMP - SP	1,417.21	24,000.00	(22,582.79)	(94.09)	12,059.64	(10,642.43)	(88.25)
4405U	INTEREST - CAMP - ULATIS	667.76	8,500.00	(7,832.24)	(92.14)	4,383.55	(3,715.79)	(84.77)
4406SC	INTEREST - OTHER	0.00	0.00	0.00	0.00	50.63	(50.63)	(100.00)
4407G	INTEREST- INVESTMENT	183.62	500.00	(316.38)	(63.28)	239.83	(56.21)	(23.44)
4407N	INTEREST - INVESTMENTS	15,017.12	40,000.00	(24,982.88)	(62.46)	20,719.92	(5,702.80)	(27.52)
4407SC	INTEREST - INVESTMENTS	9,795.07	28,000.00	(18,204.93)	(65.02)	18,186.73	(8,391.66)	(46.14)
4407U	INTEREST - INVESTMENTS	4,608.16	6,611.00	(2,002.84)	(30.30)	6,610.71	(2,002.55)	(30.29)
4507G	HOMEOWNER RELIEF	174.60	1,100.00	(925.40)	(84.13)	176.70	(2.10)	(1.19)
4507N	HOMEOWNER RELIEF	11,676.90	81,000.00	(69,323.10)	(85.58)	11,775.30	(98.40)	(0.84)

SOLANO COUNTY WATER AGENCY  
Year to Date Income Statement  
Compared with Budget and Last Year  
For the Six Months Ending December 31, 2021

		Current Year	Current Year	Variance	Variance	Last Year	Change from	Percent
		Actual	Budget	Amount	Percent	Actual	Last Year	Change
4507SC	HOMEOWNER RELIEF	10,523.40	70,000.00	(59,476.60)	(84.97)	10,608.75	(85.35)	(0.80)
4507U	HOMEOWNER RELIEF	0.00	10,200.00	(10,200.00)	(100.00)	0.00	0.00	0.00
4600SC	REDEVELOP - DIX/RV	0.00	65,000.00	(65,000.00)	(100.00)	0.00	0.00	0.00
4601SC	REDEVELOP - VACAVILLE	0.00	630,000.00	(630,000.00)	(100.00)	0.00	0.00	0.00
4601U	REDEVELOP - VACAVILLE	0.00	345,500.00	(345,500.00)	(100.00)	0.00	0.00	0.00
4602G	REDEVELOP - FAIRFIELD	0.00	48,400.00	(48,400.00)	(100.00)	0.00	0.00	0.00
4602SC	REDEVELOP - FAIRFIELD	0.00	1,100,000.00	(1,100,000.00)	(100.00)	0.00	0.00	0.00
4603SC	REDEVELOP - SUISUN CITY	0.00	420,000.00	(420,000.00)	(100.00)	0.00	0.00	0.00
4605SC	REDEVELOP - N. TEXAS	0.00	70,000.00	(70,000.00)	(100.00)	0.00	0.00	0.00
4702SC	BOATING AND WATERWAYS	0.00	100,000.00	(100,000.00)	(100.00)	0.00	0.00	0.00
4705SC	USBR Grant	0.00	45,000.00	(45,000.00)	(100.00)	65,268.46	(65,268.46)	(100.00)
4706SC	NISHIKAWA GRANT	0.00	250,000.00	(250,000.00)	(100.00)	0.00	0.00	0.00
4900N	MISC INCOME	17,240.73	23,242.00	(6,001.27)	(25.82)	17,240.73	0.00	0.00
4900SC	MISCELLANEOUS INCOME	21,558.82	23,241.00	(1,682.18)	(7.24)	17,240.73	4,318.09	25.05
4906SC	SACKETT RANCH LEASE REVENUE	12,786.50	754,205.00	(741,418.50)	(98.30)	9,700.00	3,086.50	31.82
4922SC	GREENHOUSE REVENUES	0.00	0.00	0.00	0.00	1,015.50	(1,015.50)	(100.00)
4930U	O&M - OTHER AGENCIES	0.00	8,000.00	(8,000.00)	(100.00)	0.00	0.00	0.00
4940AC	OVERHEAD DISTRIBUTION REIMB	1,429,264.87	6,433,510.00	(5,004,245.13)	(77.78)	2,114,098.64	(684,833.77)	(32.39)
4960WC	WATERMASTER INCOME	169.14	4,000.00	(3,830.86)	(95.77)	262.91	(93.77)	(35.67)
4970AC	WATER CONSERVATION REIMBURSE	0.00	142,500.00	(142,500.00)	(100.00)	0.00	0.00	0.00
4972AC	BAY AREA IRWMP GRANT	0.00	78,000.00	(78,000.00)	(100.00)	82.99	(82.99)	(100.00)
Total Revenues		16,040,318.88	39,016,159.00	(22,975,840.12)	(58.89)	16,084,148.62	(43,829.74)	(0.27)
Cost of Sales								
Total Cost of Sales		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Profit		16,040,318.88	39,016,159.00	(22,975,840.12)	(58.89)	16,084,148.62	(43,829.74)	(0.27)
Expenses								
5500AC	CAPITAL EXPENDITURES	105,096.61	698,056.00	(592,959.39)	(84.94)	6,383.75	98,712.86	1,546.31
5500G	CAPITAL EXPENDITURES	0.00	36,740.00	(36,740.00)	(100.00)	0.00	0.00	0.00
5500N	CAPITAL EXPENDITURES	1,567,148.37	2,376,097.00	(808,948.63)	(34.05)	0.00	1,567,148.37	0.00

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		Actual	Budget	Amount	Percent	Actual	Last Year	Change
5500SC	CAPITAL EXPENDITURES	175,011.02	2,889,618.00	(2,714,606.98)	(93.94)	2,835,685.00	(2,660,673.98)	(93.83)
5500U	CAPITAL EXPENDITURES	0.00	73,480.00	(73,480.00)	(100.00)	0.00	0.00	0.00
5551SC	Debt Service Principal	6,236.74	0.00	6,236.74	0.00	0.00	6,236.74	0.00
5556SC	DEBT SERVICE - INTEREST	406.45	0.00	406.45	0.00	0.00	406.45	0.00
6010AC	GROSS SALARIES	1,291,631.82	3,351,100.00	(2,059,468.18)	(61.46)	1,291,953.55	(321.73)	(0.02)
6011AC	PERS RETIREMENT	167,720.40	388,600.00	(220,879.60)	(56.84)	173,198.20	(5,477.80)	(3.16)
6012AC	PAYROLL TAXES	47,297.66	136,800.00	(89,502.34)	(65.43)	50,501.70	(3,204.04)	(6.34)
6013AC	EMPLOYEE BENEFITS	158,609.35	478,000.00	(319,390.65)	(66.82)	160,751.78	(2,142.43)	(1.33)
6030AC	TELEPHONE	17,972.06	42,700.00	(24,727.94)	(57.91)	20,837.93	(2,865.87)	(13.75)
6040AC	OFFICE EXPENSE	7,353.86	32,900.00	(25,546.14)	(77.65)	10,607.21	(3,253.35)	(30.67)
6041AC	OFFICE EQUIPMENT	14,180.21	30,250.00	(16,069.79)	(53.12)	12,262.75	1,917.46	15.64
6042AC	SAFETY TRAINING & EQUIPMENT	2,093.16	8,300.00	(6,206.84)	(74.78)	4,273.28	(2,180.12)	(51.02)
6043AC	OFFICE HELP - TEMPORARY	0.00	10,000.00	(10,000.00)	(100.00)	0.00	0.00	0.00
6044AC	HR -EMPLOYEE SUPPORT	11,851.38	100,000.00	(88,148.62)	(88.15)	15,646.29	(3,794.91)	(24.25)
6045AC	LAUNDRY	250.00	0.00	250.00	0.00	0.00	250.00	0.00
6050AC	POSTAGE	1,156.97	9,400.00	(8,243.03)	(87.69)	4,192.11	(3,035.14)	(72.40)
6060AC	SID OFFICE EXPENSE	24,830.47	67,325.00	(42,494.53)	(63.12)	25,593.81	(763.34)	(2.98)
6090AC	MEMBERSHIPS	32,220.94	72,690.00	(40,469.06)	(55.67)	33,222.45	(1,001.51)	(3.01)
6090N	SWC DUES	100,386.00	116,000.00	(15,614.00)	(13.46)	83,303.00	17,083.00	20.51
6100G	PPTY TAX ADMIN FEE	0.00	1,100.00	(1,100.00)	(100.00)	0.00	0.00	0.00
6100SC	PPTY TAX ADMIN FEE	0.00	102,500.00	(102,500.00)	(100.00)	0.00	0.00	0.00
6100U	PPTY TAX ADMIN FEE	0.00	13,600.00	(13,600.00)	(100.00)	0.00	0.00	0.00
6105N	PETERSEN RANCH EXPENSES	0.00	55,000.00	(55,000.00)	(100.00)	0.00	0.00	0.00
6105SC	PETERSEN RANCH EXPENSES	38,128.65	55,000.00	(16,871.35)	(30.68)	36,941.96	1,186.69	3.21
6106SC	SACKETT RANCH EXPENSES	22,368.05	95,000.00	(72,631.95)	(76.45)	32,111.25	(9,743.20)	(30.34)
6107N	LANG-TULE MAINTENANCE	15,699.11	20,000.00	(4,300.89)	(21.50)	0.00	15,699.11	0.00
6111AC	PS - PAYROLL SERVICES	4,279.00	11,700.00	(7,421.00)	(63.43)	7,739.13	(3,460.13)	(44.71)
6112AC	PS - COMPUTER SERVICES	291,178.12	651,250.00	(360,071.88)	(55.29)	323,025.60	(31,847.48)	(9.86)
6115AC	TALENT DECISION MONITORING	14,452.04	28,000.00	(13,547.96)	(48.39)	17,833.94	(3,381.90)	(18.96)
6128AC	GOVERNMENTAL ADVOCACY	50,750.00	72,000.00	(21,250.00)	(29.51)	59,034.50	(8,284.50)	(14.03)
6128N	GOVERNMENTAL ADVOCACY	33,250.00	108,000.00	(74,750.00)	(69.21)	19,000.00	14,250.00	75.00
6130SC	LPCCC - VEGETATION	2,900.18	14,793.00	(11,892.82)	(80.39)	10,419.63	(7,519.45)	(72.17)
6140AC	CONSULTANTS	117,065.27	295,900.00	(178,834.73)	(60.44)	206,774.11	(89,708.84)	(43.38)
6140N	CONSULTANTS	45,204.92	246,000.00	(200,795.08)	(81.62)	27,044.94	18,159.98	67.15
6140SC	CONSULTANTS	59,614.87	504,500.00	(444,885.13)	(88.18)	34,963.06	24,651.81	70.51
6140U	CONSULTANTS	45,012.42	300,000.00	(254,987.58)	(85.00)	92,144.86	(47,132.44)	(51.15)



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		Actual	Budget	Amount	Percent	Actual	Last Year	Change
6144AC	HYDROLOGY STATIONS	5,750.37	39,000.00	(33,249.63)	(85.26)	8,236.78	(2,486.41)	(30.19)
6144N	HYDROLOGY STATIONS	8,996.58	27,000.00	(18,003.42)	(66.68)	1,926.31	7,070.27	367.04
6144SC	HYDROLOGY STATIONS	57,237.40	95,000.00	(37,762.60)	(39.75)	13,399.55	43,837.85	327.16
6144U	HYDROLOGY STATIONS	1,329.24	15,000.00	(13,670.76)	(91.14)	79.91	1,249.33	1,563.42
6148SC	LPCCC - WILDLIFE	55,264.49	81,359.00	(26,094.51)	(32.07)	48,905.49	6,359.00	13.00
6149SC	LPCCC - FISHERIES	38,382.67	81,359.00	(42,976.33)	(52.82)	24,515.74	13,866.93	56.56
6161N	WATERSHED PROGRAM	7,874.12	198,000.00	(190,125.88)	(96.02)	13,879.18	(6,005.06)	(43.27)
6161SC	SOLANO PROJECT WQ MONITORING	2,301.59	30,000.00	(27,698.41)	(92.33)	8,434.72	(6,133.13)	(72.71)
6164SC	SOLANO PROJECT INVASIVES	19,635.69	188,567.00	(168,931.31)	(89.59)	35,928.02	(16,292.33)	(45.35)
6165N	Yolo Bypass/Cache Slough Progr	105,306.85	945,000.00	(839,693.15)	(88.86)	73,716.66	31,590.19	42.85
6166SC	UPPER PUTAH CREEK MGMT	104,599.61	284,000.00	(179,400.39)	(63.17)	80,147.86	24,451.75	30.51
6170N	NBA RELIABILITY PROGRAM	0.00	500,000.00	(500,000.00)	(100.00)	0.00	0.00	0.00
6170SC	INTER-DAM REACH MANAGEMENT	14,863.60	190,000.00	(175,136.40)	(92.18)	344,805.12	(329,941.52)	(95.69)
6170WC	MBK	12,028.25	40,000.00	(27,971.75)	(69.93)	12,712.75	(684.50)	(5.38)
6179SC	LPCCC SERVICES	108,322.60	0.00	108,322.60	0.00	267.80	108,054.80	40,349.07
6181SC	LPCCC EQUIPMENT	8,957.83	20,000.00	(11,042.17)	(55.21)	13,806.02	(4,848.19)	(35.12)
6183SC	LPCCC NURSERY	1,469.64	0.00	1,469.64	0.00	76,501.57	(75,031.93)	(98.08)
6199SC	LPCCC MISC. SUPPLIES	13,640.38	25,000.00	(11,359.62)	(45.44)	17,602.08	(3,961.70)	(22.51)
6210AC	BOARD EXPENSES	7,100.00	20,000.00	(12,900.00)	(64.50)	8,532.11	(1,432.11)	(16.78)
6230SC	FIELD SUPPLIES	35,622.97	80,000.00	(44,377.03)	(55.47)	29,805.28	5,817.69	19.52
6230WC	MISC WATERMASTER EXP	88.00	400.00	(312.00)	(78.00)	120.00	(32.00)	(26.67)
6250SC	HCP PLANNING	144,158.37	686,400.00	(542,241.63)	(79.00)	219,728.43	(75,570.06)	(34.39)
6300AC	CAR MAINTENANCE	9,212.57	28,200.00	(18,987.43)	(67.33)	9,789.94	(577.37)	(5.90)
6310AC	FUEL	11,680.89	35,700.00	(24,019.11)	(67.28)	10,052.85	1,628.04	16.19
6320U	GARAGE SERVICES	12,710.77	15,000.00	(2,289.23)	(15.26)	3,731.52	8,979.25	240.63
6330AC	TRAVEL	3,039.21	5,000.00	(1,960.79)	(39.22)	2,213.11	826.10	37.33
6350AC	INSURANCE	39,094.06	76,000.00	(36,905.94)	(48.56)	34,780.45	4,313.61	12.40
6360AC	EDUCATION & TRAINING	11,699.34	65,000.00	(53,300.66)	(82.00)	4,140.93	7,558.41	182.53
6410AC	COMP SOFTWARE/EQUIP	32,031.07	95,300.00	(63,268.93)	(66.39)	15,861.48	16,169.59	101.94
6550AC	SCWA Water Mgt Planning	10,600.00	20,000.00	(9,400.00)	(47.00)	0.00	10,600.00	0.00
6551AC	WATER CONSERVATION	436,369.41	590,000.00	(153,630.59)	(26.04)	386,652.36	49,717.05	12.86
6551N	WATER CONSERVATION	0.00	456,000.00	(456,000.00)	(100.00)	0.00	0.00	0.00
6554AC	MISC. WATER CONSERVATION GRANT	84,556.00	0.00	84,556.00	0.00	9,917.00	74,639.00	752.64
6600AC	MELLON LEVEE	1,492.13	20,000.00	(18,507.87)	(92.54)	0.00	1,492.13	0.00
6600SC	PSC MAINTENANCE	235,250.62	910,000.00	(674,749.38)	(74.15)	326,614.52	(91,363.90)	(27.97)
6610AC	FLOOD CONTROL	36,122.59	681,500.00	(645,377.41)	(94.70)	57,368.27	(21,245.68)	(37.03)

