SOLANO COUNTY WATER AGENCY

BOARD OF DIRECTORS MEETING

DATE: **Thursday, July 14, 2022**

TIME: **6:30 P.M. (or immediately following the Solano GSA Meeting, should Solano GSA meeting extend beyond 6:30 P.M.)**

PLACE: **Berryessa Room**
Solano County Water Agency Office
810 Vaca Valley Parkway, Suite 203
Vacaville, CA 95688
(In-person meeting, no Zoom option available)

1. **CALL TO ORDER**

2. **PLEDGE OF ALLEGIANCE**

3. **APPROVAL OF AGENDA**

4. **PUBLIC COMMENT**

   If you wish to make a Public Comment, please contact the Secretary at: clee@scwa2.com to expedite the process, thank you. Public Comments may still be made during the meeting without prior notice.

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

   (A) Minutes: Approval of the Minutes of the Board of Directors meeting of June 9, 2022.

   (B) Expenditure Approvals: Approval of the June 2022 checking account register.

   (C) Quarterly Financial Reports: Approve the Income Statement and Balance Sheet of June 2022.

   (D) Solano Resource Conservation District Contract Renewals: Authorize General Manager to execute the following contracts:
   - School Water Education Program – 1 yr. contract: $65,000.
   - AG Water Use Efficiency – 3 yr. contract: $120,000.
   - Barker Slough Watershed Partnership 3 yr. contract: $102,000.

- Flood Awareness – 3 yr. contract: $135,000.
- Water Education Programming – 3 yr. contract: $1,346,211.

(E) Lake Berryessa Mussel Prevention Program Grant Application:
Authorize General Manager or designee to file grant application and execute grant agreements and any other documents necessary to secure $374,800 California State Parks Division of Boating and Waterways Quagga and Zebra Mussel Infestation Prevention Grant.

(F) Agreement with A2Z Landscaping for Landscape Assistance Program: Authorize General Manager to execute $250,000 contract with A2Z Landscaping for continuation of the Landscape Assistance Program.

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

RECOMMENDATION: Appoint General Manager Recruitment Committee.

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

RECOMMENDATION: For information only.

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

RECOMMENDATION: For information only.

9. CONTRACT FOR HYDRODYNAMICS FEASIBILITY STUDY IN SUPPORT OF WATER+ (AKA NORTH BAY AQUEDUCT ALTERNATE INTAKE) *(estimated time: 15 minutes)*

RECOMMENDATION: Authorize General Manager to execute contract with Resource Management Associates (RMA) for hydrodynamics feasibility study in support of Water+ (aka North Bay Aqueduct Alternate Intake Project).

10. 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.

11. 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).

12. TIME AND PLACE OF NEXT MEETING

Thursday, September 8, 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.

CONSENT ITEMS

SOLANO COUNTY WATER AGENCY
BOARD OF DIRECTORS MEETING MINUTES
MEETING DATE: June 9, 2022

The Solano County Water Agency Board of Directors met this evening in a "hybrid meeting format", with some Board members participating via Zoom teleconferencing and others present in the Board Room located at the Water Agency office in Vacaville. Attending were:

Mayor Steve Young, City of Benicia
Mayor Steve Bird, City of Dixon
Mayor Ronald Kott, City of Rio Vista
Mayor Ron Rowlett, City of Vacaville
Mayor Pro Tem Alma Hernandez, City of Suisun City
Mayor Robert McConnell, City of Vallejo
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 Dale Crossley, Reclamation District N. 2068
Director J.D. Kluge, Solano Irrigation District

CALL TO ORDER

The meeting was called to order by Vice-Chair Rowlett at 6:30 p.m.

APPROVAL OF AGENDA

On a motion by Supervisor Vasquez and a second by Director Crossley the Board unanimously approved - by roll call vote - the agenda.

PUBLIC COMMENT

There were no public comments.

CONSENT ITEMS

On a motion by Mayor Kott and a second by Director Crossley the Board unanimously approved-by roll call vote-the following consent items:

(A) Minutes
(B) Expenditure Approvals

BOARD MEMBER REPORTS

Director Kluge reported that at the last Lower Putah Creek Coordinating Committee meeting the Committee discussed ongoing riparian water diversions and the resulting difficulty maintaining minimum required streamflow rates, as required pursuant to the Putah Creek Accord, at certain locations along Lower Putah Creek. Director Kluge requested that staff provide an overview of the Putah Creek Accord at a subsequent Board meeting.

GENERAL MANAGERS REPORT

The General Manager had nothing to add to the written report.

SOLANO WATER ADVISORY COMMISSION REPORT

There were no additions to the minutes from the last Solano Water Advisory Commission meeting.

DROUGHT UPDATE

General Manager Roland Sanford reported that the State Water Resources Control Board (SWRCB) is likely to mandate the curtailment of various water rights in the Sacramento-San Joaquin drainage as the summer progresses, but that the Solano Project – which is currently delivering previously "stored" water - would not be impacted by the anticipated water curtailments, because the curtailments do not apply to previously stored water.

Mr. Kyle Ochenduszko, City of Benicia Public Works Director and Chair of the Solano Water Advisory Commission, followed Mr. Sanford's remarks with a presentation on urban water use and associated water conservation activities in Solano County. Mr. Ochenduszko referenced Governor Newsom's recent water conservation directive for cities to reduce water demands by 20 percent and noted that pursuant to the Governor's directive, the cities in Solano County have implemented Stage 2 of their respective Urban Water Management Plans. He discussed the challenges associated with achieving a 20 percent reduction in water demand and observed that what constitutes a 20 percent reduction in water demand is determined in part by what is considered the "base" water use year.

Mr. Cary Keaten, General Manager of the Solano Irrigation District, commented that while the Governor has not directed agricultural entities to reduce water use by a given percentage or rate, the fact that water deliveries from the Federal Central Valley Project and the State Water Project have been reduced significantly has resulted in the fallowing of some 500,000 to 1,000,000 acres of agricultural land in California, arguably reducing agricultural water use for the State as a whole by substantially more than 20 percent.

SCWA BUDGET FOR FISCAL YEAR 2022-2-2023

General Manager Roland Sanford reported that staff has reviewed the proposed FY 2022-2023 budget with the Board's Executive Committee and that the Executive Committee is recommending adoption of the proposed budget, as presented in the Board meeting agenda packet.

Mr. Sanford provided a brief overview of the proposed FY 2022-2023 budget, noting that the proposed FY 2022-2023 budget essentially mirrors the FY 2021-2022 budget with the notable exception that the proposed FY 2022-2023 budget includes funds for additional staff in the event the Board approves the staff additions recommended by the recently completed Workforce study.

Supervisor Vasquez commented that he would like to see more information about the various consultant contracts. After brief discussion, the Board directed staff to provide additional information about the various consultant contracts – the purpose of the contracted work and the funding source – at a subsequent Board meeting.

On a motion made by Supervisor Mashburn and a second by Director Kluge the Board unanimously approved – by roll call vote – the proposed budget for FY 2022-2023.

BUDGET IMPLEMENTATION ACTIONS

General Manager Roland Sanford briefly summarized the purpose of the following budget implementation actions: State Water Project Tax Rate for FY 2022-2023, Pre-approval of Fiscal Year 2022-2023 Payments, Adoption of SCWA Investment Policy for FY 2022-2023, Cost of Living Increase for Water Agency Employees, and Approval of Consultant Services Contracts and Renewals.

The Board discussed the proposed 3 percent cost of living increase for staff, with some Board members questioning whether a 3 percent cost of living increase was sufficient in view of ongoing inflation. Supervisor Mashburn commented that while he is supportive of the proposed 3 percent cost of living increase, it may be appropriate to reevaluate the adequacy of the proposed 3 percent cost of living increase early in the forthcoming fiscal year.

Mayor McConnell recommended that contract number 13 of agenda item 11E, a water conservation rebate program to be implemented by Richard Heath and Associates, be increased from $75,000 to $125,000.

On a motion by Mayor Price and a second by Supervisor Hannigan the Board unanimously approved - with the addition of $50,000 to the Richard Heath and Associates contract (contract number 13) - by roll call vote:

(A) State Water Project Tax Rate for Fiscal year 2022-2023: Establish a tax rate of $0.02 per $100 of assessed valuation for the State Water Project property tax for fiscal year 2022-2023.

(B) Pre-approval of Fiscal Year 2022-2023 Payments; Pre-approval of specified categories of bills for fiscal year 2022-2023.

(C) SCWA Statement of Investment Policy for Fiscal Year 2022-2023: Approval of the annual Statement of Investment Policy.

(D) Cost of Living Increase for Water Agency Employees: Award 3.00% cost of living adjustment to Water Agency employees effective July 10, 2022.

(E) Consultant Services Contracts and Renewals: Authorize General Manager to execute agreements and amendments for consultant service work through fiscal year 2022-2023.

LEGISLATIVE UPDATES

Mr. Bob Reeb of Reeb Government Relations, the Water Agency's legislative advocate, reported on the status of the proposed State Budget and the status of two pieces of legislation – AB 1717 and AB 2201. Mr. Reeb noted that the State currently has an estimated 72 billion dollar budget surplus as we approach FY 2022-2023, and that it remains unclear how or to which programs those surplus funds will be allocated.

WATER POLICY UPDATES

There were no updates from staff on current or emerging Delta and Water Policy issues.

General Manager Roland Sanford reported that the Water Policy Committee continues to discuss Napa County's desire to obtain emergency water supplies from the Solano Project.

Supervisor Mashburn reported that the Delta Counties Coalition will hold a summit at the Sacramento County Board of Supervisors chambers on June 24, 2022 to discuss various issues pertaining to the Delta.

Supervisor Vasquez reported that the Delta Protection Commission is looking for a new executive director.

Ms. Elizabeth Patterson briefed the Board on recent activities of the North Bay Watershed Association (NBWA), including a discussion the NBWA Board had on the State budget surplus and the possibility for additional water infrastructure and management funding.

CLOSED SESSION

Closed Session pursuant to Gov. Code § 54957. Public Employee Appointment. Title: General Manager

The Board moved into Closed Session at 8:13 p.m. and returned to Open Session at 8:25. No reportable actions where taken in Closed Session.

TIME AND PLACE OF NEXT MEETING

Thursday, September 8, 2022, at 6:30 p.m. at the SCWA offices.

ADJOURNMENT

The meeting of the Solano County Water Agency Board of Directors was adjourned at 8:26 p.m.

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

ACTION OF
SOLANO COUNTY WATER AGENCY

DATE: **July 14, 2022**

SUBJECT: **Expenditures Approval**

RECOMMENDATIONS:

Approve expenditures from the Water Agency checking accounts for June 2022.

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 June 2022. Additional backup information is available upon request.