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		Actual	Budget	Amount	Percent	Actual	Last Year	Change
6611AC	GROUND WATER MANAGEMENT	109,726.38	557,496.00	(447,769.62)	(80.32)	300,770.98	(191,044.60)	(63.52)
6612AC	PUBLIC EDUCATION	50,723.67	448,737.00	(398,013.33)	(88.70)	37,305.94	13,417.73	35.97
6614AC	SOLANO SUB-BASIN GSA	352,526.82	355,000.00	(2,473.18)	(0.70)	0.00	352,526.82	0.00
6620G	LABOR	12,628.57	50,000.00	(37,371.43)	(74.74)	0.00	12,628.57	0.00
6620SC	LOWER PUTAH CREEK(NON-ACCORD)	139,861.25	964,725.00	(824,863.75)	(85.50)	236,149.49	(96,288.24)	(40.77)
6620U	LABOR	132,381.94	300,000.00	(167,618.06)	(55.87)	58,349.49	74,032.45	126.88
6630SC	SP ADMINISTRATION	443,243.30	1,210,000.00	(766,756.70)	(63.37)	545,675.66	(102,432.36)	(18.77)
6640SC	PSC OPERATIONS	121,134.48	365,000.00	(243,865.52)	(66.81)	117,931.29	3,203.19	2.72
6645SC	DAM MAINTENANCE	1,942.82	65,000.00	(63,057.18)	(97.01)	5,634.82	(3,692.00)	(65.52)
6646SC	DAM OPERATIONS	122,679.71	295,000.00	(172,320.29)	(58.41)	138,411.14	(15,731.43)	(11.37)
6650G	WEED CONTROL	0.00	6,000.00	(6,000.00)	(100.00)	0.00	0.00	0.00
6650U	SP PEST MANAGEMENT	22,658.17	60,000.00	(37,341.83)	(62.24)	0.00	22,658.17	0.00
6660G	EQUIP - TRANS DEPT	2,422.77	8,000.00	(5,577.23)	(69.72)	0.00	2,422.77	0.00
6660U	EQUIP - TRANS DEPT	19,938.24	80,000.00	(60,061.76)	(75.08)	6,591.06	13,347.18	202.50
6670G	SUPPLIES	0.00	2,000.00	(2,000.00)	(100.00)	298.43	(298.43)	(100.00)
6670U	SUPPLIES	19,573.29	83,500.00	(63,926.71)	(76.56)	8,769.97	10,803.32	123.19
6675G	CONTRACT WORK	0.00	12,000.00	(12,000.00)	(100.00)	0.00	0.00	0.00
6675U	CONTRACT WORK	0.00	40,000.00	(40,000.00)	(100.00)	0.00	0.00	0.00
6680G	TRANS DEPT OVERHEAD	4,292.43	15,000.00	(10,707.57)	(71.38)	0.00	4,292.43	0.00
6680U	TRANS DEPT OVERHEAD	44,996.58	145,000.00	(100,003.42)	(68.97)	26,766.10	18,230.48	68.11
6690SC	REHAB & BETTERMENT	119,602.62	1,090,000.00	(970,397.38)	(89.03)	93,981.99	25,620.63	27.26
6690U	REHAB & BETTERMENT	0.00	270,000.00	(270,000.00)	(100.00)	0.00	0.00	0.00
6700N	WATER PURCHASES	5,860,822.00	12,413,577.00	(6,552,755.00)	(52.79)	8,888,291.00	(3,027,469.00)	(34.06)
6700SC	USBR ADMINISTRATION	53,000.00	79,000.00	(26,000.00)	(32.91)	0.00	53,000.00	0.00
6701SC	WATER RIGHTS FEE	103,884.65	95,000.00	8,884.65	9.35	94,599.97	9,284.68	9.81
6710N	NAPA MAKE WHOLE	0.00	312,000.00	(312,000.00)	(100.00)	0.00	0.00	0.00
6950AC	LABOR COSTS	119,559.16	452,930.00	(333,370.84)	(73.60)	179,441.69	(59,882.53)	(33.37)
6950G	LABOR COSTS	0.00	19,096.00	(19,096.00)	(100.00)	0.00	0.00	0.00
6950N	LABOR COSTS	109,728.87	636,584.00	(526,855.13)	(82.76)	151,108.07	(41,379.20)	(27.38)
6950SC	LABOR COSTS	476,260.88	1,863,433.00	(1,387,172.12)	(74.44)	709,217.69	(232,956.81)	(32.85)
6950U	LABOR COSTS	10,886.24	54,291.00	(43,404.76)	(79.95)	11,872.72	(986.48)	(8.31)
6951AC	INTRA-FUND TRANSFER	(288,293.37)	(1,132,325.00)	844,031.63	(74.54)	(435,359.81)	147,066.44	(33.78)
6952AC	OVERHEAD EXPENSES	168,734.22	679,395.00	(510,660.78)	(75.16)	255,918.14	(87,183.92)	(34.07)
6952G	OVERHEAD EXPENSES	0.00	28,644.00	(28,644.00)	(100.00)	0.00	0.00	0.00
6952N	OVERHEAD EXPENSES	150,505.13	954,876.00	(804,370.87)	(84.24)	215,674.78	(65,169.65)	(30.22)
6952SC	OVERHEAD EXPENSES	666,453.54	2,795,149.00	(2,128,695.46)	(76.16)	992,128.10	(325,674.56)	(32.83)

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6952U	OVERHEAD EXPENSES	14,205.84	81,436.00	(67,230.16)	(82.56)	16,256.99	(2,051.15)	(12.62)
6990AC	CONTINGENCY	0.00	80,000.00	(80,000.00)	(100.00)	0.00	0.00	0.00
6990G	CONTINGENCY	0.00	5,000.00	(5,000.00)	(100.00)	0.00	0.00	0.00
6990N	CONTINGENCY	0.00	40,000.00	(40,000.00)	(100.00)	0.00	0.00	0.00
6990SC	CONTINGENCY	0.00	70,000.00	(70,000.00)	(100.00)	0.00	0.00	0.00
6990U	CONTINGENCY	0.00	50,000.00	(50,000.00)	(100.00)	0.00	0.00	0.00
	Total Expenses	<u>15,314,225.21</u>	<u>46,036,728.00</u>	<u>(30,722,502.79)</u>	(66.73)	<u>20,145,405.30</u>	<u>(4,831,180.09)</u>	(23.98)
	Net Income	<u>\$ 726,093.67</u>	<u>(\$ 7,020,569.00)</u>	<u>7,746,662.67</u>	(110.34)	<u>(\$ 4,061,256.68)</u>	<u>4,787,350.35</u>	(117.88)

SOLANO COUNTY WATER AGENCY  
Balance Sheet  
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ASSETS

Current Assets			ADMIN/SP/WC	SWP(N)	U	GV
1000SC	PERSHING	\$6,491.41	6,491.41			
1010WC	MONEY MGMT - WATERMASTER	10,310.60	10,310.60			
1020G	CHECKING - BOW	4,907,254.88	2,101,887.14	2,682,444.03	77,357.52	45,566.19
1030G	LAIF - LOCAL AREA INVESTMENT FUND	23,232,665.53	8,007,973.39	11,540,118.51	3,534,640.71	149,932.92
1040G	CAMP - CA ASSET MANAGEMENT POOL	22,922,209.47	4,618,463.54	13,874,001.21	4,249,489.24	180,255.48
1050G	CERTIFICATES OF DEPOSIT - CD'S	5,289,897.31	2,144,565.77	2,384,120.37	730,235.91	30,975.26
1060SC	PETTY CASH	463.34	463.34			
1210N	ACCOUNTS RECEIVABLE-SWP	799,124.93	548,744.93	250,380.00		
1225AC	RETENTION RECEIVABLE	189.99	189.99			
1400AC	PREPAID	92,501.99	92,501.99			
1415AC	INVENTORY-WATER CONSERVATION S	26,123.43	26,123.43			
Total Current Assets		<u>57,287,232.88</u>	<u>17,557,715.53</u>	<u>30,731,064.12</u>	<u>8,591,723.38</u>	<u>406,729.85</u>
Total Assets		<u>\$ 57,287,232.88</u>	<u>\$ 17,557,715.53</u>	<u>\$ 30,731,064.12</u>	<u>\$ 8,591,723.38</u>	<u>\$ 406,729.85</u>

LIABILITIES AND CAPITAL

Current Liabilities						
2010N	UNEARNED INCOME-SWP	\$430,500.00		430,500.00		
2020N	ACCOUNTS PAYABLE-	392,399.93	80,733.95	64,265.36	247,400.62	-
2023AC	EMPLOYEE BENEFITS PAYABLE	23,240.58	23,240.58			
2025SC	SALES TAX PAYABLE	18,665.04	18,665.04			
2106SC	SECURITY DEPOSIT - SACKETT RANCH	500.00	500.00			
2110SC	WESTSIDE IRWMP PREFUNDED ADMIN	174,857.23	174,857.23			
Total Current Liabilities		\$ 1,040,162.78	297,996.80	494,765.36	247,400.62	-
Long-Term Liabilities			0			
Total Long-Term Liabilities						
Total Liabilities		<u>1,040,162.78</u>	<u>297,996.80</u>	<u>494,765.36</u>	<u>247,400.62</u>	<u>0.00</u>
Capital						
3150SC	OTHER FLD CTRL CAPITAL PROJ.	1,423,210.66	1,423,210.66			
3155SC	OTHER CAPITAL PROJ/EMERG RESER	2,000,000.00	2,000,000.00			
3200G	GREEN VALLEY OPERTING RESERVE	88,022.00				88,022.00
3200N	SWP OPERATING RESERVE	8,038,753.00		8,038,753.00		
3200SC	DESIGNATED REHAB & BETTERMENT	2,000,000.00	2,000,000.00			
3200U	ULATIS OPERATING RESERVE	837,122.00			837,122.00	
3250G	GV CAPITAL RESERVE	189,276.99				189,276.99
3250N	DESIGNATED SWP FACILITIES RESE	15,918,820.39		15,918,820.39		
3250SC	SP FUTURE REPLACEMENT CAPITAL	5,054,493.31	5,054,493.31			
3250U	ULATIS FCP CAPITAL RESERVE	6,806,559.38			6,806,559.38	
3350SC	DESIGNATED OPERATING RESERVES	10,550,879.00	10,550,879.00			
39005	Retained Earnings	2,613,839.70	(1,943,162.34)	3,660,104.38	815,379.99	81,517.67
	Net Income	726,093.67	(654,718.24)	1,019,664.30	328,689.38	32,458.23
Total Capital		56,247,070.10	18,430,702.39	28,637,342.07	8,787,750.75	391,274.89
Total Liabilities & Capital		<u>\$57,287,232.88</u>	<u>\$18,728,699.19</u>	<u>\$29,132,107.43</u>	<u>\$9,035,151.37</u>	<u>\$391,274.89</u>

ACTION OF  
SOLANO COUNTY WATER AGENCY

DATE: January 13, 2022

SUBJECT: Resolution of Support for North Bay Aqueduct Alternate Intake Project

RECOMMENDATIONS:

Adopt Resolution 2022-01 in support of the North Bay Aqueduct Alternate Intake Project (aka Water +).


FINANCIAL IMPACT:

None

BACKGROUND:

The North Bay Aqueduct (NBA) is part of the State Water Project (SWP), providing municipal water to over 500,000 residents in Napa and Solano County. Major urban centers including Vacaville, Vallejo, Fairfield, Napa, American Canyon, Calistoga, as well as Travis Air Force Base are served by the NBA. The NBA diverts raw water at the Barker Slough Pumping Plant (BSPP), located at the terminus of Barker Slough, a dead-end tidal channel connected to Lindsey Slough and in turn Cache Slough, and ultimately the Sacramento River. The NBA’s source water quality is generally the poorest of all the SWP facilities, typically exhibiting the highest levels of total organic carbon, turbidity, and pathogens (California SWP – 2016 Watershed Sanitary Survey Update). Treating the NBA source water to drinking water quality standards is often challenging and, in some instances, impossible without blending the NBA source water with alternative supplies. Often, at least for those that have the option, the Solano NBA water users will avoid using NBA water when water quality conditions are poor.

Barker Slough and the BSPP are located within the Yolo Bypass – Cache Slough Complex (YBCSC) region, one of the last remaining refugia for native fish species in the Delta. State, federal, and local agencies are in the process of planning, implementing, and constructing large-scale tidal wetland restoration projects within the YBCSC to enhance native and endangered fish populations. Pursuant to State and Federal regulatory requirements, water diversions by the NBA must be curtailed if not suspended when endangered fish species are observed or suspected to be present at or near Barker Slough. As large-scale tidal wetland restoration – which is intended to increase the numbers of endangered fish species – proceeds, the frequency and duration with which water diversions by the NBA must be curtailed or suspended is likely to increase.

Recommended:   
Roland Sanford, General Manager

<input type="checkbox"/>	Approved as Recommended	<input type="checkbox"/>	Other (see below)	<input checked="" type="checkbox"/>	Continued on next page
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Modification to Recommendation and/or other actions:

I, Roland Sanford, General Manager and Secretary to the Solano County Water Agency, do hereby certify that the foregoing action was regularly introduced, passed, and adopted by said Board of Directors at a regular meeting thereof held on January 13, 2022 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

Roland Sanford  
General Manager & Secretary to the  
Solano County Water Agency

In summary, due to poor water quality and the presence of endangered fish species the NBA is typically “off-line” for three to six months of the year. The NBA is already an unreliable water supply, and future prospects are bleak. The ideal solution, while not cheap, is to relocate the BSPP to the Sacramento River. The purpose of the NBA Alternate Intake Project (aka Water +) is to improve water supply reliability for the NBA service region while simultaneously providing ecological benefits to the YBCSC that support both the Central Valley Flood Protection Plan and the Delta Stewardship Council’s Delta Plan objectives and goals. Additional ecological feasibility studies are needed to among other things, confirm the ecological benefits of the proposed NBA Alternate Intake Project.

For planning purposes, it is anticipated that these feasibility studies along with preliminary design, will require two to four years to complete, after which CEQA/NEPA review would occur over the next two to three years, followed by final design and construction – an additional five to eight years. Ideally, the NBA Alternate Intake Project would be completed and on-line in 15 years.

Staff and members of the Board’s Legislative Committee met with Assemblywoman Cecilia Aguiar-Curry in the Fall of 2021, who has repeatedly expressed support for the North Bay Alternate Intake Project and recommends both Solano and Napa counties adopt Resolutions formally expressing their support for North Bay Alternate Intake Project, in order to better position the North Bay Alternate Intake Project for funding by the State Legislature and State agencies.

**RELEVANCE TO 2016-2025 SCWA STRATEGIC PLAN:**

Adoption of Resolution 2022-01 is consistent with Goal # 1 (*Optimize the management of the County’s current and future water resources in a sustainable manner*) and Goal # 4 (*Protect access to reliable water supplies under current and future stressors*) of the 2016-2025 Strategic Plan.