Recommended: _____
Roland Sanford, General Manager

☐ Approved as Recommended ☐ Other (see below) ☐ 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 July 14, 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 Jun 1, 2022 to Jun 30, 2022

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
6/7/22	37580	2020SC	Invoice: 14505	13,023.24	
		1020SC	ZACHARIAH WILKERSON		13,023.24
6/7/22	37581	2020SC	Invoice: 202205	640.00	
		1020SC	BELIA MARTINEZ		640.00
6/7/22	37582	2020SC	Invoice: 10941	959.01	
		1020SC	LAURA BERGGREN		959.01
6/7/22	37583	2020SC	Invoice: 3939171	682.95	
		1020SC	AMERICAN TOWER CORPORATION		682.95
6/7/22	37584	2020SC	Invoice: 1222	10,719.00	
		1020SC	BADAWI & ASSOCIATES		10,719.00
6/7/22	37585	2020SC	Invoice: EXP REIM APRIL 2022	25.00	
		2020SC	Invoice: EXP REIM MAY 2022	25.00	
		1020SC	JEFF BARICH		50.00
6/7/22	37586	2020SC	Invoice: EXP REIM MAY 2022	444.46	
		1020SC	SABRINA SNYDER		444.46
6/7/22	37587	2020SC	Invoice: 5635565-0001	5,598.08	
		2020SC	Invoice: 5656490-0001	778.45	
		1020SC	NORCAL RENTAL GROUP, LLC		6,376.53
6/7/22	37588	2020SC	Invoice: 000001449429	453.88	
		1020SC	DEPT OF FORESTRY & FIRE PROTECTION		453.88
6/7/22	37589	2020SC	Invoice: MAY 2022	5,025.11	
		1020SC	JAMES B. DEROSE		5,025.11
6/7/22	37590	2020SC	Invoice: 4TP7844 PTI FEE	10.00	
		1020SC	DMV RENEWAL		10.00
6/7/22	37591	2020SC	Invoice: 92411	1,823.25	
		1020SC	ENOVEN TRUCK BODY & EQUIPMENT		1,823.25
6/7/22	37592	2020SC	Invoice: EXP REIM MAY 2022	466.57	
		1020SC	FREEDOM EVANS		466.57
6/7/22	37593	2020SC	Invoice: 380-0013826	5,721.28	
		1020SC	GHD, INC.		5,721.28
6/7/22	37594	2020SC	Invoice: EXP REIMB MAY 2022	271.28	
		1020SC	CLAYTON HEITMAN		271.28
6/7/22	37595	2020SC	Invoice: 103048	3,186.51	
		1020SC	HERUM/ CRABTREE/ SUNTAG		3,186.51
6/7/22	37596	2020SC	Invoice: 3014750	222.80	
		2020SC	Invoice: 8015434	37.95	
		2020SC	Invoice: 7015568	410.35	
		2020SC	Invoice: 5514460	36.78	
		2020SC	Invoice: 5172171	270.10	
		2020SC	Invoice: 9022219	267.56	
		2020SC	Invoice: 2011221	39.98	
		2020SC	Invoice: 4022740	421.58	
		2020SC	Invoice: 4522201	83.86	

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		2020SC	Invoice: 4010902	996.10	
		2020SC	Invoice: 3973764	391.19	
		2020SC	Invoice: 2200408		9.22
		1020SC	HOME DEPOT CREDIT SERVICE		3,169.03
6/7/22	37597	2020SC	Invoice: EXP REIM MAY 2022	470.16	
		1020SC	STEPHEN KARR		470.16
6/7/22	37598	2020SC	Invoice: 586729	180.00	
		1020SC	M&M SANITARY LLC		180.00
6/7/22	37599	2020SC	Invoice: 294250	84.00	
		1020SC	MILLENNIUM TERMITE & PEST		84.00
6/7/22	37600	2020SC	Invoice: EXP REIM MAY 2022	351.94	
		1020SC	MARC MORRIS		351.94
6/7/22	37601	2020SC	Invoice: 4/12/22-5/10/22	1,898.65	
		2020SC	Invoice: 4/21/22-5/19/22	37.85	
		1020SC	PACIFIC GAS & ELECTRIC CO,		1,936.50
6/7/22	37602	2020SC	Invoice: RM 288573 S	164,274.64	
		1020SC	PAPE MACHINERY		164,274.64
6/7/22	37603	2020SC	Invoice: 003	685.84	
		2020SC	Invoice: 004	1,135.84	
		1020SC	ELIZABETH PATTERSON		1,821.68
6/7/22	37604	2020SC	Invoice: 1541	1,250.00	
		1020SC	DOUG NOLAN		1,250.00
6/7/22	37605	2020SC	Invoice: 000407	181.48	
		2020SC	Invoice: 000299	65.86	
		1020SC	SAM'S CLUB		247.34
6/7/22	37606	2020SC	Invoice: 0531222111	6,540.00	
		1020SC	SHANDAM INC.		6,540.00
6/7/22	37607	2020SC	Invoice: 6179811	17.18	
		1020SC	SHELDON		17.18
6/7/22	37608	2020SC	Invoice: EXP REIM MAY 2022	38.87	
		1020SC	SAM MOORE		38.87
6/7/22	37609	2020SC	Invoice: EXP REIM MAY 2022	292.79	
		1020SC	HAROLD SNYDER III		292.79
6/7/22	37610	2020SC	Invoice: 12839207	21,060.16	
		1020SC	SOLINST CANADA LTD.		21,060.16
6/7/22	37611	2020SC	Invoice: 2022-SCWA-01	9,762.90	
		1020SC	DONALD R POORE		9,762.90
6/7/22	37612	2020SC	Invoice: BAWMRP#48	1,375.00	
		1020SC	THINKING GREEN CONSULTANTS		1,375.00
6/7/22	37613	2020SC	Invoice: 285	1,750.00	
		2020SC	Invoice: 283	2,150.00	
		2020SC	Invoice: 286	8,174.33	
		2020SC	Invoice: 284	1,800.00	
		2020SC	Invoice: 287	4,277.49	
		1020SC	KATHLEEN A		18,151.82

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			SALMUNOVICH		
6/14/22	37614	2020SC	Invoice: 14561	7,180.06	
		1020SC	ZACHARIAH WILKERSON		7,180.06
6/14/22	37615	2020SC	Invoice: 0687801	2,002.26	
		1020SC	ACWA JOINT POWERS INSURANCE AUTHORITY		2,002.26
6/14/22	37616	2020SC	Invoice: 562496-9	3,500.00	
		2020SC	Invoice: 551895-11	8,700.00	
		2020SC	Invoice: 563431-9	3,000.00	
		1020SC	ALPHA MEDIA LLC		15,200.00
6/14/22	37617	2020N	Invoice: 22-1007-1	2,432.75	
		1020SC	CBEC, INC.		2,432.75
6/14/22	37618	2020SC	Invoice: 5372	38,006.85	
		1020SC	EYASCO, INC.		38,006.85
6/14/22	37619	2020SC	Invoice: 103349	11,755.50	
		2020SC	Invoice: 103208	122.40	
		2020SC	Invoice: 103219	204.00	
		2020SC	Invoice: 103335	5,344.80	
		2020SC	Invoice: 103248	448.80	
		1020SC	HERUM/ CRABTREE/ SUNTAG		17,875.50
6/14/22	37620	2020SC	Invoice: 24.05-3	2,827.50	
		1020SC	MCCORD ENVIRONMENTAL, INC.		2,827.50
6/14/22	37621	2020SC	Invoice: APR/MAY 2022	102.00	
		1020SC	MILLENNIUM TERMITE & PEST		102.00
6/14/22	37622	2020SC	Invoice: 2971/72	685.86	
		2020SC	Invoice: 2969/70	686.44	
		2020SC	Invoice: 2885/2886	280.00	
		2020SC	Invoice: 2899/2898	292.18	
		2020SC	Invoice: 2983	309.83	
		2020SC	Invoice: 2979/82	570.44	
		2020SC	Invoice: 2980/81	570.44	
		2020SC	Invoice: 2936/37	166.10	
		2020SC	Invoice: 2934/35	259.88	
		1020SC	MORTONS URBAN PEST MANAGMENT		3,821.17
6/20/22	37622V	2020SC	Invoice: 2971/72		685.86
		2020SC	Invoice: 2969/70		686.44
		2020SC	Invoice: 2885/2886		280.00
		2020SC	Invoice: 2899/2898		292.18
		2020SC	Invoice: 2983		309.83
		2020SC	Invoice: 2979/82		570.44
		2020SC	Invoice: 2980/81		570.44
		2020SC	Invoice: 2936/37		166.10
		2020SC	Invoice: 2934/35		259.88
		1020SC	MORTONS URBAN PEST MANAGMENT	3,821.17	
6/14/22	37623	2020SC	Invoice: 337311	54.68	
		2020SC	Invoice: 337658	133.54	
		2020SC	Invoice: 337721	79.71	
		2020SC	Invoice: 150935	92.84	
		2020SC	Invoice: 338073	38.59	
		2020SC	Invoice: 338062	215.64	
		2020SC	Invoice: 338293	32.16	
		2020SC	Invoice: 338269	114.23	
		2020SC	Invoice: 338373	7.90	

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		2020SC	Invoice: 338570	13.25	
		2020SC	Invoice: 338573	9.18	
		2020SC	Invoice: 338567	109.88	
		2020SC	Invoice: 338618	14.45	
		2020SC	Invoice: 338646	19.26	
		2020SC	Invoice: 338711	72.85	
		2020SC	Invoice: 338674	58.29	
		2020SC	Invoice: 338703	84.98	
		1020SC	PACIFIC ACE HARDWARE		1,151.43
6/14/22	37624	2020SC	Invoice: 945609	27.64	
		2020SC	Invoice: 945598	27.86	
		2020SC	Invoice: 945728	919.28	
		2020SC	Invoice: 945730	584.51	
		2020SC	Invoice: 945787	67.02	
		2020SC	Invoice: 946015	271.40	
		2020SC	Invoice: 946393	47.06	
		2020SC	Invoice: 946392	47.06	
		2020SC	Invoice: 946394	69.66	
		2020SC	Invoice: 946385	40.73	
		2020SC	Invoice: 946650	424.39	
		2020SC	Invoice: 946598	32.43	
		2020SC	Invoice: 946645	145.82	
		2020SC	Invoice: 947196	596.55	
		2020SC	Invoice: 947212	143.69	
		2020SC	Invoice: 947602	19.07	
		2020SC	Invoice: 947600	64.67	
		2020SC	Invoice: 948302	104.63	
		1020SC	BOB PISANI & SON		3,633.47
6/14/22	37625	2020SC	Invoice: 3740118	3.14	
		1020SC	RAY MORGAN COMPANY		3.14
6/14/22	37626	2020U	Invoice: MAY 2022	3,126.88	
		1020SC	SOLANO COUNTY FLEET MANAGEMENT		3,126.88
6/14/22	37627	2020SC	Invoice: CALL #157	1,189.63	
		1020SC	CHARLES LOMELI, TAX COLLECTOR		1,189.63
6/14/22	37628	2020SC	Invoice: 75532	230.38	
		2020SC	Invoice: 75559	630.58	
		2020SC	Invoice: 75564	52.50	
		2020SC	Invoice: C75565		12.25
		2020SC	Invoice: 75812	390.86	
		2020SC	Invoice: 75876	349.54	
		1020SC	SUISUN VALLEY FRUIT GROWERS AS		1,641.61
6/14/22	37629	2020SC	Invoice: 2022-6-SCWA	12,955.82	
		1020SC	SUSTAINABLE SOLANO		12,955.82
6/14/22	37630	2020SC	Invoice: ANN SMITH	595.00	
		1020SC	ANN SMITH		595.00
6/14/22	37631	2020SC	Invoice: RAGHUNATH BANSAL	1,000.00	
		1020SC	RAGHUNATH BANSAL		1,000.00
6/14/22	37632	2020SC	Invoice: ESTHER CERLETTI	712.00	
		1020SC	ESTHER A. CERLETTI		712.00
6/14/22	37633	2020SC	Invoice: PAULETTE CLARKE	459.00	
		1020SC	PAULETTE CLARKE		459.00
6/14/22	37634	2020SC	Invoice: WAYNE	455.00	