## **RESOLUTION NUMBER 2022-01**

### **RESOLUTION OF THE BOARD OF DIRECTORS OF THE SOLANO COUNTY WATER AGENCY IN SUPPORT OF PROPOSED NORTH BAY AQUEDUCT ALTERNATE INTAKE PROJECT (ALSO KNOWN AS “WATER +”)**

**WHEREAS** the North Bay Aqueduct (NBA) component of the State Water Project provides municipal drinking water to over 500,000 residents in Solano and Napa counties, and;

**WHEREAS** major urban centers including Vacaville, Fairfield, Vallejo, Benicia, American Canyon, Napa, and Calistoga, as well as Travis Airforce Base are reliant on the NBA water supply, and;

**WHEREAS** the NBA draws raw water at the Barker Slough Pumping Plant, located at the terminus of Barker Slough, a dead-end tidal channel connected to Lindsey Slough, and in turn Cache Slough, and ultimately the Sacramento River, and;

**WHEREAS** Barker Slough is located within the Yolo Bypass-Cache Slough Complex (YBCSC) region, one of the last remaining refugia for endangered native fish species in the Delta, and;

**WHEREAS** the NBA raw water supply generally exhibits some of the poorest raw water quality of all the State Water Project facilities, due largely to local runoff from the surrounding Barker Slough watershed, and;

**WHEREAS** in addition to poor water quality, the NBA is periodically subjected to regulatory pumping curtailments to minimize the entrainment of endangered native fish species, and;

**WHEREAS** due to prevailing poor water quality conditions and endangered species regulatory restrictions the NBA’s ability to provide municipal drinking water is significantly impaired between the onset of the rainy season and June of each year, and;

**WHEREAS** the YBCSC has been identified by State and Federal resource agencies as highly desirable for large scale tidal wetland restoration projects – projects that are intended to increase the abundance of endangered native fish species, and;

**WHEREAS** the objectives of the ongoing and planned tidal wetland restoration projects – to increase the abundance of endangered native fish species – are in direct conflict with NBA operations at Barker Slough, and;

**WHEREAS** relocating the NBA’s intake out of Barker Slough and the YBCSC would not only preserve the viability of the NBA municipal drinking water supply, but also potentially provide ecological benefits that complement ongoing habitat restoration efforts in the YBCSC, and;

**WHEREAS** the North Bay Aqueduct Alternate Intake Project (aka “Water+”), a multi-benefit project that enhances regional water supply resiliency and provides ecological benefits, is

proposed as a means of resolving the myriad of water management issues associated with the existing North Bay Aqueduct intake at Barker Slough, and;

**WHEREAS** additional feasibility studies are needed to confirm the viability of the Water + project;

**NOW THEREFORE BE IT RESOLVED:** The Solano County Water Agency Board of Directors supports initiation of feasibility studies and development of the Water+ project, and requests State and Federal assistance to advance the Water+ project.

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I, ROLAND SANFORD, General Manager and Secretary to the Board of Directors of the Solano County Water Agency, do hereby certify that the foregoing resolution was regularly introduced, passed and adopted by said Board of Directors, at a regular meeting thereof held on the 13<sup>th</sup> day January, 2022, by the following vote:

Ayes:

Noes:

Abstain:

Absent:

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Roland Sanford  
General Manager and Secretary to  
the Board of Directors of the Solano  
County Water Agency



ACTION OF  
SOLANO COUNTY WATER AGENCY

DATE: January 13, 2022

SUBJECT: Contract with CBEC for Putah South Canal hydraulic model development

RECOMMENDATIONS:


Authorize General Manager to execute contract with CBEC for Putah South Canal hydraulic model development.

FINANCIAL IMPACT:

Total cost not to exceed \$130,000. Funding is programmed and available in the FY 2021-2022 Solano Project budget for this expense.

BACKGROUND:

The 33-mile long Putah South Canal (PSC) is a critical part of the Solano Project, conveying untreated Lake Berryessa water across Solano County. However, the precise timing of flows, arrival times of turbid water during storm events, and algaecide transport times are not well understood. To improve PSC operations, staff recommends CBEC be retained to develop a hydraulic model of the PSC. The hydraulic model, as proposed, would be a public domain model which SCWA staff could then update and run during storm events, algaecide treatments events, or other scenarios. The data would be shared and run daily as needed to support Dam and Canal Operators, as well as the cities and irrigation districts that rely on the PSC.

Recommended:   
Roland Sanford, General Manager

<input type="checkbox"/>	Approved as Recommended	<input type="checkbox"/>	Other (see below)	<input type="checkbox"/>	Continued on next page
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Modification to Recommendation and/or other actions:

I, Roland Sanford, General Manager and Secretary to the Solano County Water Agency, do hereby certify that the foregoing action was regularly introduced, passed, and adopted by said Board of Directors at a regular meeting thereof held on January 13, 2022 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

Roland Sanford  
General Manager & Secretary to the  
Solano County Water Agency

Name of Project: **PSC Model Development**

## **SOLANO COUNTY WATER AGENCY**

### **AGREEMENT FOR PROFESSIONAL SERVICES (*Professional Services/Consultant*)**

THIS AGREEMENT, **effective January 13, 2022**, is between SOLANO COUNTY WATER AGENCY, a public agency existing under and by virtue of Chapter 573 of the 1989 statutes of the State of California, hereinafter referred to as "Agency," and CBEC, Inc., hereinafter referred to as "Contractor."

The Agency requires services for **PSC Model Development**; and the Contractor is willing to perform these services pursuant to the terms and conditions set out in this Agreement.

IT IS MUTUALLY AGREED, as follows:

#### **1. SCOPE OF SERVICES**

The Agency hereby engages the Contractor, and the Contractor agrees to perform the services for **PSC Model Development**, as described in Exhibit A, in accordance with the terms of this Agreement and any applicable laws, codes, ordinances, rules or regulations.

In case of conflict between any part of this Agreement, this Agreement shall control over any Exhibit.

#### **2. COMPENSATION**

Compensation for services shall be as follows: Hourly rate of personnel plus any allowed reimbursable expenses based on unit costs as indicated on any allowed reimbursable expense in Exhibit B **not to exceed \$130,000** for all work contemplated by this Agreement.

#### **3. METHOD OF PAYMENT**

Upon submission of an invoice by the Contractor, and upon approval of the Agency's representative, the Agency shall pay the Contractor monthly in arrears for fees and allowed expenses incurred the prior month, **however in no event shall the cumulative total paid pursuant to this agreement exceed the maximum amount provided for in paragraph 2 of this Agreement.** Every invoice shall specify hours worked for each task identified in Exhibit A undertaken.

Each invoice shall be accompanied by a spreadsheet showing, by month, costs incurred to date for the project broken down by the Tasks identified in Exhibit A. The spreadsheet shall show, for each task, budget amounts, total expended and remaining amounts. The spreadsheet shall show a subtotal for each fiscal year covered by the contract. Any amendments to the contract shall be listed and incorporated into spreadsheet. An example of a typical spreadsheet shall be provided by the Agency.

4. **TIME OF PERFORMANCE**

This Agreement shall become effective as of the date it is executed and said services will take place between this date and **June 30, 2023** as directed by the Agency.

5. **MODIFICATION AND TERMINATION**

This Agreement may be modified or amended only by written instrument signed by the parties hereto, and the Contractor's compensation and time of performance of this Agreement shall be adjusted if they are materially affected by such modification or amendment.

This Agreement may be terminated by the Agency at any time, without cause, upon written notification to the Contractor. The Contractor may terminate this Agreement upon 30 days written notice to Agency.

Following termination by the Agency or the Contractor, the Contractor shall be reimbursed for all expenditures made in good faith in accordance with the terms of this Agreement that are unpaid at the time of termination.

6. **INDEMNIFY AND HOLD HARMLESS**

*To the extent permitted by law, Consultant shall hold harmless, defend at its own expense, and indemnify Solano County Water Agency, its directors, officers, employees, and authorized volunteers, against any and all liability, claims, losses, damages, or expenses, including reasonable attorney's fees and costs, arising from all acts or omissions of Consultant or its officers, agents, or employees in rendering services under this contract; excluding, however, such liability, claims, losses, damages or expenses arising from Solano County Water Agency's sole negligence or willful acts.*

7. **INSURANCE**

**Minimum Insurance Requirements:** Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries or death to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Consultant, his agents, representatives, employees or sub-contractors.

**Coverage** - Coverage shall be at least as broad as the following:

1. **Commercial General Liability (CGL)** - Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 00 01) including products and completed operations, property damage, bodily injury, personal and advertising injury with limit of at least two million dollars (\$2,000,000) per occurrence or the full per occurrence limits of the policies available, whichever is greater. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (coverage as broad as the ISO CG 25 03, or ISO CG 25 04 endorsement provided to Solano County Water Agency) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability** – (if necessary) Insurance Services Office (ISO) Business Auto Coverage (Form CA 00 01), covering Symbol 1 (any auto) or if Consultant has no owned

autos, Symbol 8 (hired) and 9 (non-owned) with limit of one million dollars (\$1,000,000) for bodily injury and property damage each accident.

3. **Workers' Compensation Insurance** - as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease. **Waiver of Subrogation:** The insurer(s) named above agree to waive all rights of subrogation against the Solano County Water Agency, its elected or appointed officers, officials, agents, authorized volunteers and employees for losses paid under the terms of this policy which arise from work performed by the Named Insured for the Agency; but this provision applies regardless of whether or not the Solano County Water Agency has received a waiver of subrogation from the insurer.

If the Consultant maintains broader coverage and/or higher limits than the minimums shown above, the Solano County Water Agency requires and shall be entitled to the broader coverage and/or higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the Solano County Water Agency.

**Other Required Provisions** - The general liability policy must contain, or be endorsed to contain, the following provisions:

1. **Additional Insured Status:** Solano County Water Agency, its directors, officers, employees, and authorized volunteers are to be given insured status (at least as broad as ISO Form CG 20 10 10 01), with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts, or equipment furnished in connection with such work or operations.
2. **Primary Coverage:** For any claims related to this project, the Consultant's insurance coverage shall be primary at least as broad as ISO CG 20 01 04 13 as respects to the Solano County Water Agency, its directors, officers, employees and authorized volunteers. Any insurance or self-insurance maintained by the Solano County Water Agency its directors, officers, employees and authorized volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

**Notice of Cancellation:** Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the Solano County Water Agency.

**Self-Insured Retentions** - Self-insured retentions must be declared to and approved by the Solano County Water Agency. The Solano County Water Agency require the Consultant to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or Solano County Water Agency.

**Acceptability of Insurers** - Insurance is to be placed with insurers having a current A.M. Best rating of no less than A: VII or as otherwise approved by Solano County Water Agency.

**Verification of Coverage** – Consultant shall furnish the Solano County Water Agency with certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements

are to be received and approved by the Solano County Water Agency before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant's obligation to provide them. The Solano County Water Agency reserves the right to require complete, certified copies of all required insurance policies, including policy Declaration pages and Endorsement pages.

**Sub-contractors** - Consultant shall require and verify that all sub-contractor maintain insurance meeting all the requirements stated herein, and Consultant shall ensure that Solano County Water Agency its directors, officers, employees, and authorized volunteers are an additional insured are an additional insured on Commercial General Liability Coverage.

**8. COMPLIANCE WITH LAW**

The Contractor shall be subject to and comply with all federal, state and local laws and regulations applicable with respect to its performance under this Agreement, including but not limited to, licensing, employment and purchasing practices; and wages, hours and conditions of employment.

**9. RECORD RETENTION**

Except for materials and records, delivered to the Agency, the Contractor shall retain all materials and records prepared or obtained in the performance of this Agreement, including financial records, for a period of at least three years after the Contractor's receipt of the final payment under this Agreement. Upon request by the Agency, the Contractor shall make such materials and records available to the Agency at no additional charge and without restriction or limitation to State and federal governments at no additional charge.

**10. OWNERSHIP OF DOCUMENTS**

All materials and records of a finished nature, such as final plans, specifications, reports and maps, prepared or obtained in the performance of this Agreement, shall be delivered to and become the property of the Agency. All materials of a preliminary nature, such as survey notes, sketches, preliminary plans, computations and other data, prepared or obtained in the performance of this Agreement, shall be made available, upon request, to the Agency at no additional charge and without restriction or limitation on their use.

**11. SUBCONTRACT AND ASSIGNMENT**

This Agreement binds the heirs, successors, assigns and representatives of the Contractor. The Contractor shall not enter into subcontracts for any work contemplated under this Agreement and shall not assign this Agreement or monies due or to become due, without the prior written consent of the General Manager of the Agency or his designee, subject to any required state or federal approval. (*Note: list any subcontractors here*)

**12. NONRENEWAL**

The Contractor understands and agrees that there is no representation, implication, or understanding that the services provided by the Contractor under this Agreement will be purchased by the Agency under a new agreement following expiration or termination of this Agreement, and waives all rights or claims to notice or hearing respecting any failure to continue purchase of all or any such services from the Contractor.

**13. NOTICE**

Any notice provided for herein are necessary to the performance of this Agreement and shall be given in writing by personal delivery or by prepaid first-class mail addressed as follows:

AGENCY

Roland Sanford, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

CONTRACTOR

C. B. Bowles, President  
CBEC, Inc.  
2544 Industrial Blvd.  
West Sacramento, CA 95691

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The parties have executed this Agreement the day and year first above written. If the Contractor is a corporation, documentation must be provided that the person signing below for the Contractor has the authority to do so.

Solano County Water Agency  
a Public Agency

CBEC, Inc.  
a California Corporation

By: \_\_\_\_\_  
Roland Sanford, General Manager  
Solano County Water Agency

By: \_\_\_\_\_  
C. B. Bowles, President  
CBEC, Inc.

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**FOR SCWA USE ONLY**

Contract Period: 1/13/2022 to 6/30/2023  
File Number: AG-C-14  
Account Manager: Alex Rabidoux  
G/L Account #: 6140SC  
Job Cost #: 4750  
Contract Type: Professional Services

**EXHIBIT A**  
**SCOPE OF SERVICES**

<b>Date:</b>	11/23/2021
<b>To:</b>	Alex Rabidoux; Solano County Water Agency (SCWA)
<b>From:</b>	Matt Weber, Toby Stegman, and Chris Campbell; cbec eco engineering (cbec)
<b>Proposal:</b>	P21-69 Putah South Canal Model
<b>Subject:</b>	Scope and budget for developing a Putah South Canal hydraulic model

## Introduction

The Solano County Water Agency (SCWA) requested that cbec, inc., eco engineering (cbec) provide a scope and budget to develop a hydraulic and water quality model of the Putah South Canal. SCWA would like the model to have the following characteristics:

- To be developed on a publicly available platform (e.g., HEC-RAS)
- To be easily updated for daily flows and water deliveries
- To run quickly (e.g., 30 minutes or less)
- To analyze water quality parameters such as copper sulfate applications
- To be able to expand the model in the future (if desired) to include the Interdam Reach of Putah Creek
- To be delivered to SCWA so that SCWA staff can run the model

To support this scope and budget, SCWA delivered a schematic of the Putah South Canal, a sample water delivery sheet, and a list of stage and flow measurement locations within the Putah South Canal system. A review of the information provided to cbec yielded the following characteristics for the Putah South Canal:

- Trapezoidal concrete lined channel with 5 standard cross-sections
- Approximately 33 miles in canal length
- Approximately 47 bridge crossings (including county/city bridges and O&M bridges)
- Approximately 21 siphons
- Approximately 57 turnouts for water deliveries
- Approximately 13 check structures



## Scope of Work

### Task 1 – Develop Model Geometry

cbec will develop a 1D HEC-RAS model geometry of the Putah South Canal. The model will cover the full 33 miles of the Putah South Canal and include all check structures, siphons, and turnouts for water deliveries (as listed in the Introduction section).

#### Task 1 Assumptions:

- The bridge crossings do not interact with the flow within the canal and do not need to be represented in the model
- As-built drawings for the canal, siphons, and check structures will be provided to cbec by SCWA
- All elevation data provided to cbec must be able to be converted to NAVD 88 (e.g., check structure as-built drawing)
- SCWA will resolve data gaps through field visits, photos, and/or surveys
- All turnouts will be incorporated into the model as lateral diversions where the end user inputs the flow for the water delivery
- Two meetings with SCWA will be scheduled to kick off model development (1<sup>st</sup> meeting) and review the model geometry and plan files (2<sup>nd</sup> meeting) prior to model calibration. Meeting time is captured in the Task 4 budget.