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			CONRAD		
		1020SC	WAYNE CONRAD		455.00
6/14/22	37635	2020SC	Invoice: DEBORAH DUNCAN	964.00	
		1020SC	DEBORAH DUNCAN		964.00
6/14/22	37636	2020SC	Invoice: KIMBERLY FREEMAN	1,000.00	
		1020SC	KIMBERLY FREEMAN		1,000.00
6/14/22	37637	2020SC	Invoice: WILLIAM O'SULLIVAN	555.00	
		1020SC	WILLIAM O'SULLIVAN		555.00
6/14/22	37638	2020SC	Invoice: ESPERANZA PALLANA	1,000.00	
		1020SC	ESPERANZA PALLANA		1,000.00
6/14/22	37639	2020SC	Invoice: RICHARD SMITH	587.00	
		1020SC	RICHARD SMITH		587.00
6/14/22	37640	2020SC	Invoice: RENEE VANHOOK	1,000.00	
		1020SC	RENEE VANHOOK		1,000.00
6/14/22	37641	2020SC	Invoice: WARREN WONG	993.00	
		1020SC	WARREN WONG		993.00
6/14/22	37642	2020SC	Invoice: ANGELO & KIM ZUCCHI	888.00	
		1020SC	ANGELO & KIM ZUCCHI		888.00
6/21/22	37643	2020SC	Invoice: 55141	207.15	
		1020SC	AARON'S AUTOMOTIVE		207.15
6/21/22	37644	2020WC	Invoice: 1159	1,440.00	
		1020SC	BRETT ATKINSON		1,440.00
6/21/22	37645	2020SC	Invoice: JUN 2022 BOD MTG	109.36	
		1020SC	STEVEN BIRD		109.36
6/21/22	37646	2020SC	Invoice: SF01959	1,828.00	
		1020SC	BSK ASSOCIATES		1,828.00
6/21/22	37647	2020SC	Invoice: 28738356	908.04	
		1020SC	CANON FINANCIAL SERVICES, INC.		908.04
6/21/22	37648	2020SC	Invoice: JUN 2022 BOD MTG	100.00	
		1020SC	DALE CROSSLEY		100.00
6/21/22	37649	2020SC	Invoice: 0000001453248	680.82	
		1020SC	DEPT OF FORESTRY & FIRE PROTECTION		680.82
6/21/22	37650	2020SC	Invoice: 22-024-O-JUN 2022	815.00	
		2020N	Invoice: 22-284-V MAY 2022	176,450.00	
		2020SC	Invoice: 22-026-T JUN 2022	512,918.00	
		1020SC	DEPARTMENT OF WATER RESOURCES		690,183.00
6/21/22	37651	2020SC	Invoice: 7-761-85718	315.22	

SOLANO COUNTY WATER AGENCY
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Date	Check #	Account ID	Line Description	Debit Amount	Credit Amount
		2020SC	Invoice: 9-626-31472	8.19	
		2020SC	Invoice: 7-784-13552	111.31	
		1020SC	FEDEX EXPRESS		434.72
6/21/22	37652	2020SC	Invoice: N1557101	14,445.37	
		1020SC	HOLT AG SOLUTIONS		14,445.37
6/21/22	37653	2020SC	Invoice: CL20376	623.04	
		2020SC	Invoice: CL21784	1,254.43	
		1020SC	INTERSTATE OIL COMPANY		1,877.47
6/21/22	37654	2020SC	Invoice: JUN 2022 EXEC MTG	100.00	
		2020SC	Invoice: JUN 2022 BOD MTG	100.00	
		1020SC	JOHN D. KLUGE		200.00
6/21/22	37655	2020SC	Invoice: 63100751965	2,539.48	
		2020SC	Invoice: 63100753105	234.64	
		1020SC	LES SCHWAB GROUP HOLDINGS, LLC		2,774.12
6/21/22	37656	2020SC	Invoice: JUN 2022 BOD MTG	100.00	
		1020SC	MITCH MASHBURN		100.00
6/21/22	37657	2020SC	Invoice: JUN 2022 BOD MTG	135.10	
		1020SC	ROBERT MCCONNELL		135.10
6/21/22	37658	2020SC	Invoice: 6/8/2022	77.31	
		2020SC	Invoice: WIMMER PLANTS	231.93	
		1020SC	PUTAH CREEK COUNCIL		309.24
6/21/22	37659	2020SC	Invoice: 49381049	105.07	
		1020SC	RECOLOGY VACAVILLE SOLANO		105.07
6/21/22	37660	2020SC	Invoice: 13628	211.30	
		1020SC	REGIONAL GOVERNMENT SERVICES AUTHORITY		211.30
6/21/22	37661	2020SC	Invoice: WCP-243	3,876.40	
		1020SC	RICHARD HEATH & ASSOCIATES, INC.		3,876.40
6/21/22	37662	2020SC	Invoice: JUN 2022 BOD MTG	100.00	
		1020SC	RON ROWLETT		100.00
6/21/22	37663	2020SC	Invoice: 1492	4,753.49	
		1020SC	RW EQUIPMENT REPAIR		4,753.49
6/21/22	37664	2020U	Invoice: 11033	4,110.27	
		2020U	Invoice: 11034	1,370.63	
		2020U	Invoice: 11035	19,347.53	
		2020U	Invoice: 11036	34,225.19	
		2020U	Invoice: 11037	2,743.50	
		2020U	Invoice: 11038	1,194.70	
		2020U	Invoice: 11039	7,612.87	
		2020U	Invoice: 11040	7,660.13	
		2020U	Invoice: 11041	26,161.59	
		2020U	Invoice: 11042	5,081.98	
		2020U	Invoice: 11043	33,077.61	
		2020U	Invoice: 11044	250.10	
		1020SC	SOLANO COUNTY		142,836.10

SOLANO COUNTY WATER AGENCY
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			PUBLIC WORKS DIVISION		
6/21/22	37665	2020SC	Invoice: JUN 2022 EXEC MTG	100.00	
		1020SC	JAMES SPERING		100.00
6/21/22	37666	2020SC	Invoice: 216431	457.92	
		2020SC	Invoice: 216435	771.04	
		1020SC	STERLING MAY EQUIPMENT CO.		1,228.96
6/21/22	37667	2020SC	Invoice: 1124034	43.33	
		2020SC	Invoice: 1124033	439.98	
		1020SC	GROW WEST		483.31
6/21/22	37668	2020SC	Invoice: TROY ADAMS	1,000.00	
		1020SC	TROY ADAMS		1,000.00
6/21/22	37669	2020SC	Invoice: CLIFFORD DAWSON	1,000.00	
		1020SC	CLIFFORD DAWSON		1,000.00
6/21/22	37670	2020SC	Invoice: GARY DECOLA	853.00	
		1020SC	GARY DECOLA		853.00
6/21/22	37671	2020SC	Invoice: ANGELA FANTUZZI	347.00	
		1020SC	ANGELA FANTUZZI		347.00
6/21/22	37672	2020SC	Invoice: BREANNA GAWRYS	50.00	
		1020SC	BREANNA GAWRYS		50.00
6/21/22	37673	2020SC	Invoice: MYRA LEVINE	300.00	
		1020SC	MYRA LEVINE		300.00
6/21/22	37674	2020SC	Invoice: JULIET TORELL	1,000.00	
		1020SC	JULIET TORELL		1,000.00
6/21/22	37675	2020SC	Invoice: JUN 2022 EXEC MTG	100.00	
		2020SC	Invoice: JUN 2022 BOD MTG	100.00	
		1020SC	JOHN VASQUEZ		200.00
6/21/22	37676	2020SC	Invoice: OSV000002764935	285.00	
		1020SC	VERIZON CONNECT		285.00
6/21/22	37677	2020SC	Invoice: 13	10,148.29	
		2020SC	Invoice: 15	6,500.00	
		1020SC	VICTOR PAUL CLAASSEN		16,648.29
6/21/22	37678	2020SC	Invoice: DAVIS_FY2021-22-9	14,802.38	
		2020SC	Invoice: DAVIS_FY2021-22-10	15,479.32	
		1020SC	KEN W. DAVIS		30,281.70
6/21/22	37679	2020SC	Invoice: 1561	3,500.00	
		1020SC	WILSON PUBLIC AFFAIRS		3,500.00
6/21/22	37680	2020SC	Invoice: 158871	4,347.50	
		1020SC	WOOD RODGERS, INC.		4,347.50
6/21/22	37681	2020SC	Invoice: JUN 2022 BOD MTG	138.03	
		1020SC	STEVE YOUNG		138.03

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6/21/22	37684	2020SC	Invoice: EXP REIM MAY 2022	166.88	
		1020SC	JOSHUA FASOLO		166.88
6/28/22	37685	2020SC	Invoice: 55278	95.63	
		2020SC	Invoice: 55277	85.63	
		1020SC	AARON'S AUTOMOTIVE		181.26
6/28/22	37686	2020SC	Invoice: 3222	5,852.96	
		1020SC	AG INNOVATIONS		5,852.96
6/28/22	37687	2020SC	Invoice: 10946	822.09	
		1020SC	LAURA BERGGREN		822.09
6/28/22	37688	2020SC	Invoice: 551895-12	7,200.00	
		1020SC	ALPHA MEDIA LLC		7,200.00
6/28/22	37689	2020SC	Invoice: 2110089	758.38	
		1020SC	THE REINALT-THOMAS CORP		758.38
6/28/22	37690	2020SC	Invoice: 1055	87.50	
		2020SC	Invoice: 1006	52.50	
		1020SC	BOUCHER LAW, PC		140.00
6/28/22	37691	2020SC	Invoice: 000018346977	838.74	
		2020SC	Invoice: 000018344585	289.80	
		2020SC	Invoice: 000018344630	167.08	
		1020SC	CALNET3		1,295.62
6/28/22	37692	2020N	Invoice: 22-1007-2	2,026.50	
		2020N	Invoice: 22-1008-2	492.25	
		2020N	Invoice: 22-1007-3	9,961.75	
		1020SC	CBEC, INC.		12,480.50
6/28/22	37693	2020SC	Invoice: 5113010392	190.76	
		1020SC	CINTAS CORPORATION		190.76
6/28/22	37694	2020SC	Invoice: 7-791-81316	132.79	
		1020SC	FEDEX EXPRESS		132.79
6/28/22	37695	2020SC	Invoice: 1-505186	722.65	
		1020SC	FIRST VANGUARD RENTALS & SALES		722.65
6/28/22	37696	2020SC	Invoice: 6318	836.11	
		1020SC	HOOD PROMOTIONS GROUP, INC.		836.11
6/28/22	37697	2020SC	Invoice: CL23205	2,545.93	
		1020SC	INTERSTATE OIL COMPANY		2,545.93
6/28/22	37698	2020SC	Invoice: 2210	2,475.00	
		1020SC	CHERYL MONAGHAN		2,475.00
6/28/22	37699	2020SC	Invoice: 5783	6,474.00	
		2020SC	Invoice: 5801	585.00	
		2020SC	Invoice: 5814	7,969.00	
		1020SC	J.T. MARTIN		15,028.00
6/28/22	37700	2020SC	Invoice: 0118960	96.00	
		1020SC	DARYL SISCO		96.00
6/28/22	37701	2020SC	Invoice: 183214	31,788.75	
		2020SC	Invoice: 183122	920.00	
		1020SC	LSA ASSOCIATES, INC.		32,708.75
6/28/22	37702	2020SC	Invoice: 2758-60		840.00

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Date	Check #	Account ID	Line Description	Debit Amount	Credit Amount
		2020SC	Invoice: 2971/72	685.86	
		2020SC	Invoice: 2969/70	686.44	
		2020SC	Invoice: 2885/2886	291.60	
		2020SC	Invoice: 2899/2898	292.18	
		2020SC	Invoice: 2983	309.83	
		2020SC	Invoice: 2979/82	570.44	
		2020SC	Invoice: 2980/81	570.44	
		2020SC	Invoice: 2936/37	166.10	
		2020SC	Invoice: 2934/35	516.10	
		1020SC	MORTONS URBAN PEST MANAGMENT		3,248.99
6/28/22	37703	2020SC	Invoice: 5/11/22-6/9/22	2,698.51	
		1020SC	PACIFIC GAS & ELECTRIC CO,		2,698.51
6/28/22	37704	2020SC	Invoice: 3105551838	542.83	
		1020SC	PITNEY BOWES		542.83
6/28/22	37705	2020SC	Invoice: EXP REIM MAY 2022	189.99	
		1020SC	EDUARDO RANGEL		189.99
6/28/22	37706	2020SC	Invoice: 49379902	277.28	
		1020SC	RECOLOGY VACAVILLE SOLANO		277.28
6/28/22	37707	2020SC	Invoice: EXP REIM 2022	79.80	
		1020SC	SAM MOORE		79.80
6/28/22	37708	2020SC	Invoice: CM 0031830		1,707.66
		2020SC	Invoice: 0031977	14,428.53	
		2020SC	Invoice: 0031978	277.39	
		2020SC	Invoice: 0031984	131,888.68	
		2020SC	Invoice: 0031983	58,221.84	
		1020SC	SOLANO IRRIGATION DISTRICT		203,108.78
6/28/22	37708a	1020SC	VOID		
6/28/22	37709	2020SC	Invoice: 006492990046 JUL2022	2,210.77	
		1020SC	STANDARD INSURANCE COMPANY		2,210.77
6/28/22	37710	2020SC	Invoice: 3076617181	221.60	
		2020SC	Invoice: 3083184711	270.77	
		2020SC	Invoice: 3089787271	85.91	
		1020SC	STAPLES		578.28
6/28/22	37711	2020SC	Invoice: 217124	82.51	
		1020SC	STERLING MAY EQUIPMENT CO.		82.51
6/28/22	37712	2020SC	Invoice: 879815	3,777.20	
		2020SC	Invoice: 881092	1,988.20	
		1020SC	SYAR INDUSTRIES, INC		5,765.40
6/28/22	37713	2020SC	Invoice: 9908129225	1,297.74	
		1020SC	VERIZON WIRELESS		1,297.74
6/28/22	37714	2020SC	Invoice: 12-B	9,036.22	
		2020SC	Invoice: 14	11,310.00	
		1020SC	VICTOR PAUL CLAASSEN		20,346.22
6/28/22	37715	2020SC	Invoice: 21422	1,195.00	
		1020SC	WESTERN WEATHER GROUP INK		1,195.00

SOLANO COUNTY WATER AGENCY
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6/28/22	37716	2020SC	Invoice: DAVIS_FY2021-22-11	16,994.98	
		1020SC	KEN W. DAVIS		16,994.98
6/28/22	37717	2020SC	Invoice: 41650	595.00	
		1020SC	CAL.NET INC. (WAS WINTERS BROADBAND)		595.00
6/28/22	37718	2020SC	Invoice: 943321	3,797.10	
		1020SC	YELLOW SPRINGS INSTRUMENT CO.		3,797.10
6/25/22	ASHLEY MAY 2022	2020SC	Invoice: ASHLEY MAY 2022	612.15	
		1020SC	UMPQUA BANK		612.15
6/25/22	CRUZ MAY 2022	2020SC	Invoice: CRUZ MAY 2022	465.16	
		1020SC	UMPQUA BANK		465.16
6/25/22	CUETARA MAY 2022	2020SC	Invoice: CUETARA MAY 2022	478.50	
		1020SC	UMPQUA BANK		478.50
6/1/22	EFT	2020SC	Invoice: JUNE 2022 HEALTH	24,188.34	
		1020SC	CALPERS		24,188.34
6/2/22	EFT	2020SC	Invoice: SIP PPE 05.28.2022	7,566.26	
		2020SC	Invoice: PEPRA PPE 05.28.2022	5,981.08	
		2020SC	Invoice: PPE 05.28.2022	9,795.97	
		1020SC	CALPERS		23,343.31
6/10/22	EFT	2020SC	Invoice: 25290477	130.00	
		1020SC	PAYCHEX		130.00
6/11/22	EFT	2020SC	Invoice: SIP PPE 06.11.2022	7,491.13	
		2020SC	Invoice: PPE 06.11.2022	9,795.97	
		2020SC	Invoice: PEPRA 06.11.2022	5,981.10	
		1020SC	CALPERS		23,268.20
6/17/22	EFT	2020SC	Invoice: 66742	112.20	
		1020SC	ONEPOINT HUMAN CAPITAL MANAGEMENT LLC		112.20
6/21/22	EFT	2020SC	Invoice: 81394381	2,380.30	
		1020SC	WEX BANK		2,380.30
6/30/22	EFT	2020SC	Invoice: PPE 06.25.2022	9,795.97	
		2020SC	Invoice: PEPRA PPE 06.25.2022	5,981.10	
		2020SC	Invoice: SIP PPE 06.25.2022	8,101.53	
		1020SC	CALPERS		23,878.60
6/3/22	EFT	2020SC	Invoice: 66341	521.90	
		1020SC	ONEPOINT HUMAN CAPITAL MANAGEMENT LLC		521.90
6/11/22	EFT 06.11.2022	6012AC	EMPLOYER LIABILITIES PPE 6.11.2022	3,136.47	
		2024AC	EMPLOYEE LIABILITIES PPE 6.11.2022	21,800.15	

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		1020SC	PAYROLL TAXES		24,936.62
6/25/22	EFT 06.25.2022	6012AC	EMPLOYER LIABILITIES PPE 6.25.2022	3,038.32	
		2024AC	EMPLOYEE LIABILITIES PPE 6.25.2022	21,515.32	
		1020SC	PAYROLL TAXES		24,553.64
6/25/22	FEHRENKAMP MAY 202	2020SC	Invoice: FEHRENKAMP MAY 2022	622.98	
		1020SC	UMPQUA BANK		622.98
6/25/22	FOWLER MAY 2022	2020SC	Invoice: FOWLER MAY 2022	1,115.77	
		1020SC	UMPQUA BANK		1,115.77
6/25/22	HYER APR 2022	2020SC	Invoice: HYER APR 2022		120.47
		1020SC	UMPQUA BANK	120.47	
6/25/22	HYER MAY 2022	2020SC	Invoice: HYER MAY 2022	455.72	
		1020SC	UMPQUA BANK		455.72
6/25/22	JONES MAY 2022	2020SC	Invoice: JONES MAY 2022	568.63	
		1020SC	UMPQUA BANK		568.63
6/25/22	LEE MAY 2022	2020SC	Invoice: LEE MAY 2022	3,703.96	
		1020SC	UMPQUA BANK		3,703.96
6/25/22	MOORE MAY 2022	2020SC	Invoice: MOORE MAY 2022	350.51	
		1020SC	UMPQUA BANK		350.51
6/25/22	MORRIS MAY 2022	2020U	Invoice: MORRIS MAY 2022	1,033.01	
		1020SC	UMPQUA BANK		1,033.01
6/25/22	PASCUAL MAY 2022	2020SC	Invoice: PASCUAL MAY 2022	253.16	
		1020SC	UMPQUA BANK		253.16
6/25/22	PATE MAY 2022	2020SC	Invoice: PATE MAY 2022	1,198.65	
		1020SC	UMPQUA BANK		1,198.65
6/25/22	POORE MAY 2022	2020SC	Invoice: POORE MAY 2022	545.81	
		1020SC	UMPQUA BANK		545.81
6/1/22	Petty Cash 6.01.2022	2020SC	Invoice: EXP REIMB 3.09.22	11.70	
		1060SC	ZACH HYER		11.70
6/25/22	RABIDOUX MAY 2022	2020SC	Invoice: RABIDOUX MAY 2022	127.41	
		1020SC	UMPQUA BANK		127.41
6/25/22	SHTAYYEH MAY 2022	2020U	Invoice: SHTAYYEH MAY 2022	684.75	
		1020SC	UMPQUA BANK		684.75
6/25/22	SNYDER MAY 2022	2020SC	Invoice: SNYDER MAY 2022	2,135.12	
		1020SC	UMPQUA BANK		2,135.12
6/25/22	STEVENSON MAY 2022	2020SC	Invoice: STEVENSON MAY 2022	9.41	
		1020SC	UMPQUA BANK		9.41

SOLANO COUNTY WATER AGENCY
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6/25/22	WILLINGMYRE MAY 20	2020SC	Invoice: WILLINGMYRE MAY 2022	37.14	
		1020SC	UMPQUA BANK		37.14
	Total			1,848,488.97	1,848,488.97

ACTION OF
SOLANO COUNTY WATER AGENCY

DATE: **July 14, 2022**

SUBJECT: **Financial Report Approval**

RECOMMENDATIONS:

Approve the quarterly Income Statement and Balance Sheet for the period ending June 2022.

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 June 2022. Additional backup information is available upon request.

Recommended: _____
Roland Sanford, General Manager

☐ Approved as Recommended	☐ Other (see below)	☐ Continued on next page

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 July 14, 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 Twelve Months Ending June 30, 2022