#### Task 1 Deliverables:

- Draft HEC-RAS model geometry for review by SCWA
- Final model geometry and documentation is included in Task 3 deliverable

**Estimated Cost: \$30,504**

### Task 2 – Model Calibration and Validation

cbec will calibrate and validate the HEC-RAS model for hydraulic and water quality parameters. Hydraulic calibration and validation will focus on accurately representing the flow values within the Putah South Canal (i.e., mass balance) and the stage/flow relationships at the check structure locations. Water quality calibration and validation will depend on the data provided by SCWA (e.g., dye/tracer measurements to tune the advection, dispersion, and reaction parameters).

#### Task 2 Assumptions:

- SCWA will provide cbec with the weir equations and coefficients for the check structures
- SCWA will provide stage/flow measurements and relationships for the check structure and siphon locations
- All elevation data provided to cbec must be able to be converted to NAVD 88 (e.g., stage data)
- SCWA will provide water quality measurements at key index points for calibration/validation
- Two meetings with SCWA will be scheduled to discuss calibration/validation data needs (1<sup>st</sup> meeting) and review calibration/validation results (2<sup>nd</sup> meeting). Meeting time is captured in the Task 4 budget.

#### **Task 2 Deliverables:**

- Draft HEC-RAS model calibration/validation results for review by SCWA (all associated input/output files)
- Final model calibration/validation results are included in the Task 3 deliverable

***Estimated Cost: \$32,892***

### **Task 3 – Model Documentation**

cbec will develop a report to describe the model development, document the calibration and validation results, and provide a brief user manual to serve as a guide for SCWA staff to run the model and extract results.

#### **Task 3 Assumptions:**

- A draft report will be delivered to SCWA (Microsoft Word and PDF versions) for review
- A final report will be delivered to SCWA (PDF version) with a collated set of comments and edits based on the draft review

#### **Task 3 Deliverables:**

- A draft report (Microsoft Word and PDF) to describe the model development, document the calibration and validation results, and provide a user manual to SCWA staff
- A Final report (PDF)
- A final HEC-RAS model with calibration/validation runs (all associated input/output files)

***Estimated Cost: \$23,112***



Hydrology | Hydraulics | Geomorphology | Design | Field Services

## Task 4 – Project and Quality Management

Task 4 covers project management, which includes meetings with SCWA and cbec's internal quality management review process for deliverables.

### Task 4 Assumptions:

- cbec will schedule meetings with SCWA at the beginning and end of major project milestones (Tasks 1, 2, and 3)
- cbec will implement their internal quality management review process for all deliverables

### Task 4 Deliverables:

- N/A

**Estimated Cost: \$16,002**

## Proposed Budget and Schedule

cbec proposes to perform these services on a time and materials basis. The estimated cost to perform the proposed scope of work is \$102,510, as shown by the attached budget estimate. The schedule is to be defined in collaboration with SCWA with a targeted completion date in Summer of 2022.



Hydrology | Hydraulics | Geomorphology | Design | Field Services

## ESTIMATED PROJECT BUDGET SUMMARY

### Putah South Canal Model

cbec Project # P21-69

Task #	Task Description		Subtotal
1	Develop Model Geometry	\$	30,504.00
2	Model Calibration and Validation	\$	32,892.00
3	Model Documentation	\$	23,112.00
4	Project and Quality Management	\$	16,002.00
		<b>Labor Fee</b>	<b>\$ 102,510.00</b>
		<b>Reimbursables</b>	<b>\$ -</b>
		<b>Subconsultant(s)</b>	<b>\$ -</b>
		<b>Total Project Budget</b>	<b>\$ 102,510.00</b>

## ESTIMATED LABOR FEES

### Putah South Canal Model cbec Project # P21-69

Unless expressly provided within the contract, rates are subject to increase annually on January 1 of each year.

Task #	Senior Scientific Advisor	President / Managing Director	Director	Senior Ecoengineer III Senior Ecohydrologist III	Senior Ecoengineer II Senior Ecohydrologist II	Senior Ecoengineer I Senior Ecohydrologist I	Ecoengineer II Ecohydrologist II	EcoEngineer I EcoHydrologist I	Technician II	Technician I	Clerical / Admin. / Graphic Design	Subtotal Labor Hours Per Task	Subtotal Labor Fee Per Task
	\$330	\$278	\$258	\$232	\$201	\$180	\$165	\$144	\$129	\$98	\$93		
1			4				32	168				204	\$ 30,504.00
2			4				36	180				220	\$ 32,892.00
3			4				64	80				148	\$ 23,112.00
4			16				58	16				90	\$ 16,002.00
	0	0	28	0	0	0	190	444	0	0	0	662	\$ 102,510.00

## EXHIBIT B

### RATE OF COMPENSATION

<b>Task #</b>	<b>Task Description</b>	<b>Subtotal</b>
1	Develop Model Geometry	\$30,504.00
2	Model Calibration and Validation	\$32,892.00
3	Model Documentation	\$23,112.00
4	Project and Quality Management	\$16,002.00
	<b>Project Subtotal</b>	<b>\$102,510.00</b>
5	Additional Model Support, Training of SCWA Staff	\$27,490.00
	<b>Total Budget (Not to Exceed)</b>	<b>\$130,000.00</b>

ACTION OF  
SOLANO COUNTY WATER AGENCY

DATE: January 13, 2022

SUBJECT: North Bay Aqueduct Alternate Intake Project: Collaborative Agreement with USGS for project development support.

RECOMMENDATIONS:

Authorize General Manager to execute Collaborative Agreement with the United States Geological Survey (USGS) for technical support of North Bay Aqueduct Alternate Intake Project.

FINANCIAL IMPACT:

Cost of services provided by this agreement is \$78,613. There is adequate funding in the NBA budget.

BACKGROUND:

The North Bay Aqueduct (NBA) is part of the State Water Project (SWP), providing municipal water to over 500,000 residents in Napa and Solano County. Major urban centers including Vacaville, Vallejo, Fairfield, Napa, American Canyon, Calistoga, as well as Travis Air Force Base are served by the NBA. The NBA diverts raw water at the Barker Slough Pumping Plant (BSPP), located at the terminus of Barker Slough, a dead-end tidal channel connected to Lindsey Slough and in turn Cache Slough, and ultimately the Sacramento River. The NBA’s source water quality is generally the poorest of all the SWP facilities, typically exhibiting the highest levels of total organic carbon, turbidity, and pathogens (California SWP – 2016 Watershed Sanitary Survey Update). Treating the NBA source water to drinking water quality standards is often challenging and in some instances impossible without blending the NBA source water with alternative supplies. Often, at least for those that have the option, the Solano NBA water users will avoid using NBA water when water quality conditions are poor.

Barker Slough and the BSPP are located within the Yolo Bypass – Cache Slough Complex (YBCSC) region, one of the last remaining refugia for native fish species in the Delta. State, federal, and local agencies are in the process of planning, implementing, and constructing large-scale tidal wetland restoration projects within the YBCSC to enhance native and endangered fish populations. Pursuant to State and Federal regulatory requirements, water diversions by the NBA must be curtailed if not suspended when endangered fish species are

Recommended:   
Roland Sanford, General Manager

<input type="checkbox"/>	Approved as Recommended	<input type="checkbox"/>	Other (see below)	<input checked="" type="checkbox"/>	Continued on next page
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Modification to Recommendation and/or other actions:

I, Roland Sanford, General Manager and Secretary to the Solano County Water Agency, do hereby certify that the foregoing action was regularly introduced, passed, and adopted by said Board of Directors at a regular meeting thereof held on January 13, 2022 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

Roland Sanford  
General Manager & Secretary to the  
Solano County Water Agency

Page 2

observed or suspected to be present at or near Barker Slough. As large-scale tidal wetland restoration – which is intended to increase the numbers of endangered fish species – proceeds, the frequency and duration with which water diversions by the NBA must be curtailed or suspended is likely to increase.

In summary, due to poor water quality and the presence of endangered fish species the NBA is typically “off-line” for three to six months of the year. The NBA is already an unreliable water supply, and future prospects are bleak. The ideal solution, while not cheap, is to relocate the BSPP to the Sacramento River. The purpose of the NBA Alternate Intake Project (aka Water +) is to improve water supply reliability for the NBA service region while simultaneously providing ecological benefits to the YBCSC that support both the Central Valley Flood Protection Plan and the Delta Stewardship Council’s Delta Plan objectives and goals.

Additional ecological feasibility studies are needed to among other things, confirm the ecological benefits of the proposed NBA Alternate Intake Project. The USGS has substantial expertise in the subject matters required to conduct these feasibility analyses. This action funds the USGS to develop a Modeling Plan (Phase 1) that will then be used as a request for proposals to hire a modeling consultant to implement the Model Plan. (Phase 2). USGS will also provide further technical support through Phase 2 as part of this agreement.

RELEVANCE TO 2016-2025 SCWA STRATEGIC PLAN:

Adoption of Resolution 2022-01 is consistent with Goal # 1 (*Optimize the management of the County’s current and future water resources in a sustainable manner*) and Goal # 4 (*Protect access to reliable water supplies under current and future stressors*) of the 2016-2025 Strategic Plan.



## COLLABORATIVE AGREEMENT

This Collaborative Agreement (“Agreement”) is entered into by and between the U.S. Geological Survey (USGS), a bureau of the Department of the Interior, through the offices of its **California Water Science Center, Sacramento, California**, hereinafter referred to as the “USGS” and **Solano County Water Agency**, hereinafter referred to as “Collaborator.” USGS and Collaborator are sometimes herein referred to as a “Party” and collectively as the “Parties.” Any inconsistency between the standard terms of Articles 1 through 16 of this Agreement and any attachments to this Agreement shall be resolved by giving precedence to Articles 1 through 16.

Whereas, the USGS is authorized to perform collaborative work and prosecute projects in cooperation with other agencies, Federal, State or private, pursuant to 43 USC §36c; and

Whereas, the USGS is authorized to receive payments in arrears from any State, Territory, Tribe, possession, or political subdivision by 43 USC §50b, and;

Whereas, the USGS has a mission in science and has need of scientific data and/or materials on fisheries ecology to support this mission; and

Whereas, Collaborator has natural resource management obligations and has need of USGS expertise in fisheries ecology; and

Whereas, the Project entitled “**North Bay Aqueduct (NBA) Alternate Intake Program Ecosystem Benefit Feasibility Study and Scientific Advisory Group Participation**” is intended by the Parties to be mutually beneficial and to benefit the people of the United States;

Now, therefore, the Parties hereto agree as follows:

1. **Statement of Work.** See the attached Statement of Work (SOW) (Attachment A), incorporated by reference herein.
2. **Principal Investigator.** The USGS principal investigator (PI) for this Project is **Jon Bureau, (916) 997-4206, 6000 J Street, Placer Hall, Sacramento, CA 95819**. The PI for the Collaborator is **Thomas L Pate, (707) 249-4097, [tpate@scwa2.com](mailto:tpate@scwa2.com), 810 Vaca Valley Pkwy, Ste. 203, CA 95688**. In the event that a PI is unable to continue in this Project, the sponsoring agency will make every effort to provide a replacement acceptable to the other Party
3. **Title to Equipment.** There will be no joint property purchased as a result of the collaborative effort outlined in the SOW. Each Party will provide its own equipment necessary to support its participation in the SOW.
4. **Term.** The collaborative effort contemplated by this Agreement will commence on the effective date of this Agreement. The effective date of this Agreement shall be the later date of (1) **01 February 1, 2022** or (2) the date of the last signature by the Parties. The expiration date of this Agreement shall be **01 April 2023**.
5. **Funding/Resource Share.**
  - (a) The Collaborator will provide **\$78,613** to the Project. The Collaborator is providing in-kind services and/or resources with an estimated value of: **\$0.00**.

(b) If the Collaborator is a non-governmental organization, the USGS requires an advance of **\$0.00**.

(c) If the Collaborator is a government organization such as a State, Territory, Tribe, possession or political subdivision thereof, the following shall apply: The USGS will submit invoices on a [ **“quarterly”**] basis. Payment not sent within thirty (30) days from date of invoice will bear interest administrative and penalty charges at the annual rate pursuant to the Debt Collection Act of 1982, (codified at 31 U.S.C. § 3717) established by the U.S. Treasury.

(d) The USGS is providing in-kind services and/or resources with an estimated value of: **\$0.00** to the Project.

**6. Amendments/Termination.** This Agreement can be changed or amended only by a written instrument signed by the Parties. This Agreement may be terminated by either Party on thirty (30) days written notice to the other Party. In the event of an early termination by Collaborator, USGS shall be reimbursed for any completed work or work in progress on the effective date of termination (i.e., when the Agreement actually terminates following the receipt of written notice from the other Party). Any unspent advanced funds will be returned to Collaborator. The USGS shall provide a copy of the outcomes completed as of the effective date of termination in the event of an early termination of the Agreement.

#### **7. Scientific Information/Data.**

Each Party is free to publish the information and data developed in the performance of the statement of work (SOW) and data management plan (DMP). Before a Party submits the information and data for publication or otherwise intends to publicly release or disclose scientific information and data that is jointly developed, the other Party will be provided thirty (30) days for review of the proposed release or disclosure, prior to submission for publication. The Parties acknowledge that scientific information and data developed using USGS funds as a result of the SOW are subject to applicable USGS Fundamental Science Practices (FSP) review, approval, and release requirements, which are available in [Survey Manual Chapter \(SMC\) 502.4, Fundamental Science Practices: Review, Approval, and Release of Information Products](#). The USGS is required to provide timely public access to the results of scientific information and data associated with federally funded research that does not contain sensitive protected information. Data and associated metadata will be open format and publicly accessible. The data and metadata will also be open access and machine readable in accordance with USGS FSP requirements available in [SMC 502.7, Fundamental Science Practices: Metadata for USGS Scientific Information Products Including Data](#) and [SMC 502.8, Fundamental Science Practices: Review and Approval of Scientific Data for Release](#).

#### **8. (Reserved)**

9. **Notices.** Any notice required to be given or which shall be given under this Agreement shall be in writing and delivered by first-class mail and via email to the Parties as follows:

**USGS:**

**Technical:**

Jon Bureau  
6000 J Street, Placer Hall  
Sacramento, CA 95819  
[jrbureau@usgs.gov](mailto:jrbureau@usgs.gov)  
(916) 997-4206  
<https://www.usgs.gov/centers/ca-water/>

**Administrative:**

Tina Dale  
6000 J Street, Placer Hall  
Sacramento, CA 95819  
508-490-5020  
212

**Collaborator:**

**Technical:**

Thomas L. Pate  
810 Vaca Valley Pkwy, Suite 203  
Vacaville, CA 95688  
[tpate@scwa2.com](mailto:tpate@scwa2.com)  
(707) 249-4097

**Administrative:**

Katherine Ashely  
810 Vaca Valley Pkwy, Suite 203  
Vacaville, CA 95688  
(707) 455-1100

**Financial Contact Information for Collaborator:**

Marci Fehrenkamp  
810 Vaca  
Valley Pkwy, Suite  
203  
Vacaville, CA 95688  
[mfehrenkamp@scwa2.com](mailto:mfehrenkamp@scwa2.com)  
707-455-1102  
DUNS No. 185573834  
Tax ID No. 68-0197823

10. **Independent Organization.** For purposes of this Agreement and all research and services to be provided hereunder, each Party shall be, and shall be deemed to be, an independent Party and not an agent or employee of the other Party. Each Party shall have exclusive control over its employees in the performance of the SOW. While in field locations, a Party's employees must adhere to the safety and technical requirements imposed by the Party controlling the work site.

Neither Party has authority to make any statements, representations, or commitments of any kind, or take any action, which shall be binding on the other Party, except as may be explicitly provided for herein or authorized in writing. Neither Party has authority to use the name of the other in advertising or in other forms of publicity without the written permission of the other.