	Current Year Actual	Current Year Budget	Variance Amount	Variance Percent	Last Year Actual	Change from Last Year	Percent Change
Revenues							
SECURED	$ 91,367.80	$ 94,000.00	(2,632.20)	(2.80)	$ 111,377.18	(20,009.38)	(17.97)
SECURED	14,859,777.25	14,700,010.00	159,767.25	1.09	14,249,250.27	610,526.98	4.28
SECURED	8,743,838.31	8,700,000.00	43,838.31	0.50	8,403,475.80	340,362.51	4.05
SECURED	1,191,915.60	1,200,000.00	(8,084.40)	(0.67)	1,128,561.27	63,354.33	5.61
UNSECURED	4,502.23	3,500.00	1,002.23	28.64	3,717.75	784.48	21.10
UNSECURED	363,014.65	355,000.00	8,014.65	2.26	358,285.59	4,729.06	1.32
UNSECURED	317,167.25	295,000.00	22,167.25	7.51	309,396.41	7,770.84	2.51
UNSECURED	40,057.56	36,000.00	4,057.56	11.27	40,144.45	(86.89)	(0.22)
CURRENT SUPPLEMENTAL	2,648.54	1,000.00	1,648.54	164.85	2,021.72	626.82	31.00
CURRENT SUPPLEMENTAL	269,387.34	238,800.00	30,587.34	12.81	145,202.91	124,184.43	85.52
CURRENT SUPPLEMENTAL	188,622.54	120,000.00	68,622.54	57.19	102,613.09	86,009.45	83.82
CURRENT SUPPLEMENTAL	24,906.68	16,000.00	8,906.68	55.67	11,916.24	12,990.44	109.01
WATER SALES	1,685,444.00	1,560,100.00	125,344.00	8.03	1,603,170.00	82,274.00	5.13
WATER SALES	93,208.00	83,000.00	10,208.00	12.30	83,062.00	10,146.00	12.21
COST OF POWER TO PUMP NBA	269,278.05	50,000.00	219,278.05	438.56	138,225.57	131,052.48	94.81
CONVEYANCE SETTLEMENT	368,154.78	100,000.00	268,154.78	268.15	71,066.63	297,088.15	418.04
NAPA MAKE WHOLE	312,000.00	312,000.00	0.00	0.00	312,000.00	0.00	0.00
SWP ADJUSTMENTS	832,743.00	256,000.00	576,743.00	225.29	803,709.00	29,034.00	3.61
INTEREST - MONEY MGMT	17.54	40.00	(22.46)	(56.15)	31.60	(14.06)	(44.49)
INTEREST - CHECKING	236.07	250.00	(13.93)	(5.57)	254.87	(18.80)	(7.38)
INTEREST - LAIF - GREEN VALLEY	311.99	325.00	(13.01)	(4.00)	514.60	(202.61)	(39.37)
INTEREST - LAIF - SWP	23,920.51	26,000.00	(2,079.49)	(8.00)	44,459.72	(20,539.21)	(46.20)
INTEREST - LAIF - SP	14,373.93	23,000.00	(8,626.07)	(37.50)	39,024.20	(24,650.27)	(63.17)
INTEREST - LAIF - ULATIS	7,225.35	8,300.00	(1,074.65)	(12.95)	14,184.92	(6,959.57)	(49.06)
INTEREST - CAMP - GREEN VALLEY	281.76	325.00	(43.24)	(13.30)	205.47	76.29	37.13
INTEREST - CAMP - SWP	21,818.60	27,000.00	(5,181.40)	(19.19)	17,751.62	4,066.98	22.91
INTEREST - CAMP - SP	14,991.43	24,000.00	(9,008.57)	(37.54)	15,581.35	(589.92)	(3.79)
INTEREST - CAMP - ULATIS	6,684.12	8,500.00	(1,815.88)	(21.36)	5,663.66	1,020.46	18.02
INTEREST - OTHER	0.00	0.00	0.00	0.00	50.63	(50.63)	(100.00)
INTEREST- INVESTMENT	407.62	500.00	(92.38)	(18.48)	444.82	(37.20)	(8.36)
INTEREST - INVESTMENTS	32,258.50	40,000.00	(7,741.50)	(19.35)	38,429.73	(6,171.23)	(16.06)
INTEREST - INVESTMENTS	21,709.87	28,000.00	(6,290.13)	(22.46)	33,731.39	(12,021.52)	(35.64)
INTEREST - INVESTMENTS	9,889.03	6,611.00	3,278.03	49.58	12,261.03	(2,372.00)	(19.35)
INTEREST - INVESTMENTS	0.00	0.00	0.00	0.00	(270.37)	270.37	(100.00)
INTEREST-CHANGE IN MARKET VAL	0.00	0.00	0.00	0.00	(23,358.91)	23,358.91	(100.00)
INTEREST-CHANGE IN MARKET VALU	0.00	0.00	0.00	0.00	(20,503.11)	20,503.11	(100.00)
INTEREST-CHANGE IN MRKET VALUE	0.00	0.00	0.00	0.00	(7,452.68)	7,452.68	(100.00)
HOMEOWNER RELIEF	1,164.00	1,100.00	64.00	5.82	1,178.00	(14.00)	(1.19)
HOMEOWNER RELIEF	77,846.00	81,000.00	(3,154.00)	(3.89)	78,502.00	(656.00)	(0.84)
HOMEOWNER RELIEF	70,156.00	70,000.00	156.00	0.22	70,725.00	(569.00)	(0.80)

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HOMEOWNER RELIEF	8,858.70	10,200.00	(1,341.30)	(13.15)	8,856.15	2.55	0.03
REDEVELOP - DIX/RV	55,017.37	65,000.00	(9,982.63)	(15.36)	50,856.44	4,160.93	8.18
REDEVELOP - VACAVILLE	951,911.43	630,000.00	321,911.43	51.10	668,955.51	282,955.92	42.30
REDEVELOP - VACAVILLE	548,057.02	345,500.00	202,557.02	58.63	352,948.20	195,108.82	55.28
REDEVELOP - FAIRFIELD	30,914.47	48,400.00	(17,485.53)	(36.13)	30,182.24	732.23	2.43
REDEVELOP - FAIRFIELD	988,206.51	1,100,000.00	(111,793.49)	(10.16)	928,345.46	59,861.05	6.45
REDEVELOP - SUISUN CITY	438,389.08	420,000.00	18,389.08	4.38	376,635.39	61,753.69	16.40
REDEVELOP - N. TEXAS	41,854.85	70,000.00	(28,145.15)	(40.21)	45,479.86	(3,625.01)	(7.97)
BOATING AND WATERWAYS	(89,767.95)	100,000.00	(189,767.95)	(189.77)	175,265.48	(265,033.43)	(151.22)
USBR Grant	0.00	45,000.00	(45,000.00)	(100.00)	153,268.46	(153,268.46)	(100.00)
NISHIKAWA GRANT	0.00	250,000.00	(250,000.00)	(100.00)	0.00	0.00	0.00
MISCELLANEOUS INCOME	17.94	0.00	17.94	0.00	43.60	(25.66)	(58.85)
MISC INCOME	17,240.73	23,242.00	(6,001.27)	(25.82)	17,240.73	0.00	0.00
MISCELLANEOUS INCOME	21,558.82	23,241.00	(1,682.18)	(7.24)	222,294.47	(200,735.65)	(90.30)
SACKETT RANCH LEASE REVENUE	22,086.50	754,205.00	(732,118.50)	(97.07)	19,300.00	2,786.50	14.44
Lang-Rule Revenues	1,000.00	0.00	1,000.00	0.00	0.00	1,000.00	0.00
GREENHOUSE REVENUES	0.00	0.00	0.00	0.00	10,684.50	(10,684.50)	(100.00)
O&M - OTHER AGENCIES	7,651.40	8,000.00	(348.60)	(4.36)	13,436.47	(5,785.07)	(43.05)
OVERHEAD DISTRIBUTION REIMB	3,575,284.94	6,433,510.00	(2,858,225.06)	(44.43)	4,565,864.57	(990,579.63)	(21.70)
WATERMASTER INCOME	2,944.42	4,000.00	(1,055.58)	(26.39)	3,127.35	(182.93)	(5.85)
WATER CONSERVATION REIMBURSE	0.00	142,500.00	(142,500.00)	(100.00)	169,199.29	(169,199.29)	(100.00)
BAY AREA IRWMP GRANT	0.00	78,000.00	(78,000.00)	(100.00)	35,656.04	(35,656.04)	(100.00)
LPCCC SERVICES	0.00	0.00	0.00	0.00	98,000.00	(98,000.00)	(100.00)
LOAN PROCEEDS REVENUE	0.00	0.00	0.00	0.00	100,352.69	(100,352.69)	(100.00)
Total Revenues	36,582,552.13	39,016,159.00	(2,433,606.87)	(6.24)	36,244,598.32	337,953.81	0.93
Cost of Sales							
Total Cost of Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Profit	36,582,552.13	39,016,159.00	(2,433,606.87)	(6.24)	36,244,598.32	337,953.81	0.93
Expenses							
CAPITAL EXPENDITURES	148,453.66	698,056.00	(549,602.34)	(78.73)	18,404.08	130,049.58	706.63
CAPITAL EXPENDITURES	0.00	36,740.00	(36,740.00)	(100.00)	0.00	0.00	0.00
CAPITAL EXPENDITURES	1,793,347.48	2,376,097.00	(582,749.52)	(24.53)	0.00	1,793,347.48	0.00
CAPITAL EXPENDITURES	363,302.20	2,889,618.00	(2,526,315.80)	(87.43)	3,140,537.69	(2,777,235.49)	(88.43)
CAPITAL EXPENDITURES	0.00	73,480.00	(73,480.00)	(100.00)	0.00	0.00	0.00
DEBT SERVICE - PRINCIPAL	11,348.41	0.00	11,348.41	0.00	2,241.48	9,106.93	406.29

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DEBT SERVICE - INTEREST	1,937.98	0.00	1,937.98	0.00	415.80	1,522.18	366.08
GROSS SALARIES	2,684,393.34	3,351,100.00	(666,706.66)	(19.90)	2,516,741.50	167,651.84	6.66
PERS RETIREMENT	336,063.24	388,600.00	(52,536.76)	(13.52)	344,557.84	(8,494.60)	(2.47)
PAYROLL TAXES	96,368.88	136,800.00	(40,431.12)	(29.55)	94,915.70	1,453.18	1.53
EMPLOYEE BENEFITS	333,684.85	478,000.00	(144,315.15)	(30.19)	314,672.59	19,012.26	6.04
OPEB/PENSION UNFUNDED EXPENSE	0.00	0.00	0.00	0.00	228,288.00	(228,288.00)	(100.00)
TELEPHONE	38,986.06	42,700.00	(3,713.94)	(8.70)	42,146.83	(3,160.77)	(7.50)
OFFICE EXPENSE	14,530.65	32,900.00	(18,369.35)	(55.83)	17,975.16	(3,444.51)	(19.16)
OFFICE EQUIPMENT	18,295.21	30,250.00	(11,954.79)	(39.52)	23,779.03	(5,483.82)	(23.06)
SAFETY TRAINING & EQUIPMENT	5,889.41	8,300.00	(2,410.59)	(29.04)	9,643.79	(3,754.38)	(38.93)
OFFICE HELP - TEMPORARY	1,208.00	10,000.00	(8,792.00)	(87.92)	0.00	1,208.00	0.00
HR -EMPLOYEE SUPPORT	27,564.50	100,000.00	(72,435.50)	(72.44)	20,865.59	6,698.91	32.11
POSTAGE	2,280.82	9,400.00	(7,119.18)	(75.74)	5,495.14	(3,214.32)	(58.49)
SID OFFICE EXPENSE	54,353.00	67,325.00	(12,972.00)	(19.27)	48,944.51	5,408.49	11.05
MEMBERSHIPS	63,944.87	72,690.00	(8,745.13)	(12.03)	66,339.36	(2,394.49)	(3.61)
SWC DUES	100,386.00	116,000.00	(15,614.00)	(13.46)	83,303.00	17,083.00	20.51
PPTY TAX ADMIN FEE	1,419.00	1,100.00	319.00	29.00	1,184.00	235.00	19.85
PPTY TAX ADMIN FEE	134,415.00	102,500.00	31,915.00	31.14	112,212.00	22,203.00	19.79
PPTY TAX ADMIN FEE	18,271.00	13,600.00	4,671.00	34.35	15,251.00	3,020.00	19.80
PETERSEN RANCH EXPENSES	4,824.91	55,000.00	(50,175.09)	(91.23)	28,367.85	(23,542.94)	(82.99)
PETERSEN RANCH EXPENSES	94,474.18	55,000.00	39,474.18	71.77	28,367.85	66,106.33	233.03
SACKETT RANCH EXPENSES	86,386.58	95,000.00	(8,613.42)	(9.07)	106,009.63	(19,623.05)	(18.51)
LANG-TULE MAINTENANCE	0.00	20,000.00	(20,000.00)	(100.00)	0.00	0.00	0.00
PS - PAYROLL SERVICES	9,419.65	11,700.00	(2,280.35)	(19.49)	13,193.42	(3,773.77)	(28.60)
PS - COMPUTER SERVICES	628,281.43	651,250.00	(22,968.57)	(3.53)	664,940.62	(36,659.19)	(5.51)
TALENT DECISION MONITORING	8,850.00	28,000.00	(19,150.00)	(68.39)	8,526.40	323.60	3.80
GOVERNMENTAL ADVOCACY	92,000.00	72,000.00	20,000.00	27.78	109,384.50	(17,384.50)	(15.89)
GOVERNMENTAL ADVOCACY	57,000.00	108,000.00	(51,000.00)	(47.22)	47,500.00	9,500.00	20.00
LPCCC - VEGETATION	5,590.47	14,793.00	(9,202.53)	(62.21)	13,516.87	(7,926.40)	(58.64)
CONSULTANTS	235,279.43	295,900.00	(60,620.57)	(20.49)	406,859.40	(171,579.97)	(42.17)
CONSULTANTS	100,338.60	246,000.00	(145,661.40)	(59.21)	96,061.08	4,277.52	4.45
CONSULTANTS	180,885.55	504,500.00	(323,614.45)	(64.15)	159,232.37	21,653.18	13.60
CONSULTANTS	71,815.66	300,000.00	(228,184.34)	(76.06)	159,020.57	(87,204.91)	(54.84)
HYDROLOGY STATIONS	24,480.21	39,000.00	(14,519.79)	(37.23)	19,834.63	4,645.58	23.42
HYDROLOGY STATIONS	13,189.01	27,000.00	(13,810.99)	(51.15)	13,526.96	(337.95)	(2.50)
HYDROLOGY STATIONS	110,851.05	95,000.00	15,851.05	16.69	50,850.73	60,000.32	117.99
HYDROLOGY STATIONS	13,790.05	15,000.00	(1,209.95)	(8.07)	79.91	13,710.14	17,156.98
LPCCC - WILDLIFE	155,573.49	81,359.00	74,214.49	91.22	73,928.94	81,644.55	110.44
LPCCC - FISHERIES	69,811.33	81,359.00	(11,547.67)	(14.19)	31,019.49	38,791.84	125.06
WATERSHED PROGRAM	31,950.05	198,000.00	(166,049.95)	(83.86)	25,146.58	6,803.47	27.06
SOLANO PROJECT WQ MONITORING	17,250.05	30,000.00	(12,749.95)	(42.50)	36,986.78	(19,736.73)	(53.36)