11. **Governing Law.**

(a) This Agreement is subject to interpretation under State and Federal law. If there is

inconsistency between the laws, then Federal law is controlling. Each Party agrees to be responsible for the activities, including the negligence, of their employees. Responsibility of the USGS for the payment of claims for loss of property, personal injury, or death caused by the negligence or wrongful act or omission of a USGS employee, while acting within the scope of their employment, is limited to provisions of the Federal Tort Claims Act, 28 USC §§ 2671-80. USGS warrants that it is self-insured for the purposes of Worker's Compensation.

(b) The USGS and the Collaborator make no express or implied warranty as to the conditions of the research, merchantability or fitness for a particular purpose of the research, data, or resulting product incorporating data developed and exchanged under the SOW.

**12. Force Majeure.** Neither Party shall be held liable for any unforeseeable event beyond its control, not caused by the fault or negligence of such Party, which causes such Party to be unable to perform its obligations under this Agreement, and which it is unable to overcome by the exercise of due diligence including, but not limited to, flood, drought, earthquake, storm, fire, pestilence, lightning, and other natural catastrophes; epidemic, war, riot, civil disturbance, or disobedience; strikes, labor disputes, or failure, threat of failure, or sabotage; or any order or injunction made by a court or public agency. In the event of the occurrence of such a force majeure event, the Party unable to perform must promptly notify the other Party. It shall further use its best efforts to resume performance as quickly as possible and shall suspend performance only for such period of time as is necessary as a result of the force majeure event.

**13. Entire Agreement.** This Agreement contains all of the terms of the Parties and supersedes all prior Agreements and understandings related thereto. Due to the specialized nature of the collaborative work, this Agreement is non-assignable by either Party.

**14. Disputes.** The signatories to this Agreement shall expend their best efforts to amicably resolve any dispute that may arise under this Agreement. Any dispute that the signatories are unable to resolve shall be submitted to the Director of the USGS or his/her designee and the [insert title] of the Collaborator or his/her designee for resolution.

**15. Miscellaneous Provisions.** Pursuant to the Anti-Deficiency Act, 31 U.S.C. §1341 (a)(1), nothing herein contained shall be construed as binding the USGS to expend in any one fiscal year any sum in excess of its appropriations or funding in excess of what it has received for the collaborative work outlined in the SOW.

**16. Survivability.** The following provisions shall survive the termination of this Agreement: 7. Publications/Reports/ Data, and 14. Disputes.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on the lastdate listed below.

**ACCEPTED AND AGREED**

**The USGS signatory certifies that:**

- **The USGS signatory is consistent with the delegations of authority to signagreements, SMC 205.13.**
- **The Collaborator is a U.S. owned organization.**
- **The COI form has been coordinated with the Ethics Office, as applicable.**
- **This Collaborative Agreement contains standard terms only or, if it contains non-standard terms, it was sent to OPA for review.**

U.S. GEOLOGICAL SURVEY

COLLABORATOR

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## **Attachment A: Statement of Work between USGS and Solano County Water Agency**

### **Objectives or Specific Aims**

The primary objectives of the proposed North Bay Aqueduct (NBA) Alternate Intake Program are to preserve water supplies, improve water supply reliability, resilience and quality for the NBA service area while simultaneously increasing listed species populations by improving ecosystem services in the Yolo Bypass-Cache Slough Complex (YBCS), possibly reducing summertime water temperatures at the landward boundary of the YBCS that are at or above suitable thresholds for endangered and native fish (Brown et al., 2013, Stumpner et al., in review) and by increasing food-web subsidies to downstream habitats in the Deep Water Ship Channel (DWSC) and the Low Salinity Zone (LSZ) (Kimmerer et al., 1998; Kimmerer et al., 2002; Bennett et al., 2002).

The objectives of the proposed USGS work funded by this agreement are threefold:

- (1) Write a scope of work for the North Bay Aqueduct (NBA) Alternate Intake Program Ecosystem Benefit Feasibility Study. This scope of work will produce a Model Plan with detailed specification of the recommended numerical modeling (2D and possibly 3D) and sub-modeling (suspended sediment, residence time, phytoplankton and temperature modeling), specification of the bathymetry, calibration and validation data sets recently collected by the USGS <https://www.sciencebase.gov/catalog/item/5d7192cce4b0c4f70cff9326>, boundary condition specification (tides, river flows), the initial AIP operational scenarios and specification of first-cut performance metrics in meeting the Project Objectives.
- (2) Scientific Advisory Group Participation of USGS staff.
- (3) Review of draft report.

The Model Plan will be implemented by another party (e.g. RMA), hired by Collaborator, that will produce reports for review and recommendations by USGS for further analysis as necessary.

### **Term and Proposed Project Schedule/Milestones**

- 01 February 2022 - Start work**
- 01 April 2022 – Draft Proposal Due (or 1 month after agreement is executed)**
- 01 July 2022 – Quarterly Progress Report on the modeling effort**
- 01 October 2022 – Quarterly Progress Report on the modeling effort**
- 01 January 2023 - Quarterly Progress Report on the modeling effort**
- 01 April 2023 – Review and commentary on draft modeling report.**

**USGS Scope of Work: *Write a detailed Model Plan for the North Bay Aqueduct (NBA) Alternate Intake Program Ecosystem Benefit Feasibility Study and Scientific Advisory Group Participation.***

Jon R. Burau, Hydrodynamics Project Chief, USGS California Water Science Center, 6000 J Street, Sacramento, California, Phone: (916) 997-4206, Email: [jrburau@usgs.gov](mailto:jrburau@usgs.gov)

The following provides the motivation and the need for the North Bay Aqueduct (NBA) Alternate Intake Program (AIP) Ecosystem Benefit Study which is followed by an overview of the modeling objectives, scope and approach the details of which will be spelled out in a scope of .

## **INTRODUCTION – OVERVIEW of the ALTERNATE INTAKE PROGRAM (AIP)**

The overarching objectives of the proposed (NBA AIP) are to preserve water supplies, improve water supply reliability, resilience and quality for the NBA service area while simultaneously potentially enhancing listed species populations by improving ecosystem services in the Yolo Bypass-Cache Slough Complex (YBCS), by possibly reducing summertime water temperatures at the landward boundary of the YBCS that are at or above suitable thresholds for endangered and native fish ([Brown et al., 2013](#), [Stumpner et al., in review](#)) and by increasing food-web subsidies to downstream habitats in the Deep Water Ship Channel (DWSC) and the Low Salinity Zone (LSZ) ([Kimmerer et al., 1998](#); [Kimmerer et al., 2002](#); [Bennett et al., 2002](#)).

## **PROBLEM**

The San Francisco Estuary is unable to support native fish populations, in part, because it is well known as a low productivity system ([Cloern et al, 1985](#); [Cole and Cloern, 1984](#); [Cloern et al., 2021](#); [Robinson et.al., 2016](#), [Cloern et al., 2016](#)) “having lost virtually all of its high-productivity marshes while lower-productivity open-water habitats have increased” ([Bardeen and Cloern, 2021](#) and PPIC blog post: “[Why is the Delta Starving?](#)” ).

Yet the NBA and agricultural users remove primary production (organic carbon) generated by tidal marshes from the YBCS through their water diversions, at odds with the stated objectives of the Delta Smelt resiliency strategy and the ecological benefits of existing and proposed tidal marshes. The lost ecological benefits include the export of marsh-derived pelagic production and detrital matter that could be instead used to fuel downstream habitats associated with detrital food web maxima ([Feyrer et.al 2017](#), [Young et.al 2021a](#)) created by the unique hydrodynamics that occur in terminal channel systems ([Stumpner, et.al. 2021](#)), such as Lindsey, Cache and Shag Sloughs, Stairsteps, Liberty Cut, Tule Canal (Figure 1) and the DWSC (Figure 2) and in the LSZ (Figure 5) ([Burau et al., 1998](#); [Burau et al., 1999](#); [Monismith et al., 1996](#); [Monismith et al., 2002](#);). These diversions also reduce the export of primary and secondary production from the YBCS into the western Delta by reducing, or reversing, the net flows in Cache Slough during periods of low Sacramento River inflows (e.g. during droughts), (Figure 6).

Given the reduction in native fish populations over the last decade, and the possibility of the re-introduction of delta smelt, it simply makes no sense to make significant investments in the creation of tidal marsh in the YBCS only to remove primary production from these systems and reduce its export to downstream habitats. Why is it OK to remove “food” (primary production) from the YCBS, one of only two places in the Delta where we can significantly increase primary and secondary production, in a system that is fundamentally food limited?

## **WATER SUPPLY BENEFITS of the AIP**

The AIP will add a dual conveyance capability to the NBA, increasing water supply resiliency through operational flexibility by reducing water supply disruptions when the Barker Slough Pumping Plant (BSPP) is offline for maintenance and would nearly eliminate water treatment costs associated with the



removal of organic carbon.

### **ECOSYSTEM BENEFITS of the AIP**

Because the proposed NBA AIP pipeline would cross several major water channels of managed watersheds that are tributary to the YBCS (Figure 1) it could also be used to implement pulse flows that could be used as an adaptive management tool that could be optimized to improve the ecosystem benefits of existing tidal marshes and public wetland restoration investments and increase the resiliency of listed native species populations to the negative effects of climate change by:

- Reducing (or eliminating) the export of primary and secondary production from water diversions in the YBCS (Figure 2) by supplying water from the NBA AIP.
- Increasing residence time diversity (Stumpner et al. 2021), encouraging the creation of detrital food web maxima in Lindsey, Cache and Shag Sloughs and increasing the supply of detrital materials to the detrital food web max in the DWSC (Feyrer et al. 2017) and in the LSZ (Kimmerer et al., 1998; Kimmerer et al., 2002; Bennett et al., 2002).
- Increasing transport of both pelagic and detrital primary production materials out of YBCS to increase the possibility of phytoplankton bloom formation in the LSZ (Brown et al., in review).
- Decreasing water temperatures in the upper YBCS (Brown et al., 2013).

### **OBJECTIVES and SCOPE of the PROPOSED NUMERICAL MODELING**

The principal objective of this modeling effort is to study the effect of the reduction, and possible elimination of large scale diversions from the YBCS on specific physical processes that enhance ecosystem services in the YCBS and in downstream habitats through either the reduction of diversions in the YCBS or strategic releases of water from the AIP at the “starred” locations in figure 1 (e.g. pulse flows timed with the spring/neap cycle).

### **NUMERICAL MODELING APPROACH**

The general modeling approach is aimed at investigating the possibility of improving local, regional and systemwide ecosystem function by:

- (1) first guiding investments in marsh restoration by maximizing primary production and export through the recommendation of specific marsh landscape features (e.g. the berm height at MHHW in Figure 3); then,
- (2) leveraging these investments by optimizing the connection between primary production in tidal marshes and adjacent and downstream habitats.

Exploration and optimization of relevant physical processes and connections between habits will include:

- (1) Maximizing the creation and export of both pelagic and detrital primary production by optimizing tidal marsh plain exchange during spring tides by creating dendritic channel



systems bordered by berm heights at approximately MHHW (Figure 2) (Stumpner et al., 2021).

- (2) Reducing (or eliminating entirely) the net flows associated with water diversions in the numerous YBCS terminal channels (e.g. Lindsey, Cache and Shag Sloughs, Stairsteps, Liberty Cut, Tule Canal – Figure 1) so that biological “hot spots” and residence time diversity (Stumpner et al., 2020) can occur as it does in the DWSC (Feyrer et al., 2017, Young et al., 2021a), a terminal channel system.
- (3) Increasing the net flow in Cache Slough through release of AIP water to increase the exchange of food web subsidies from the YBCS to the DWSC and LSZ.
- (4) Syncing pulse flows from the (NBA AIP) with the spring (fortnightly 14-day period) and perigean (30-day period) maximize the export of extremely long residence time (low nutrient content, high temperature) water and marsh-derived primary production to downstream habitats.

The main objective of modeling is to determine the amount of water needed in space and time for a given estimated ecological benefit (as described above using the approaches and evaluative metrics described in general below) by synchronizing pulse flows from the AIP pipeline at the stated locations in figure 1 with the spring (14-day) or perigean (30-day) tides that ultimately drive the peak in the export of primary production from tidal marshes.

RMA’s 2D model hydrodynamic model will initially be used, assuming an unstratified water column, even though it is possible that prolonged (multi-day) temperature stratification can occur in channels where the tidal currents are weak that could create significant localized phytoplankton blooms when the net flow associated with the water diversions from the YBCS are eliminated during neap tides. If scaling of the initial 2D results based on the analysis in Lenocho et al., 2021 suggests that temperature stratification is important, a combination of 2D in the strongly tidal forced regions in the YBCS and 3D where the tides are weak may be needed.

## MEASUREMENTS OF ECOSYSTEM PERFORMANCE

Changes in ecosystem “performance” will be evaluated using the following surrogate approaches/metrics:

**Primary production and export from existing and proposed tidal marshes:** will be evaluated and optimized using the spring to neap tidal discharge ratio (Stumpner and Andrews, 2021), and in the case of pelagic primary production, using the phytoplankton model described in RMA 2021.

**Primary production and its transport within the YBCS** will also be evaluated using the phytoplankton model described in RMA 2021.

**The creation of residence time diversity**, and, in particular the creation of “goldilocks zone” driven biological “hotspots” within terminal channels and the removal of extremely long residence time, nutrient limited waters, will be evaluated using the Water Age model described in Gross et al., 2018.

**The location and extent of detrital food-web maxima** will be evaluated using a sediment transport model – turbidity and detrital food-web maxima are always co-located because they both depend on identical physical accumulation mechanisms – a combination of flood tidal current speed bias associated with the standing wave character in terminal channels and negatively buoyant suspended sediment and detrital materials.

**Water Temperature** reductions in the upper reaches of the YBCS due to the introduction of cooler Sacramento River water from the AIP will be evaluated using the RMA 2D temperature model.

## **MODELING PROJECT FUNDING AND ORGANIZATION**

The Project will be collaboratively managed and funded by DWR and Solano County Water Agency (SCWA). SCWA will hold and manage the contract for the work. A technical team (TT) has been formed consisting of appropriate staff from DWR and SCWA to direct the study. A science advisory panel (SAP) will be formed consisting of knowledgeable experts from relevant fields of study to review and modify this proposal, deliverables at milestones, make recommendations, and consult with TT and science team as needed. The USGS members of the SAG will be funded through this agreement.

### **Products**

- **Task 1:** NBA -AIP Ecosystem Benefit Feasibility Study Scope of Work: Modeling Plan
- **Task 2:** Quarterly Status Reports
- **Task 3:** USGS participation in Scientific Advisory Group (Jon Burau, Fred Feyrer, Paul Stumpner, Matt Young)
- **Task 4:** Review final report

### **Timeline**

01 February 2022 - Start work  
 01 April 2022 – Draft Model Plan Due (or 1 month after agreement is executed)  
 01 July 2022 - Quarterly Progress Report on the modeling effort  
 01 October 2022 - Quarterly Progress Report on the modeling effort  
 01 January 2023 - Quarterly Progress Report on the modeling effort  
 01 April 2023 – Review and commentary on draft modeling report.