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SOLANO PROJECT INVASIVES	66,126.99	188,567.00	(122,440.01)	(64.93)	142,831.19	(76,704.20)	(53.70)
Yolo Bypass/Cache Slough Progr	279,963.62	945,000.00	(665,036.38)	(70.37)	301,370.12	(21,406.50)	(7.10)
UPPER PUTAH CREEK MGMT	194,146.29	284,000.00	(89,853.71)	(31.64)	193,887.76	258.53	0.13
NBA RELIABILITY PROGRAM	6,474.00	500,000.00	(493,526.00)	(98.71)	0.00	6,474.00	0.00
INTER-DAM REACH MANAGEMENT	58,943.66	190,000.00	(131,056.34)	(68.98)	483,340.80	(424,397.14)	(87.80)
MBK	24,915.41	40,000.00	(15,084.59)	(37.71)	22,707.00	2,208.41	9.73
LPCCC SERVICES	108,322.60	0.00	108,322.60	0.00	99,697.55	8,625.05	8.65
LPCCC EQUIPMENT	19,482.19	20,000.00	(517.81)	(2.59)	22,329.24	(2,847.05)	(12.75)
LPCCC NURSERY	0.00	0.00	0.00	0.00	125,031.67	(125,031.67)	(100.00)
LPCCC MISC. SUPPLIES	17,765.46	25,000.00	(7,234.54)	(28.94)	35,538.00	(17,772.54)	(50.01)
BOARD EXPENSES	20,779.67	20,000.00	779.67	3.90	19,688.27	1,091.40	5.54
FIELD SUPPLIES	65,941.68	80,000.00	(14,058.32)	(17.57)	45,959.91	19,981.77	43.48
MISC WATERMASTER EXP	242.00	400.00	(158.00)	(39.50)	244.00	(2.00)	(0.82)
HCP PLANNING	312,349.40	686,400.00	(374,050.60)	(54.49)	385,459.05	(73,109.65)	(18.97)
CAR MAINTENANCE	18,876.32	28,200.00	(9,323.68)	(33.06)	17,067.15	1,809.17	10.60
FUEL	29,487.88	35,700.00	(6,212.12)	(17.40)	20,495.24	8,992.64	43.88
GARAGE SERVICES	27,150.84	15,000.00	12,150.84	81.01	9,824.82	17,326.02	176.35
TRAVEL	10,354.56	5,000.00	5,354.56	107.09	5,109.10	5,245.46	102.67
INSURANCE	78,309.40	76,000.00	2,309.40	3.04	72,318.49	5,990.91	8.28
EDUCATION & TRAINING	20,515.65	65,000.00	(44,484.35)	(68.44)	15,859.58	4,656.07	29.36
COMP SOFTWARE/EQUIP	57,668.72	95,300.00	(37,631.28)	(39.49)	27,510.97	30,157.75	109.62
SCWA Water Mgt Planning	10,600.00	20,000.00	(9,400.00)	(47.00)	3,880.00	6,720.00	173.20
WATER CONSERVATION	859,194.12	590,000.00	269,194.12	45.63	419,082.22	440,111.90	105.02
WATER CONSERVATION	0.00	456,000.00	(456,000.00)	(100.00)	233,924.94	(233,924.94)	(100.00)
MISC. WATER CONSERVATION GRANT	158,007.00	0.00	158,007.00	0.00	28,922.00	129,085.00	446.32
MELLON LEVEE	3,789.43	20,000.00	(16,210.57)	(81.05)	7,600.02	(3,810.59)	(50.14)
PSC MAINTENANCE	603,773.79	910,000.00	(306,226.21)	(33.65)	808,495.59	(204,721.80)	(25.32)
FLOOD CONTROL	102,614.98	681,500.00	(578,885.02)	(84.94)	223,930.66	(121,315.68)	(54.18)
GROUND WATER MANAGEMENT	381,587.31	557,496.00	(175,908.69)	(31.55)	441,981.47	(60,394.16)	(13.66)
PUBLIC EDUCATION	289,305.48	448,737.00	(159,431.52)	(35.53)	183,564.24	105,741.24	57.60
SOLANO SUB-BASIN GSA	366,067.32	355,000.00	11,067.32	3.12	6,813.20	359,254.12	5,272.91
LABOR	30,790.77	50,000.00	(19,209.23)	(38.42)	40,364.81	(9,574.04)	(23.72)
LOWER PUTAH CREEK(NON-ACCORD)	491,193.83	964,725.00	(473,531.17)	(49.08)	535,956.21	(44,762.38)	(8.35)
LABOR	251,247.47	300,000.00	(48,752.53)	(16.25)	309,413.04	(58,165.57)	(18.80)
NISHIKAWA PROJECT GRANT - SP	91,615.64	0.00	91,615.64	0.00	0.00	91,615.64	0.00
SP ADMINISTRATION	962,358.95	1,210,000.00	(247,641.05)	(20.47)	1,161,619.85	(199,260.90)	(17.15)
PSC OPERATIONS	263,375.74	365,000.00	(101,624.26)	(27.84)	274,122.87	(10,747.13)	(3.92)
DAM MAINTENANCE	22,159.63	65,000.00	(42,840.37)	(65.91)	11,378.28	10,781.35	94.75
DAM OPERATIONS	290,389.50	295,000.00	(4,610.50)	(1.56)	305,928.62	(15,539.12)	(5.08)
WEED CONTROL	0.00	6,000.00	(6,000.00)	(100.00)	0.00	0.00	0.00
SP PEST MANAGEMENT	22,658.17	60,000.00	(37,341.83)	(62.24)	10,362.77	12,295.40	118.65

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EQUIP - TRANS DEPT	4,246.45	8,000.00	(3,753.55)	(46.92)	6,116.47	(1,870.02)	(30.57)
EQUIP - TRANS DEPT	37,262.76	80,000.00	(42,737.24)	(53.42)	36,373.17	889.59	2.45
SUPPLIES	1,052.93	2,000.00	(947.07)	(47.35)	298.43	754.50	252.82
SUPPLIES	29,836.24	83,500.00	(53,663.76)	(64.27)	32,707.11	(2,870.87)	(8.78)
CONTRACT WORK	0.00	12,000.00	(12,000.00)	(100.00)	0.00	0.00	0.00
CONTRACT WORK	5,232.49	40,000.00	(34,767.51)	(86.92)	0.00	5,232.49	0.00
TRANS DEPT OVERHEAD	11,643.77	15,000.00	(3,356.23)	(22.37)	6,856.50	4,787.27	69.82
TRANS DEPT OVERHEAD	95,734.19	145,000.00	(49,265.81)	(33.98)	120,808.13	(25,073.94)	(20.76)
REHAB & BETTERMENT	31.91	0.00	31.91	0.00	0.00	31.91	0.00
REHAB & BETTERMENT	108,772.88	1,090,000.00	(981,227.12)	(90.02)	252,646.04	(143,873.16)	(56.95)
REHAB & BETTERMENT	8,414.30	270,000.00	(261,585.70)	(96.88)	0.00	8,414.30	0.00
WATER PURCHASES	12,590,807.78	12,413,577.00	177,230.78	1.43	11,979,999.80	610,807.98	5.10
USBR ADMINISTRATION	53,000.00	79,000.00	(26,000.00)	(32.91)	0.00	53,000.00	0.00
WATER RIGHTS FEE	103,884.65	95,000.00	8,884.65	9.35	94,599.97	9,284.68	9.81
NAPA MAKE WHOLE	312,000.00	312,000.00	0.00	0.00	312,000.00	0.00	0.00
LABOR COSTS	325,370.50	452,930.00	(127,559.50)	(28.16)	287,640.38	37,730.12	13.12
LABOR COSTS	280.78	19,096.00	(18,815.22)	(98.53)	4,738.99	(4,458.21)	(94.08)
LABOR COSTS	301,815.48	636,584.00	(334,768.52)	(52.59)	422,972.49	(121,157.01)	(28.64)
LABOR COSTS	1,094,405.97	1,863,433.00	(769,027.03)	(41.27)	1,342,152.59	(247,746.62)	(18.46)
LABOR COSTS	23,201.60	54,291.00	(31,089.40)	(57.26)	26,635.39	(3,433.79)	(12.89)
INTRA-FUND TRANSFER	(816,947.81)	(1,132,325.00)	315,377.19	(27.85)	(717,881.36)	(99,066.45)	13.80
OVERHEAD EXPENSES	491,577.30	679,395.00	(187,817.70)	(27.64)	430,241.02	61,336.28	14.26
OVERHEAD EXPENSES	457.69	28,644.00	(28,186.31)	(98.40)	8,294.54	(7,836.85)	(94.48)
OVERHEAD EXPENSES	455,247.81	954,876.00	(499,628.19)	(52.32)	649,657.66	(194,409.85)	(29.92)
OVERHEAD EXPENSES	1,646,355.69	2,795,149.00	(1,148,793.31)	(41.10)	2,035,358.12	(389,002.43)	(19.11)
OVERHEAD EXPENSES	32,952.04	81,436.00	(48,483.96)	(59.54)	44,663.81	(11,711.77)	(26.22)
CONTINGENCY	0.00	80,000.00	(80,000.00)	(100.00)	0.00	0.00	0.00
CONTINGENCY	0.00	5,000.00	(5,000.00)	(100.00)	0.00	0.00	0.00
CONTINGENCY	0.00	40,000.00	(40,000.00)	(100.00)	0.00	0.00	0.00
CONTINGENCY	0.00	70,000.00	(70,000.00)	(100.00)	0.00	0.00	0.00
CONTINGENCY	0.00	50,000.00	(50,000.00)	(100.00)	0.00	0.00	0.00
Total Expenses	31,797,668.13	46,036,728.00	(14,239,059.87)	(30.93)	33,630,758.62	(1,833,090.49)	(5.45)
Net Income	$ 4,784,884.00	($ 7,020,569.00)	11,805,453.00	(168.16)	$ 2,613,839.70	2,171,044.30	83.06

SOLANO COUNTY WATER AGENCY
Balance Sheet
June 30, 2022

ASSETS

			ADMIN/SP/WC	SWP(N)	U	GV
Current Assets						
1000SC	PERSHING	($242,853.66)	(242,853.66)			
1010WC	MONEY MGMT - WATERMASTER	13,671.27	13,671.27			
1020G	CHECKING - BOW	879,942.62	(4,769,283.35)	5,518,650.86	85,008.92	45,566.19
1030G	LAIF - LOCAL AREA INVESTMENT FUND	23,264,358.94	8,039,666.80	11,540,118.51	3,534,640.71	149,932.92
1040G	CAMP - CA ASSET MANAGEMENT POOL	30,204,917.97	13,453,577.54	12,321,595.71	4,249,489.24	180,255.48
1050G	CERTIFICATES OF DEPOSIT - CD'S	6,521,903.43	3,376,571.89	2,384,120.37	730,235.91	30,975.26
1060SC	PETTY CASH	461.19	461.19			
1210N	ACCOUNTS RECEIVABLE-SWP	342,566.84	342,566.84			
1220AC	EMPLOYEE RECEIVABLE	0.00				
1225AC	RETENTION RECEIVABLE	189.99	189.99			
1400AC	PREPAID	36,539.65	36,539.65			
1415AC	INVENTORY-WATER CONSERVATION S	35,755.84	35,755.84			
	Total Current Assets	61,057,454.08	20,286,864.00	31,764,485.45	8,599,374.78	406,729.85
	Total Assets	$ 61,057,454.08	$ 20,286,864.00	$ 31,764,485.45	$ 8,599,374.78	$ 406,729.85

LIABILITIES AND CAPITAL

Current Liabilities						
2010N	UNEARNED INCOME-SWP	$456,640.00	26,140.00	430,500.00		
2020N	ACCOUNTS PAYABLE-	160,854.43	69,330.39	64,518.21	27,005.83	-
2023AC	EMPLOYEE BENEFITS PAYABLE	7,845.06	7,845.06			
2025SC	SALES TAX PAYABLE	2,261.43	2,261.43			
2106SC	SECURITY DEPOSIT - SACKETT RANCH	500.00	500.00			
2110SC	WESTSIDE IRWMP PREFUNDED ADMIN	123,492.73	123,492.73			
	Total Current Liabilities	$ 751,593.65	229,569.61	495,018.21	27,005.83	-
Long-Term Liabilities		0				
	Total Long-Term Liabilities					
	Total Liabilities	751,593.65	229,569.61	495,018.21	27,005.83	0.00
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	4,784,884.00	409,991.57	3,085,538.67	1,207,678.65	81,675.11
	Total Capital	60,305,860.43	19,495,412.20	30,703,216.44	9,666,740.02	440,491.77
	Total Liabilities & Capital	**$61,057,454.08**	**$19,724,981.81**	**$31,198,234.65**	**$9,693,745.85**	**$440,491.77**

ACTION OF
SOLANO COUNTY WATER AGENCY

DATE: **July 14, 2022**

SUBJECT: **Solano Resource Conservation District Contract Renewals**

RECOMMENDATIONS:

Authorize General Manager to execute the following agreements with the Solano Resource Conservation District:

1. Solano Resource Conservation District, School Water Education Program, existing vendor (1-year contract) – contract limit of $65,000;

2. Solano Resource Conservation District, AG Water Use Efficiency Program, existing vendor (3-year contract) – contract limit of $120,000;

3. Solano Resource Conservation District, Barker Slough Watershed Partnership, existing vendor (3-year contract) – contract limit of $102,000;

4. Solano Resource Conservation District, Flood Awareness, existing vendor (3-year contract) – contract limit of $135,000;

5. Solano Resource Conservation District, Water Education Programming, existing vendor (3-year contract) – contract limit of $1,346,211.

FINANCIAL IMPACT:

Funding for these agreements is included in the Fiscal Year 2022-2023 Budget.

Recommended: _____
Roland Sanford, General Manager

☐	Approved as Recommended	☐	Other (see below)	☒	Continued on next page

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 July 14, 2022 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

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

BACKGROUND:

The proposed agreements with the Solano Resource Conservation District Solano (Solano RCD) are for the continuation of services and programs the Solano RCD has provided over the last several years. A brief synopsis of each agreement is presented below:

1. *School Water Education Program (SWEP)* Solano RCD will administer SWEP, a program for educating students and teachers about Solano County's drinking water sources, drought resilience and water conservation; and to provide an awareness of stormwater pollution and how to maintain the health of our local waterways.

2. *AG Water Use Efficiency* Program Solano RCD will administer Ag Water Use Efficiency Program and work with Water Agency staff and members of the Solano Ag Water Efficiency Committee on the following tasks: coordination with Solano Sub-basin SGMA efforts; publish "The Irrigator" newsletter once a year; conduct at least one grower workshop per year; coordinate outreach and workshops with the Dixon-Solano Water Quality Coalition; conduct irrigation audits/technical assistance upon request; create Conservation Plans for growers; assist with coordination of quarterly Ag Water Efficiency Committee meetings; attend other pertinent meetings as required; and oversee sub-contractor performing pump efficiency tests for growers upon request.

3. *Barker Slough Watershed Partnership* Solano RCD will collaborate with landowners, tenant farmers, and others to implement soil erosion control best management practices in the Barker Slough watershed, upstream of the North Bay Aqueduct's Barker Slough Pumping Plant – a municipal drinking water source for over 500,000 residents in Napa and Solano counties.

4. *Flood Awareness* Solano RCD will administer the Water Agency's small grant flood control project program; provide public outreach and education in support of small grant flood control project program, assist landowners with the small grant flood control project application process, and oversee implementation of small grant flood control projects.

5. *Water Education Programing* Solano RCD will administer the following water education programs:

    a. Watershed Explorers Program: This program utilizes science and place-based learning to build awareness and understanding of local creeks and watersheds including their unique ecosystems for third graders, as well as good stewardship practices to help care for them. Using a curriculum based on concepts linked to California's state education standards, the program offers local children, many of whom have little or no experience being in open space settings, a concrete, experiential introduction to their watershed and the life that depends on it.
    b. Suisun March Program: This program utilizes science and place-based learning to build awareness and understanding of local creeks and watersheds including their unique ecosystems for sixth graders. The program offers local children, many of whom have little or no experience being in open space settings, a concrete, experiential introduction to their watershed and the creatures that inhabit it, using a curriculum based on concepts linked to California's state educational standards.
    c. Welcome to the Watershed Program: Solano RCD staff provide resource conservation education and *Welcome to the Watershed* kits to Solano County residents and growers at conservation-related community events and workshops. These kits include water saving devices, educational information, and opportunities for individuals to learn more.
    d. Biomonitoring Program: The Biomonitoring Program focuses on a micro-perspective for eleventh and twelfth graders, looking at a single reach of a single creek, evaluating watershed health through physical, chemical, and biological assessments. This intensive, hands-on program includes three classroom lessons, a habitat assessment field trip, and a citizen-science creek monitoring field trip assessing the health of a local watershed.

Name of Project: School Water Education Program

SOLANO COUNTY WATER AGENCY

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT, **effective July 1, 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 Solano Resource Conservation District, hereinafter referred to as "Contractor."

The Agency requires services for **school water education program** ; 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:

l. SCOPE OF SERVICES

The Agency hereby engages the Contractor, and the Contractor agrees to perform the services for **school water education program** 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 $ 65,000** for all work contemplated by this Agreement.

3. METHOD OF PAYMENT

Payment for services will be approved by the Agency's representative only if all contract requirements have been met.

Invoices must be submitted monthly, 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. *Invoices that are over 6 months old will not be approved or paid by the Agency*. **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. To be approved by payment, any allowed reimbursable expenses will need supporting written documentation such as receipts and mileage logs.

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.

Any change in the scope of the professional services to be done, method of performance, nature of materials or price thereof, or to any other matter materially affecting the performance or nature of the professional services will not be paid for or accepted unless such change, addition or deletion be approved in advance, in writing, by the Agency's General Manager.

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, Contractor 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 Contractor or its officers, agents, or employees in rendering services under this contract; excluding, however, such liability, claims, losses, damages or expenses arising Solano County Water Agency's sole negligence or willful acts.

7. **INSURANCE**

Minimum Insurance Requirements: Contractor 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 Contractor, 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 Contractor 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 Contractor 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 Contractor. 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 Contractor including materials, parts, or equipment furnished in connection with such work or operations.
   2. **Primary Coverage:** For any claims related to this project, the Contractor'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 Contractor'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 Contractor 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 – Contractor 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 Contractor'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 - Contractor shall require and verify that all sub-contractor maintain insurance meeting all the requirements stated herein, and Contractor 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)***

13. **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.

14. **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	CONTRACTOR
Roland Sanford, General Manager Solano County Water Agency 810 Vaca Valley Parkway, Suite 203 Vacaville, CA 95688	Chris Rose, Executive Director Solano Resource Conservation District 1170 N. Lincoln St., Suite 110 Dixon, CA 95620

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	Solano Resource Conservation District
By:_____ Roland Sanford, General Manager	By: _____ Chris Rose, Executive Director

FOR SCWA USE ONLY

Contract Period: July 1, 2022 to June 30, 2023
File Number: _____
Account Manager: Andrew Florendo
G/L Account #: 6612AC
Job Cost #: 3307
Contract Type: Professional Services

EXHIBIT A

SCOPE OF SERVICES

Goals and Objectives

Provide Solano County students with locally relevant, meaningful water education.

A. Work with county funding sources to develop, manage, and implement the *School Water Education Program,* available to any class in the county.
B. Offer water education to students and teachers on Solano County's drinking water sources, drought, and water conservation.
C. Provide programing to help students and teachers develop an awareness of stormwater pollution and how to maintain the health of our local waterways.

Program Deliverables

- **Solano County Water Resources Lessons**
  - In-class or virtual lesson that can be modified for grade levels K-12.
  - Water lesson highlighting water conservation and Solano County drinking water sources.
  - For younger audiences: demonstration with a hands-on, three-dimensional Enviroscape model to observe stormwater and non-point source pollution at a watershed level, coupled with a Solano County watershed mapping activity.
  - For older audiences: statewide mapping activity on California water, highlighting the fact that populations are not concentrated where the water falls and that climate in California is extremely variable.
  - Following the lesson, teachers receive a student water conservation challenge sheet. This worksheet allows students to keep track of how much water they use on a daily basis, highlighting the areas where students have the greatest opportunities to reduce water use.