## Budget

Employee Name	Task	Task Name	Hours	Hourly Rate	Hourly Total	Leave Dist	Total (Net)	Total (Gross)	Totals
Hydrologist	1.0	Write Scope of Work	80	\$86.87	\$6,949.29	\$1,494.10	\$8,443.39	\$15,902.70	
Hydrologist	1.0	Write Scope of Work	80	\$63.20	\$5,056.09	\$1,087.06	\$6,143.15	\$11,570.31	
Fish Biologist	1.0	Write Scope of Work	20	\$91.67	\$1,833.47	\$394.20	\$2,227.67	\$4,195.70	
Fish Biologist	1.0	Write Scope of Work	20	\$57.13	\$1,142.57	\$245.65	\$1,388.23	\$2,614.65	
								<b>Task 1 Total</b>	<b>\$34,283.36</b>
Hydrologist	2.0	Quarterly Reports	24	\$86.87	\$2,084.79	\$448.23	\$2,533.02	\$4,770.81	
								<b>Task 2 Total</b>	<b>\$4,770.81</b>
Hydrologist	3.0	SAG Participation	40	\$86.87	\$3,474.65	\$747.05	\$4,221.69	\$7,951.35	
Fish Biologist	3.0	SAG Participation	40	\$91.67	\$3,666.94	\$788.39	\$4,455.33	\$8,391.40	
Hydrologist	3.0	SAG Participation	40	\$65.10	\$2,603.89	\$559.84	\$3,163.72	\$5,958.71	
Fish Biologist	3.0	SAG Participation	40	\$58.84	\$2,353.70	\$506.05	\$2,859.74	\$5,386.19	
								<b>Task 3 Total</b>	<b>\$27,687.64</b>
Hydrologist	4.0	Review Final Report	20	\$86.87	\$1,737.32	\$373.52	\$2,110.85	\$3,975.67	
Fish Biologist	4.0	Review Final Report	16	\$91.67	\$1,466.78	\$315.36	\$1,782.13	\$3,356.56	
Hydrologist	4.0	Review Final Report	16	\$65.10	\$1,041.55	\$223.93	\$1,265.49	\$2,383.48	
Fish Biologist	4.0	Review Final Report	16	\$58.84	\$941.48	\$202.42	\$1,143.90	\$2,154.47	
								<b>Task 4 Total</b>	<b>\$11,870.19</b>
								<b>Grand Total</b>	<b>\$78,612.01</b>

## FIGURES

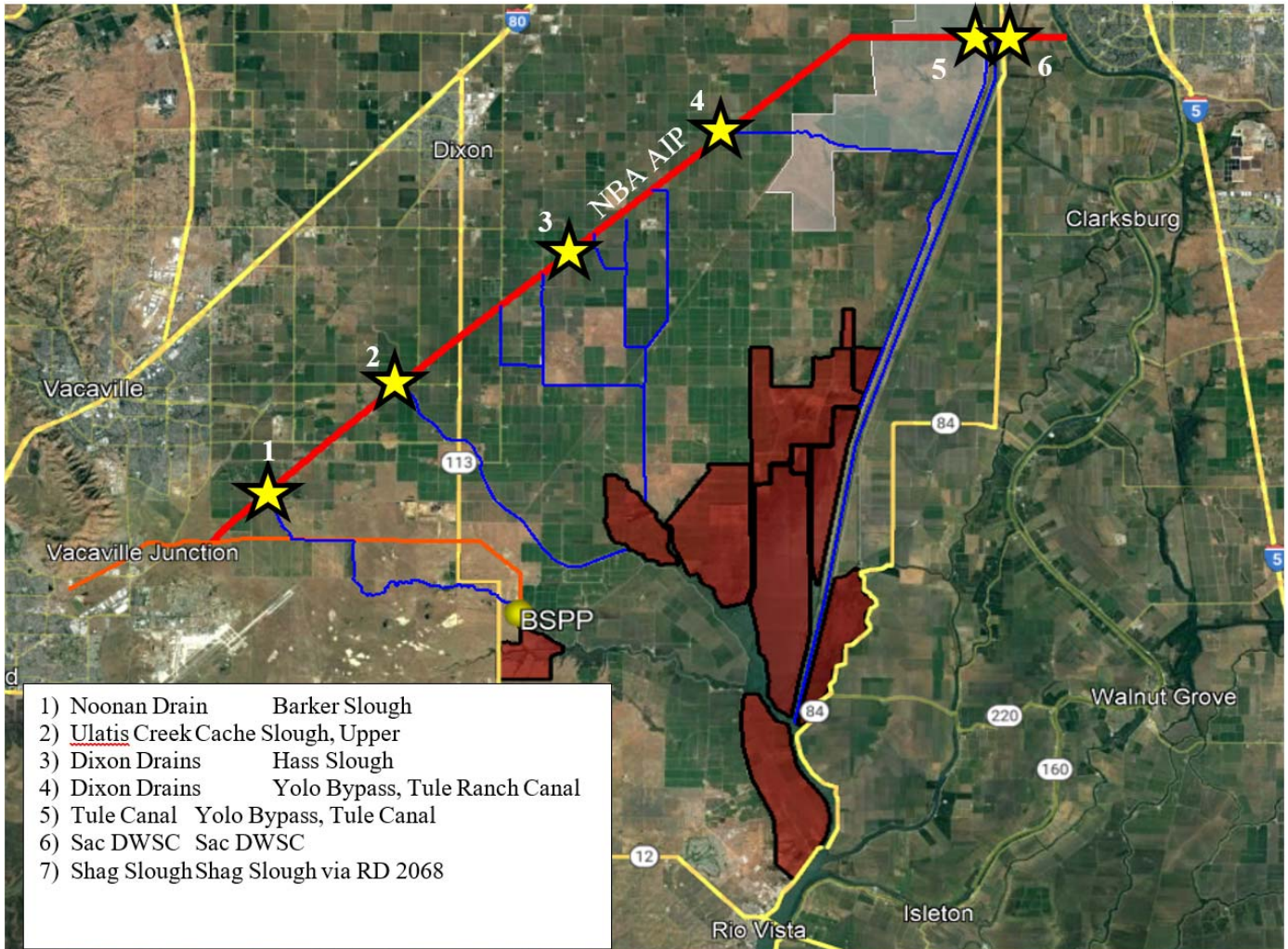
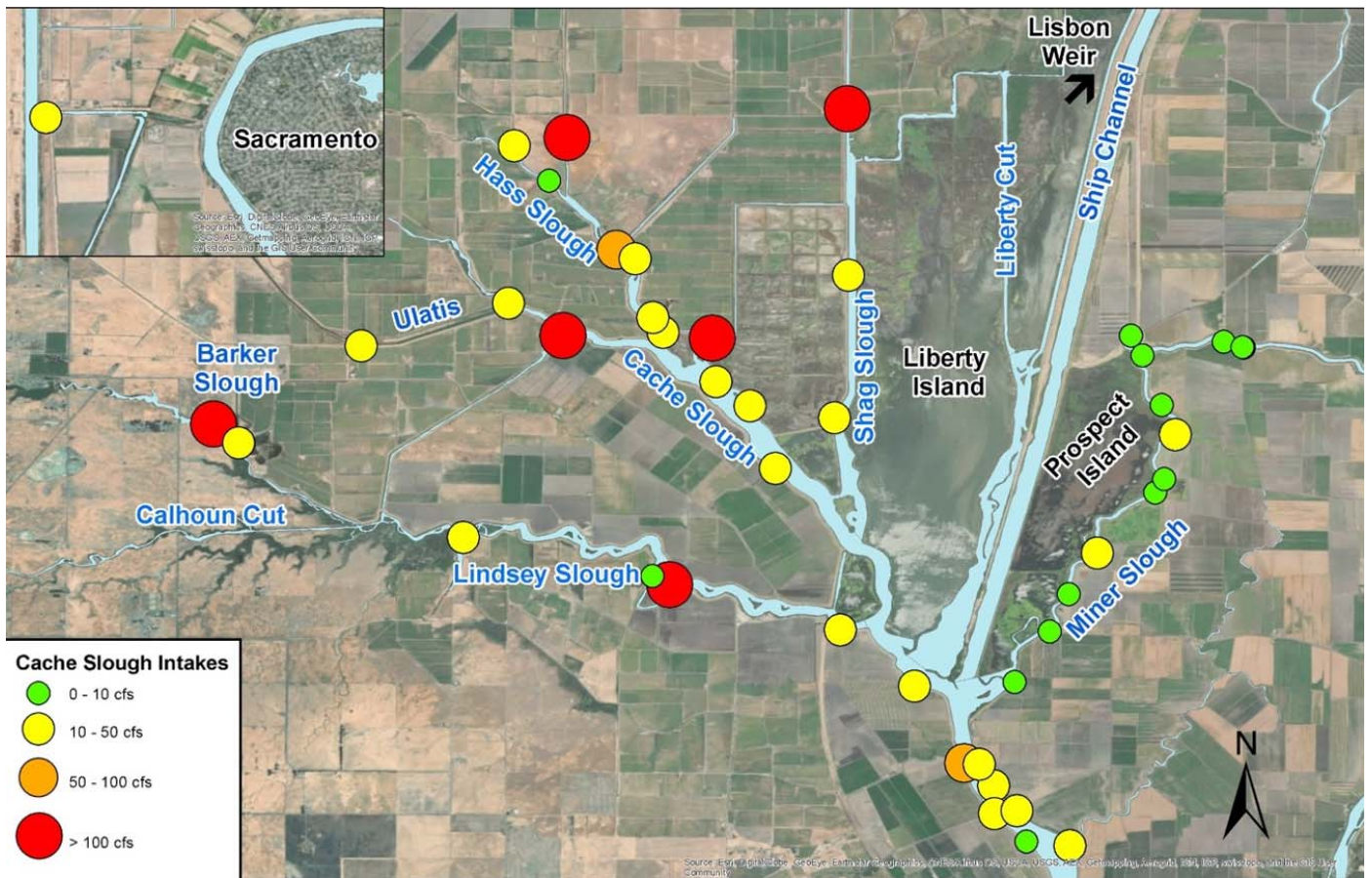


Figure 1 – The NBA AIP alignment and YBCS tributaries.





**Figure 2 – Map of Municipal and Agricultural Diversions within the YBCS system**

*\*Most small diversions are not operated 24-hrs day or at max capacity. An upper-end capacity of 2/3 is used for this analysis as a rough approximation.*

*\*\* The BSPP diversions are restricted to max 60 CFS from Mar through June in dry years when juvenile smelt are present.*

## Different Geomorphology and Land-Water Interface

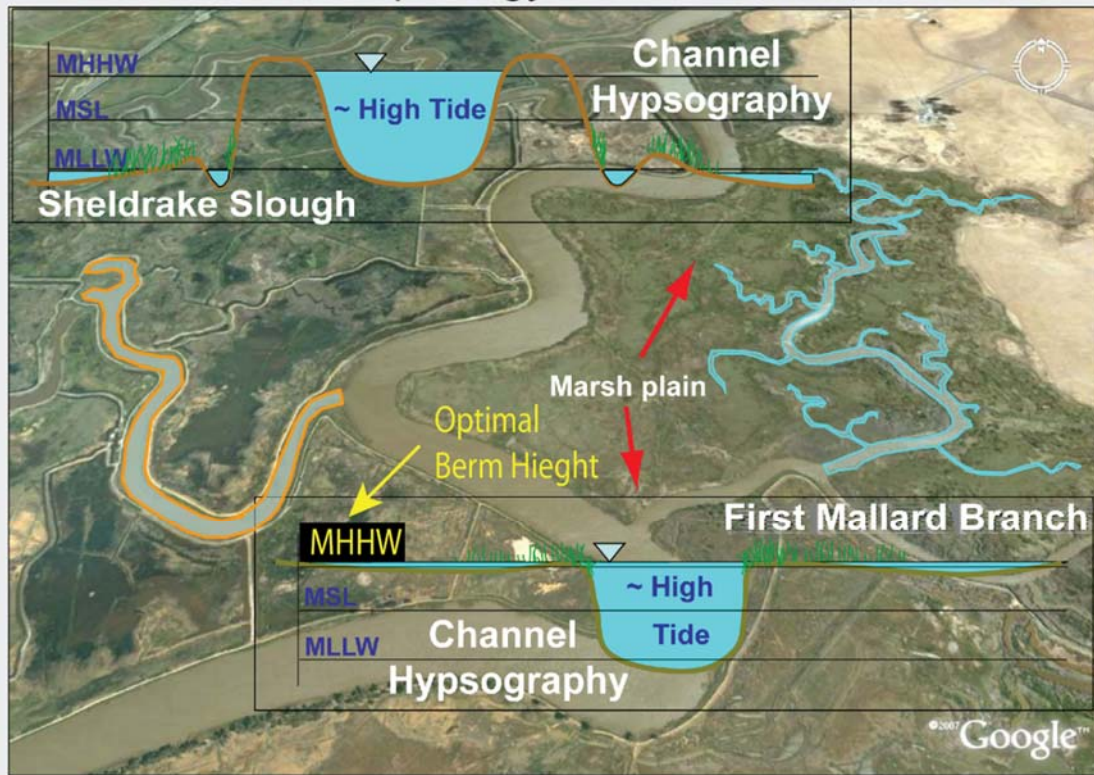


Figure 3 – Example of two different channel geomorphologies in Rush Ranch in Suisun Marsh: Sheldrake Slough a single leveed-off channel and First Mallard Branch a natural dendritic marsh system that maintains an optimal berm height at Mean Higher High Water (MHHW) that maximizes spring-tide marsh plain inundation, nutrient exchange for both channel and marsh habitats and pelagic and detrital primary production and export.

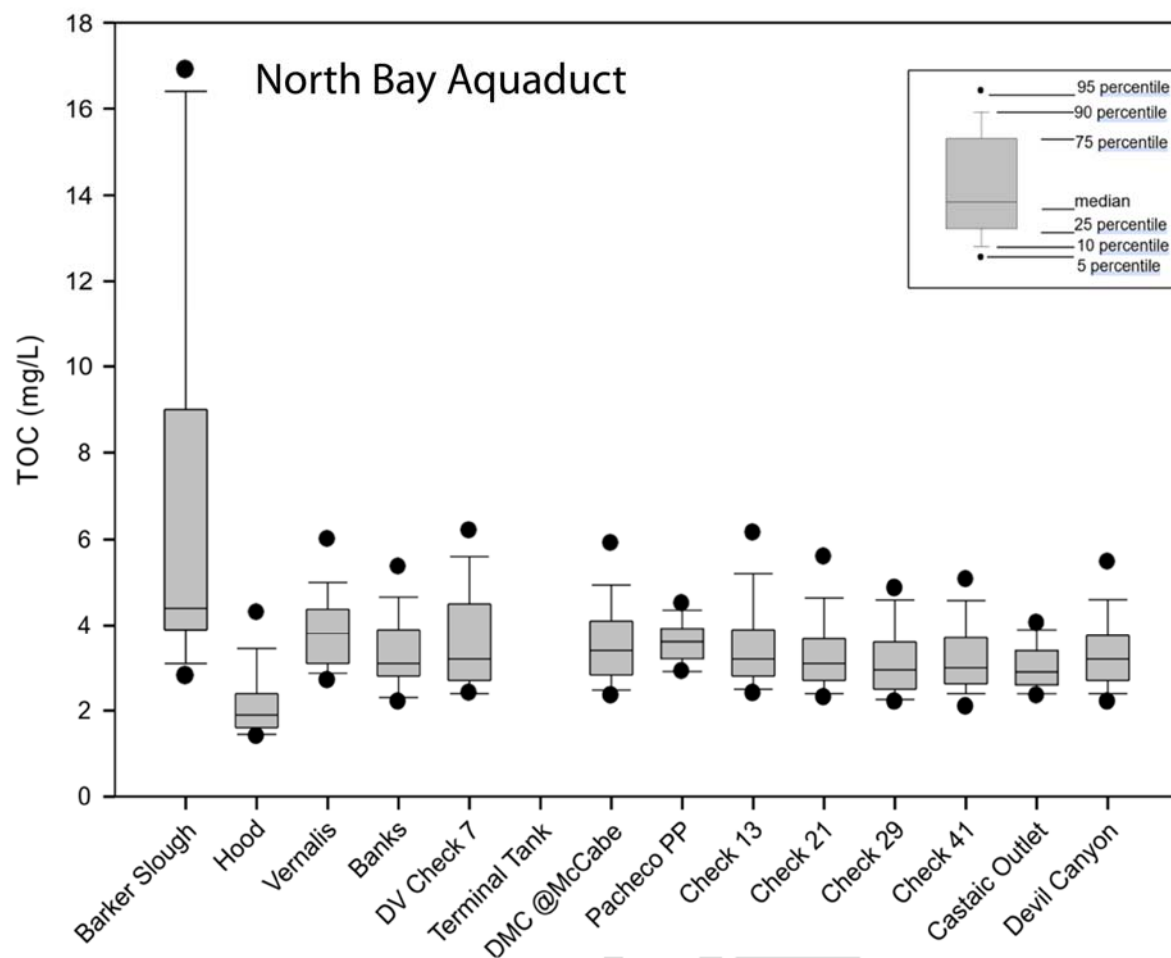
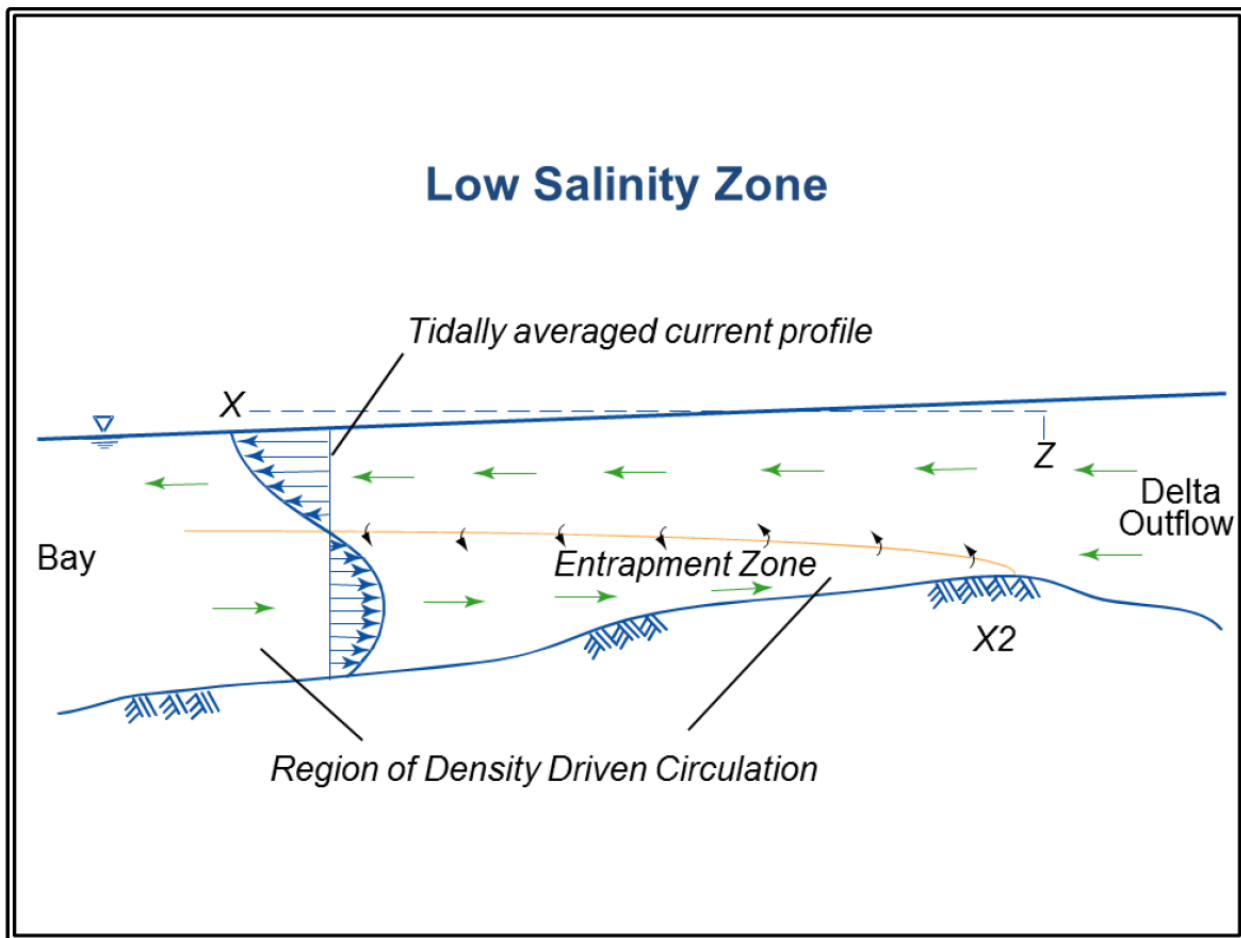


Figure 4 – Total organic content (TOC) in the Delta.



**Figure 5 – Schematic of the physics, density driven (or gravitational) circulation of accumulation of negatively buoyant materials, alternatively called the entrapment zone or estuarine turbidity maxima (ETM), that occurs in the low salinity zone of the San Francisco Estuary (Courtesy of Pete Smith, USGS retired).**



## Cache Slough Net Flows

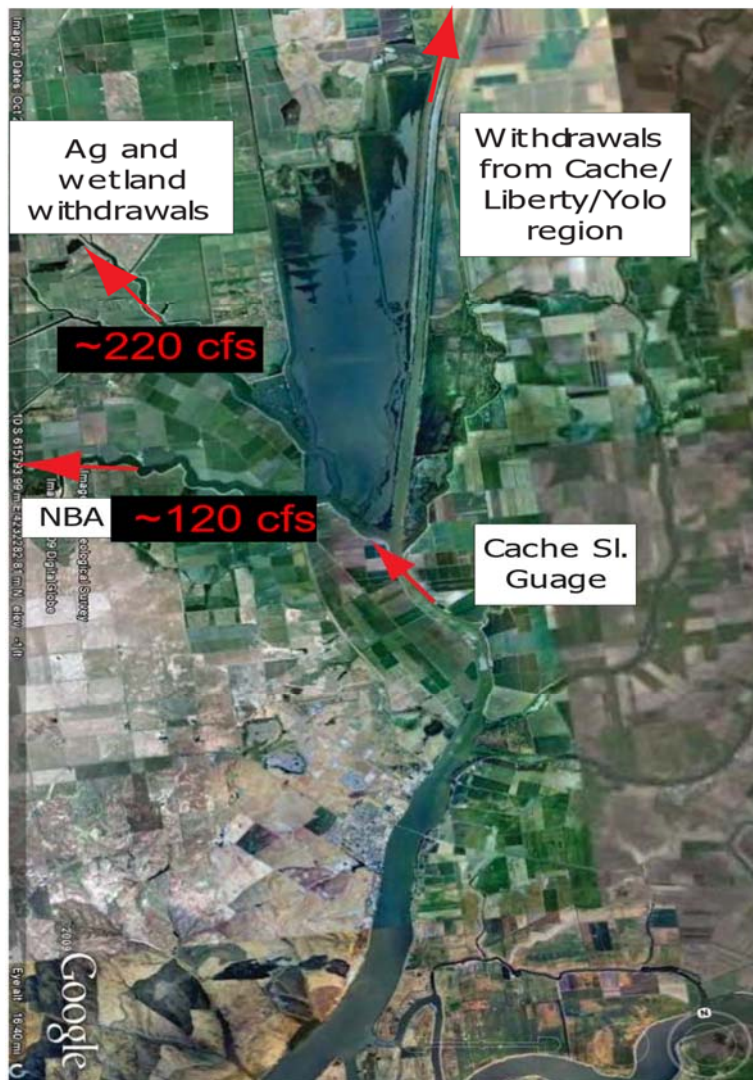


Figure 6 – Conceptual drawing of upstream net flows in Cache Slough due to NBA and agricultural diverters in the YBCS,

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DRAFT

# SOLANO COUNTY WATER AGENCY



## MEMORANDUM

**TO:** Board of Directors

**FROM:** Roland Sanford, General Manager

**DATE:** January 6, 2022

**SUBJECT:** January General Manager's Report

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### Water Supply Outlook

While we still have a long way to go in order to officially be out of the drought, December was a huge step forward. As of this writing Lake Berryessa storage is just over 1,000,000 acre-feet and still increasing, albeit modestly. As previously reported, pursuant to the Drought Measures Agreement, which dictates water supply cutbacks when lake storage on April 1 is below 800,000 acre-feet, full water supply allocations will occur in 2022. The situation for 2023 is also looking much more promising. If at least “average” rainfall occurs over the balance of the current rainy season, Lake Berryessa storage will likely peak at over 1,100,000 acre-feet, which by the close of 2022 or early 2023 will nearly guarantee that at least 800,000 acre-feet will remain in storage – enough to provide full water allocations in 2023. Stay tuned.

As of this writing there has been no official update on the State Water Project allocation for 2022. However, in view of the significant and in some instances record breaking December Sierra snowfall, we are hopeful that the 2022 allocation will be increased from essentially zero to at least five percent, if not greater. In the absence of an exceptionally wet January, February and March it remains doubtful the 2022 State Water Project allocation will exceed 40 percent due in part to very low reservoir storage at Lake Oroville, at the onset of the rainy season.

### COVID update

Prior to the Omicron COVID variant it appeared that a return to normal operations, including in-person meetings, was on the horizon. Given what has transpired vis-à-vis Omicron, for at least the next two months staff will continue to work remotely for the most part, and the office will remain open to the public by appointment only. Spring brings eternal hope.

810 Vaca Valley Parkway, Suite 203  
Vacaville, California 95688  
Phone (707) 451-6090 • FAX (707) 451-6099  
[www.scwa2.com](http://www.scwa2.com)



**REPORT OF CONSTRUCTION CHANGE ORDERS AND  
CONTRACTS APPROVED BY GENERAL MANAGER UNDER  
DELEGATED AUTHORITY**

**Construction Contract Change Orders (15% of original project costs or \$50,000, whichever is less) - None**

**Construction Contracts (\$45,000 and less) – None**

**Professional Service Agreements (\$45,000 and less) – None**

**Non-Professional Service Agreements (\$45,000 and less) – None**

**Construction contracts resulting from informal bids authorized by SCWA Ordinance- None**

Note: Cumulative change orders or amendments resulting in exceeding the dollar limit need Board approval.

# NEWS ARTICLES



# Lower Putah Creek committee taking closer look at salmon deaths

By Katherine Simpson  
Express staff writer

The Lower Putah Creek Coordinating Committee discussed the high fatality rate of salmon at their regular meeting on Dec. 9.

When the salmon reached the bottom of apuran Creek, low water quality killed the majority of the salmon.

"The fish die off is unprecedented to our knowledge," said streamkeeper Rich Marovich.

Alix Rabidoux, Principal Water Resource Engineer at Solano County Water Agency, presented a timeline of the salmon's migration path and changes to the water quality.

Rabidoux described the work



Ken W. Davis/Courtesy photo

The salmon deaths were found in the Yolo Bypass area. that they had done to clear the pass of salmon leading to their arrival in early November; however, salmon mortalities cropped up in Lower Putah Creek.

After noticing the fatalities, local agencies began analyzing the water quality. They noticed low levels of dissolved oxygen in the Yolo Bypass Toe Drain. The Toe Drain serves to manage the wetlands as the main supply source for fall flood up from October to December. Water from the Toe Drain is used until March or

April to maintain the appropriate water levels.

Likely, the rain storm on Oct. 26 flooded the water system with plants and other debris. The presence of additional organic matter in the water caused oxygen levels to drop to near-zero level.

"No mortalities (occurred) higher up in the system," said Rabidoux. "Really only in the Yolo Bypass."

A variety of agencies are collaborating to try and increase water quality

**See SALMON, Page 8**

## SALMON

*Continued from Page 1*

for any remaining salmon making the run.

"We hope to save the salmon run this year, but the longer term (benefit) is this is the practice run so that we're ready for next time" said Max Stevenson, who will replace Marovich as streamkeeper.

### Other Business

At the meeting, Ma-

rovich gave his final streamkeeper's report after 21 years in the position. He highlighted the LPCC's successes in his years on the job including efforts to ensure that the salmon population could be self-sustaining, controlling invasive Himalayan blackberries, and removing large, flammable eucalyptus trees.

Marovich thanked the committee members, "for all you've done and all you con-

tinue to do for Putah Creek."

The committee directed Stevenson to pursue new grants. One offers \$6 million to support efforts to reduce the effects of drought on wildlife and fish. Stevenson suggested that the funds could help create longer-term solutions to prevent further salmon fatalities. The second, a FEMA-grant, is aimed towards wildfire relief.



# Marovich passes the streamkeeper baton

By Rick von Geldern  
Express staff writer

Twenty-one years ago, the position of streamkeeper with the Solano County Water Agency was created by the Putah Creek Accord, an agreement ending 10 years of creek flow litigation with the mission of cleaning up Putah Creek. Rich Marovich, who has held that position since its inception, announced his retirement effective January.

Born and raised in Palo Alto, Marovich grew up exploring. He recalls as a six-year-old collecting California Black Toadlets in a five-gallon bucket from the area's cement lined creeks and releasing them into the family's garden where they were able to gorge on insects. Over the course of a couple weeks, he said they grew to be fat, healthy toads.

His mother's interest in science got him interested in collecting Monarch butterfly larvae from milkweed plants near his home. He took the larvae home, provided them with milkweed and watched the larvae pupate, or transform from caterpillars into butterflies before releasing them.

In 1978, Marovich graduated from UC Davis where he earned a bachelor's degree in plant science with a specialty in nursery management. He worked for the California Department of Pesticide Regulation as a senior environmental scientist and was the endangered species program founder and lead scientist.

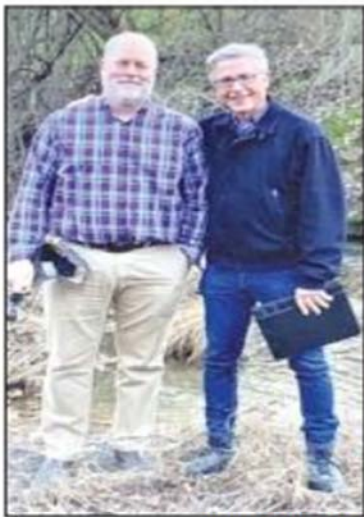
After a college reunion one year, Marovich looked up one of his classmates, Janet Krovoza, whose husband Joe sat on the Putah Creek Council. They shared an interest in white water boating and, at one point Joe told Marovich of the streamkeeper job opening and asked how he would like to get paid to go boating.

"That sounded irresistible," Marovich said. Needless to say, he was hired and became Putah Creek's first streamkeeper.

## Job responsibilities

As streamkeeper, Marovich said he, "broadly looks after Putah Creek."

Responsibilities of the



Turid Reid/Courtesy photo

Rich Marovich, right, stands with incoming streamkeeper Max Stevenson.

streamkeeper include educating the community, protecting the resources of Putah Creek, improving the habitat and water quality, protecting against excessive water flow diversions, overseeing a team of ecologists, soil scientists, aquatic, fish and wildlife biologists and working with landowners along Putah Creek. Marovich noted that 75 percent of the land along the creek is privately-owned, so to do creek work landowners must agree to it.

Marovich said there had not been a comprehensive study of Putah Creek when he became streamkeeper. One of his first grant-funded projects was to develop a watershed management action plan consisting of the creek's physical and biological features.

The first step was to make assessments of the creek, but the agency refrained from making recommendations until they talked to landowners. For decades Putah Creek was used as a dump, so identifying trash sites and reaching out to landowners to discuss cleanup was determined to be a step in the right direction. Also part of the discussion was eradication of invasive weeds, spawning of Chinook salmon and improving wildlife habitats.

Finding that most landowners were interested in cleaning up the creek led to obtaining a grant to remove trash in and along the creek. Auto and tractor parts, washing machines, empty pesticide containers, tires and just about anything you could think of had been dumped into the creek, Marovich said.

Marovich wanted to co-create with landowners along the creek so they could coordinate themselves as an interest group. It turned out that what landowners most wanted was to control trespassing, while the public wanted places to go on Putah Creek. These, he said, were complementary objectives for each stakeholder; the creek got cleaned up and the public got Winters Putah Creek Park.

## Putah Creek importance

Putah Creek has more value than they ever knew thanks to the Putah Creek Accord, said Marovich. Shortly after the accord was signed in May 2000, the Point Reyes Observatory made a reconnaissance survey stopping at tributaries along I-5 and I-505 surveying for birds and ranking their habitat.

Putah Creek was rated one out of a scale to ten, indicating very low value.

In the years since, with perpetual monitoring of wildlife along the creek, Putah Creek has been determined to be one of the best tributary streams in the Sacramento region for diversity of wildlife support, Marovich said.

"That value was concealed by the fact that it was kind of a diamond in the rough. The stream had been used as a trash dump, a drain, vegetation had been scoured out, the channel straightened for flood conveyance, mined for gravel and impacted in every way humans can impact a natural system," Marovich said.

Marovich stressed the importance of creek corridors to wildlife because this is where water is that wildlife needs to survive during the summer months. Aquatic insects flourish and provide food sources for riparian birds. This is

See BATON, Page 9



## BATON

*Continued from Page 1*

shelter and native riparian vegetation are for habitats.

"If the habitat goes away, so does our wildlife," Marovich said.

"One of the things that attracted me about this position is that it was brand new. The sky was the limit."

During his 21 years as streamkeeper, over \$14 million in grant funds were raised for physical and biological assessments, weed control, bank stabilization, geomorphic restoration and habitat enhancement.

"That made a tremendous amount of

improvement to the creek," Marovich said.

Twenty-one years of accomplishments.

We've accomplished many objectives, Marovich said, like removing trash, controlling invasive weeds, promoting native vegetation, doubling the bird population, restoring the annual Chinook salmon runs in numbers that no one thought possible and resolving excessive diversions through dialogue with riparian landowners.

"Not only did we restore a creek, but we restored a sense of community. We're all in this together. When we tap into collective wisdom, we also have

community support," Marovich said and added. "The City of Winters has been tremendous with their support."

"When we walk into the room, we don't want to put the solution on the table. We want to put the problem on the table. We don't want to reveal our solution until we've heard from the stakeholders because they may have better ideas. If you're not part of the problem, how can you possibly be part of the solution?" he asked.

### The future

Marovich is passing the baton over to Max Stevenson. Stevenson

has served since 2012 as the assistant general manager for the Yolo County Flood Control & Water Conservation District. He starts as the new Putah Creek Streamkeeper on Jan. 10, 2022. Stevenson holds a doctorate in Plant Eco Physiology from UC Davis.

"I'm thrilled to turn it over to Max Stevenson because he's super qualified and has the right temperament for it and because we now have the confidence going forward," Marovich said.

As for the future of the streamkeeper, Marovich said, "That's up to the Putah Creek Coordinating Committee and Max Stevenson

to figure out, but it's likely to be better than ever imagined. As far as we've come, there's equal or greater distance to go."

In retirement Marovich is eager to spend time gardening, whitewater rafting and to continuing to be of service for environmental enhancement. Rafting down the Colorado River is short on his bucket list.

After restoration of Winters Putah Creek Park, wildlife biologists found California Black Toads on the creek for the first time. Marovich said they must have been there all along, but who knew.

ACTION OF  
SOLANO COUNTY WATER AGENCY

DATE: January 13, 2022

SUBJECT: Resolution of Appreciation – Rich Marovich

RECOMMENDATIONS:

Adopt Resolution 2022-02 honoring Rich Marovich, Putah Creek Streamkeeper, upon his retirement after 21 years of service.


FINANCIAL IMPACT:

None

BACKGROUND:

Richard (Rich) Marovich began his 21-year career as the Putah Creek Streamkeeper on December 4, 2000. The Putah Creek Streamkeeper position was created as part of the Putah Creek Accord of 2000 (Putah Creek Accord), a settlement agreement that resolved several issues pertaining to the operation of the Solano Project and the ecological condition of Lower Putah Creek. Dr. Peter Moyle is credited with the idea of the Streamkeeper position for Putah Creek.

The Putah Creek Streamkeeper reports to the Lower Putah Creek Coordinating Committee, which was also created by the Putah Creek Accord, and is an employee of the Solano County Water Agency. As stated in the Putah Creek Accord, the Streamkeeper’s job is to monitor the condition of Putah Creek from the Putah Diversion Dam to the Yolo Bypass (Lower Putah Creek), and to make recommendations regarding the condition of the waterway and actions appropriate to preserve and protect said stream segment. At the onset, the Putah Creek Streamkeeper was part-time (32 hours per week) position and was intended to be an introductory post for budding ecologists. Rich redefined the Putah Creek Streamkeeper position and in doing so became a major factor in the success of the Putah Creek Accord.

Recommended:   
Roland Sanford, General Manager

<input type="checkbox"/>	Approved as Recommended	<input type="checkbox"/>	Other (see below)	<input checked="" type="checkbox"/>	Continued on next page
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Modification to Recommendation and/or other actions:

I, Roland Sanford, General Manager and Secretary to the Solano County Water Agency, do hereby certify that the foregoing action was regularly introduced, passed, and adopted by said Board of Directors at a regular meeting thereof held on January 13, 2022 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

Roland Sanford  
General Manager & Secretary to the  
Solano County Water Agency

**Page 2**

Rich was faced with the daunting task of repairing the Solano County Water Agency's relations with Putah Creek landowners - a major foundational achievement in itself - following the 10 years of litigation that ended with the Putah Creek Accord. His success in fostering trust among various parties is attributable to his kind disposition and outstanding work ethic.

Initially, Rich focused on garbage and debris removal projects, followed by Arundo and other invasive plant removal projects. Over time his projects became more ambitious, beginning with the installation of a limited number of rock vanes on Putah Creek and Dry Creek, a tributary to Putah Creek, to minimize channel erosion and enhance degraded riparian habitats, and gravel "scarification" (loosening of cemented stream bottom gravels) to improve salmonid spawning habitat. A major step in project complexity occurred with the removal of the derelict Winters Percolation Dam, a large concrete structure that had not been maintained for decades and inhibited fish passage, and more recently, working with the City of Winters and others to develop the Winters Putah Creek Park project.

As Rich begins his retirement, he leaves other ambitious projects poised for implementation, most notably a bypass channel at the downstream end of Lower Putah Creek to facilitate fish passage. Rich has played a pivotal role in the transformation of Lower Putah Creek from a largely ignored and degraded waterway to the ecological and community asset it is today. There is still plenty of work to do, but the foundation and path forward has been set through Rich's efforts. Rich's final day as the Putah Creek Streamkeeper was December 30, 2021.

## **RESOLUTION NUMBER 2022-02**

### **RESOLUTION OF THE BOARD OF DIRECTORS OF THE SOLANO COUNTY WATER AGENCY HONORING RICHARD (RICH) MAROVICH UPON HIS RETIREMENT FOLLOWING 21 YEARS OF SERVICE AS THE PUTAH CREEK STREAMKEEPER**

**WHEREAS** the Putah Creek Streamkeeper position was created as part of the Putah Creek Accord of 2000 (Putah Creek Accord), a settlement agreement that resolved a number of issues pertaining to the operation of the Solano Project and the ecological condition of Lower Putah Creek, and;

**WHEREAS** the Putah Creek Streamkeeper's job, as articulated in the Putah Creek Accord, is to monitor the condition of Lower Putah Creek, between the Putah Diversion Dam and Yolo Bypass, and make recommendations regarding the condition of the waterway and actions appropriate to preserve and protect said stream segment, and;

**WHEREAS** the Putah Creek Streamkeeper position, as initially envisioned, was a part-time position intended for budding ecologists, and;

**WHEREAS** Richard (Rich) Marovich began working as the Putah Creek Streamkeeper on December 4, 2000 – the first individual to hold the position of Putah Creek Streamkeeper, and;

**WHEREAS** through his kind disposition and outstanding work ethic, Rich Marovich fostered trust among parties and played a pivotal role in the transformation of Lower Putah Creek from a largely ignored and degraded waterway to the ecological and community asset it is today, and;

**WHEREAS** through his successful efforts to enhance and preserve Lower Putah Creek, Rich Marovich elevated the prominence of the Putah Creek Streamkeeper position, and in doing so became a major factor in the success of the Putah Creek Accord, and;

**WHEREAS** Rich Marovich, after serving over 21 years as the Putah Creek Streamkeeper, retired on December 30, 2021;

**NOW THEREFORE BE IT RESOLVED,** The Solano County Water Agency Board of Directors congratulate Rich Marovich on a highly successful career as the first Putah Creek Streamkeeper and wish him well in retirement.

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I, ROLAND SANFORD, General Manager and Secretary to the Board of Directors of the Solano County Water Agency, do hereby certify that the foregoing resolution was regularly introduced, passed and adopted by said Board of Directors, at a regular meeting thereof held on the 13<sup>th</sup> day January, 2022, by the following vote:

Ayes:

Noes:

Abstain:

Absent:

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Roland Sanford  
General Manager and Secretary to  
the Board of Directors of the Solano  
County Water Agency

ACTION OF  
SOLANO COUNTY WATER AGENCY

DATE: January 13, 2022

SUBJECT: Appointment of Legislative and Water Policy Committees for 2022

RECOMMENDATIONS:

Appoint Legislative and Water Policy Committees and establish respective meeting calendars.

FINANCIAL IMPACT:


None.

BACKGROUND:

Legislative Committee

The Legislative Committee consists of seven members; five Board members appointed by the Board Chair, one member appointed by the Solano Water Advisory Commission, and the Water Agency’s Legislative Advocate. The committee typically meets monthly – the first Thursday of the month – and reviews pending legislation for possible “support/non-support” recommendations and Board discussion. In 2021 the Legislative Committee consisted of the following members:

- 2021 Legislative Committee
- Director Dale Crossley (Chair)
- Supervisor Erin Hannigan
- Mayor Lori Wilson
- Mayor Ron Kott
- Director J.D. Kluge
- Carey Keaton, Solano Water Advisory Commission
- Robert Reeb, Water Agency Legislative Advocate

Recommended:   
Roland Sanford, General Manager

<input type="checkbox"/>	Approved as Recommended	<input type="checkbox"/>	Other (see below)	<input checked="" type="checkbox"/>	Continued on next page
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Modification to Recommendation and/or other actions:

I, Roland Sanford, General Manager and Secretary to the Solano County Water Agency, do hereby certify that the foregoing action was regularly introduced, passed, and adopted by said Board of Directors at a regular meeting thereof held on January 13, 2022 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

Roland Sanford  
General Manager & Secretary to the  
Solano County Water Agency

Water Policy Committee

The Water Policy Committee consists of six members; five Board members appointed by the Board Chair, and one member appointed by the Solano Water Advisory Commission. The committee typically meets monthly – the fourth Monday of the month – and reviews State and Federal policies as they pertain to the Water Agency, drafts, and recommends policies for consideration by the full Board. In 2021 the Water Policy Committee consisted of the following members:

2021 Water Policy Committee

Director Dale Crossley (Chair)  
Supervisor John Vasquez  
Supervisor Mitch Mashburn  
Mayor Robert McConnell  
Director J.D. Kluge  
Curtis Paxton, Solano Water Advisory Commission

Tentative 2022 Committee Meeting Calendars

Pursuant to existing protocol, staff recommends the following tentative committee meeting schedules for 2022:

Legislative Committee

January 24  
February 28  
March 29  
April 25  
May 23  
June 27  
July 25  
August 22  
September 26  
October 24  
November 28  
December 26

Water Policy Committee

January 19  
February 16  
March 16  
April 20  
May 18  
June 15  
July 20  
August 17  
September 21  
October 19  
November 16  
December 21



ACTION OF  
SOLANO COUNTY WATER AGENCY

DATE: January 13, 2022

SUBJECT: Appointment of Lake Berryessa Ad Hoc Committee

RECOMMENDATIONS:

Appoint ad hoc committee to review Napa County’s recreational development plans at and near Lake Berryessa.

FINANCIAL IMPACT:

None.


BACKGROUND:

The revitalization and expansion of recreational opportunities at Lake Berryessa has been on Napa County’s agenda since at least 2017. Among other things, Napa County sees opportunities for economic development at Lake Berryessa and that portion of Napa County in particular. In November 2020 the United States Bureau of Reclamation delegated direct oversight of some Lake Berryessa resorts to Napa County, and more recently, Napa County has entertained proposals to revitalize and expand recreational opportunities at Lake Berryessa. In late 2021 the Board’s Water Policy Committee began discussions regarding how Napa County’s plans to expand recreational opportunities at Lake Berryessa could impact Solano Project water supply operations, including the Water Agency’s on going invasive mussel inspection program at Lake Berryessa.

At the December 9, 2021 Board of Directors meeting the Board heard presentations on the status of the Lake Berryessa Invasive Mussel Infestation Prevention Program and briefly discussed the broader topic of recreational development at and near Lake Berryessa. Board members suggested creation of an ad hoc committee to review and advise the Board regarding the potential implications of Napa County’s recreational development plans on Solano Project water supply operations.

RELEVANCE TO 2016-2025 SCWA STRATEGIC PLAN:

Appointment of an ad hoc committee to review and advise the Board regarding the potential implications of Napa County’s recreational development plans on Solano Project water supply operations is consistent with Goal # 1 (*Optimize the management of the County’s current and future water resources in a sustainable manner*) and Goal # 4 (*Protect access to reliable water supplies under current and future stressors*) of the 2016-2025 Strategic Plan.

Recommended:   
Roland Sanford, General Manager

<input type="checkbox"/>	Approved as Recommended	<input type="checkbox"/>	Other (see below)	<input type="checkbox"/>	Continued on next page
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Modification to Recommendation and/or other actions:

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Ayes:

Noes:

Abstain:

Absent:

Roland Sanford  
General Manager & Secretary to the  
Solano County Water Agency  
JAN.2022.BOD.ITM.13

ACTION OF  
SOLANO COUNTY WATER AGENCY

DATE: January 13, 2022

SUBJECT: U.S. EPA and U.S. Army Corps of Engineers Proposed Definition of “Waters of the United States”

RECOMMENDATIONS:

Authorize Staff to submit comments on definition of “waters of the United States” proposed by U.S. EPA and U.S. Army Corps of Engineers, following review and approval of staff comments by the Board’s Water Policy Committee.

FINANCIAL IMPACT:

None.

BACKGROUND:

The definition of “waters of the United States” has significant regulatory implications. Most notably, waters of the United States, however defined, are subject to the regulatory protocols of the Federal Clean Water Act. What constitutes waters of the United States has been a source of debate since the Federal Clean Water Act was passed by Congress in 1972 and continues to be extensively debated. While rivers, lakes and other clearly navigable water bodies are widely acknowledged to be waters of the United States, less clear and the source of considerable debate are intermittent water bodies, such as seasonal wetlands and certain land surfaces draining to seasonal wetlands, as well as artificial watercourses such as roadside and irrigation ditches. How waters of the United States are defined has significant regulatory implications for agricultural operations, as well as counties, municipalities, and flood control agencies.

On December 7, 2021 the U.S. EPA and U.S. Army Corps of Engineers published a proposed definition of waters of the United States in the Federal Register (Vol. 86, No. 232), which can be accessed at: <https://www.federalregister.gov/documents/2021/12/07/2021-25601/revised-definition-of-waters-of-the-united-states>). Comments on the proposed definition are due by February 7, 2022; three days before the regularly scheduled Board meeting February. Staff is requesting authorization to submit comments on the proposed definition of waters of the United States, pending approval of the comments by the Board’s Water Policy Committee.

Recommended:   
Roland Sanford, General Manager

<input type="checkbox"/> Approved as Recommended	<input type="checkbox"/> Other (see below)	<input type="checkbox"/> Continued on next page
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