- **'Test Your Tap' Lesson and Lab**
  - Two-day, in-class lesson geared toward students in grade levels 5-12.
  - Students bring in water from various tap and bottled sources, comparing and examining the quality of both. Students use test tabs for a chemical analysis, and reflect on the benefits of our local water sources.

- **Project WET Trainings** (Water Education for Teachers)
  - Teacher training that provides teachers the resources needed to teach about water related subjects in their classroom.
  - Annual February and August trainings offered.

- **Dunnell Nature Center/Local Park Field Trips**
  - Deliver water-related curriculum in an outdoor setting for grade levels 2-5.
  - Students participate in outdoor, hands-on activities while rotating through stations. They explore Solano County water sources learn about stormwater pollution, plus experience a creek-side nature hike. The field trip focuses on:
    - The path water takes from the highest points in the watershed and out to the ocean.
    - Impacts of trash, oil, and animal waste on stormwater.
    - Impacts of drought on our native flora and fauna.
    - Behaviors to enhance students' impact on watershed health.

- **Project WET training assessments, teacher feedback overview, and program reports**
  - Assemble program reports (July-December and January-June) with teacher feedback, Project WET evaluations, press releases and other relevant program materials.

Virtual Adaptation of Program

In the event that in-person field trips and/or lessons are not permitted due COVID-19-related restrictions, the program will be adapted to be provided virtually in the following ways:

- Field trips will be live-streamed to a classroom projector/television (for in-person cohorts) or individual computers (for virtual cohorts).
- During the virtual activities, students engage with educators by typing in the chat, discussing with peers, and providing responses via video.

All of the programs foster literacy in the environmental science fields that are relevant to students' lives and that can be explored even in students' own backyards.

EXHIBIT B

RATE OF COMPENSATION

$123.50	Executive Director	10.00	$1,235.00
$92.00	Education Director	60.00	$5,520.00
$36.00	Program Educators	345.00	$12,420.00
$62.50	Program Coordinator 2	158.00	$9,875.00
$63.50	Program Coordinator 1	40.00	$2,540.00
$73.50	Program Manager 1	20.00	$1,470.00
$73.00	Program Manager 2	276.50	$20,184.50
		Other	$9,060.00
		TOTAL	$62,304.50

Name of Project: Agricultural Water Efficiency Program

SOLANO COUNTY WATER AGENCY

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT, **effective July 1, 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 **Solano Resource Conservation District**, hereinafter referred to as "Contractor."

The Agency requires services for Administration of an Agricultural Water Efficiency Program; 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:

l. SCOPE OF SERVICES

The Agency hereby engages the Contractor, and the Contractor agrees to perform the services for Administration of an Agricultural Water Efficiency Program 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 $ 120,000** for all work contemplated by this Agreement.

3. METHOD OF PAYMENT

Payment for services will be approved by the Agency's representative only if all contract requirements have been met.

Invoices must be submitted monthly, 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. *Invoices that are over 6 months old will not be approved or paid by the Agency*. **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. To be approved by payment, any allowed reimbursable expenses will need supporting written documentation such as receipts and mileage logs.

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, 2025** 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.

Any change in the scope of the professional services to be done, method of performance, nature of materials or price thereof, or to any other matter materially affecting the performance or nature of the professional services will not be paid for or accepted unless such change, addition or deletion be approved in advance, in writing, by the Agency's General Manager.

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, Contractor 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 Contractor or its officers, agents, or employees in rendering services under this contract; excluding, however, such liability, claims, losses, damages or expenses arising Solano County Water Agency's sole negligence or willful acts.

7. **INSURANCE**

Minimum Insurance Requirements: Contractor 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 Contractor, 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 Contractor 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 Contractor 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 Contractor. 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 Contractor including materials, parts, or equipment furnished in connection with such work or operations.
   2. **Primary Coverage:** For any claims related to this project, the Contractor'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 Contractor'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 Contractor 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 – Contractor 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 Contractor'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 - Contractor shall require and verify that all sub-contractor maintain insurance meeting all the requirements stated herein, and Contractor 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.

9. **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.

10. **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.

11. **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.

12. **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.

Knutsen Pump Testing
2073 Central Ave.
Roseville, CA 95747

13. **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.

14. **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	CONTRACTOR
Roland Sanford, General Manager Solano County Water Agency 810 Vaca Valley Parkway, Suite 203 Vacaville, CA 95688	Chris Rose, Executive Director Solano Resource Conservation District 1170 N. Lincoln St., Suite 110 Dixon, CA 95620

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	Solano Resource Conservation District
By:_____ Roland Sanford, General Manager	By: _____ Chris Rose, Executive Director

FOR SCWA USE ONLY

Contract Period: **July 1, 2022** to **June 30, 2025**
File Number: _____
Account Manager: **Andrew Florendo**
G/L Account #: **6551 AC**
Job Cost #: **2017**
Contract Type: **Professional Services**

EXHIBIT A

SCOPE OF SERVICES

Solano Resource Conservation District will work with the Solano County Water Agency and other members of the Solano Ag Water Efficiency Committee on the following tasks:

- Coordinate with Solano Sub-basin SGMA efforts
- Publish "The Irrigator" newsletter once/year
- Conduct at least one grower workshop per year
- Coordinate outreach and workshops with the Dixon-Solano Water Quality Coalition
- Conduct irrigation audits/technical assistance upon request
- Create Conservation Plans for growers
- Assist SCWA in coordinating quarterly meetings of the Ag Water Efficiency Committee.
- Attend other pertinent meetings as required.
- Manage sub-contractor to perform pump efficiency tests for Committee members and growers upon request.

EXHIBIT B

RATE OF COMPENSATION

Fiscal Year 2022-2023: $40,000

Fiscal Year 2023-2024: $40,000

Fiscal Year 2024-2025: $40,000

• Executive Director	$125.50 per hour
• Watershed Project Manager	$86.00 per hour
• Assistant Project Manager	$74.50 per hour
• Restoration Field Manager	$85.00 per hour
• Restoration Project Coordinator	$75.00 per hour
• Restoration Technician	$33.00 per hour
• Office Manager	$80.00 per hour
• Vehicle Mileage	Yearly IRS Mileage Rate
• Reimbursable (Supplies, Equipment)	Direct reimbursement with no markup
• Sub-contract	Direct reimbursement with no markup

Hourly billing rates provided in this scope are estimates only. Invoices will utilize finalized hourly rates approved by the Solano RCD Board of Directors.

Name of Project: **Barker Slough Watershed Partnership**

SOLANO COUNTY WATER AGENCY

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT, **effective July 1, 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 **Solano Resource Conservation District**, hereinafter referred to as "Contractor."

The Agency requires services for **Barker Slough Watershed Partnership;** 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:

l. **SCOPE OF SERVICES**

The Agency hereby engages the Contractor, and the Contractor agrees to perform the services for **Barker Slough Watershed Partnership**, 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 $102,000** 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, 2025** 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 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	CONTRACTOR
Roland Sanford, General Manager Solano County Water Agency 810 Vaca Valley Parkway, Suite 203 Vacaville, CA 95688	Chris Rose, Executive Director Solano Resource Conservation District 1170 N. Lincoln St., Suite 110 Dixon, CA 95620

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	Solano Resource Conservation District
By:_____ Roland Sanford, General Manager	By:_____ Chris Rose, Executive Director

FOR SCWA USE ONLY

Contract Period: 7/1/2022 to 6/30/2025
File Number: AG-S-9
Account Manager: Alex Rabidoux
G/L Account #: 6161N
Job Cost #: 7005
Contract Type: Professional Services

AG-S-9.SRCD.Barker Slough Watershed.FY22-25.agt

EXHIBIT A

SCOPE OF SERVICES

The Solano Resource Conservation District will administer the Water Agency's Barker Slough Watershed Partnership. The purpose of the Partnership will be to protect the Barker Slough Watershed, administer a $25,000 grant program (funds provided by SCWA), work with landowners to install BMPs, help protect past investments by the Water Agency in livestock fencing and alternative water sources, and conduct an annual assessment of the watershed.

EXHIBIT B

RATE OF COMPENSATION

Fiscal Year 2022-2023:	$31,000
Fiscal Year 2023-2024:	$34,000
Fiscal Year 2024-2025:	$37,000

• Executive Director	$125.50 per hour
• Deputy Executive Director	$106.50 per hour
• Conservation Projects Manager	$85.00 per hour
• Assistant Project Manager	$74.50 per hour
• Restoration Field Manager	$81.00 per hour
• Restoration Project Coordinator	$71.00 per hour
• Restoration Technician	$33.00 per hour
• Office Manager	$80.00 per hour
• Vehicle Mileage	Yearly IRS Mileage Rate
• Reimbursable (Supplies, Equipment)	Direct reimbursement with no markup

Hourly billing rates provided in this scope are estimates only. Invoices will utilize finalized hourly rates approved by the Solano RCD Board of Directors.

Name of Project: **Flood Awareness**

SOLANO COUNTY WATER AGENCY

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT, **effective July 1, 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 **Solano Resource Conservation District**, hereinafter referred to as "Contractor."

The Agency requires services for **Flood Awareness** 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:

l. **SCOPE OF SERVICES**

The Agency hereby engages the Contractor, and the Contractor agrees to perform the services for **Flood Awareness**, 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 $135,000** 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, 2025** 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 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	CONTRACTOR
Roland Sanford, General Manager Solano County Water Agency 810 Vaca Valley Parkway, Suite 203 Vacaville, CA 95688	Chris Rose, Executive Director Solano Resource Conservation District 1170 N. Lincoln St., Suite 110 Dixon, CA 95620

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	Solano Resource Conservation District
By: _____	By: _____
Roland Sanford, General Manager	Chris Rose, Executive Director

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Contract Period: 7/1/30/2022 to 6 / 30 / 2025
File Number: AG – S – 9
Account Manager: GC
G/L Account #: 6610 AC
Job Cost#: 3004
Contract Type: Professional Services

SRCD.Flood Awareness.doc

EXHIBIT A

SCOPE OF SERVICES

The Solano Resource Conservation District will administer the Water Agency's small grant program, provide public outreach and awareness for flood control issues, and other flood control duties and outreach as needed

EXHIBIT B

RATE OF COMPENSATION

Fiscal Year 2022-2023:	$40,000
Fiscal Year 2023-2024:	$45,000
Fiscal Year 2024-2025:	$50,000

• Executive Director	$125.50 per hour
• Watershed Project Manager	$86.00 per hour
• Assistant Project Manager	$74.50 per hour
• Restoration Field Manager	$85.00 per hour
• Restoration Project Coordinator	$75.00 per hour
• Restoration Technician	$33.00 per hour
• Office Manager	$80.00 per hour
• Vehicle Mileage	Yearly IRS Mileage Rate
• Reimbursable (Supplies, Equipment)	Direct reimbursement with no markup

Hourly billing rates provided in this scope are estimates only. Invoices will utilize finalized hourly rates approved by the Solano RCD Board of Directors.

Name of Project: **Water Education Programming**

SOLANO COUNTY WATER AGENCY

AGREEMENT FOR PROFESSIONAL SERVICES
(***Professional Services/Contractor***)

THIS AGREEMENT, **effective July 14, 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 **Solano Resource Conservation District**, hereinafter referred to as "Contractor."

The Agency requires services for **Water Education Programming**; 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:

l. SCOPE OF SERVICES

The Agency hereby engages the Contractor, and the Contractor agrees to perform the services for **Water Education Programming**, 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 $1,346,211** for all work contemplated by this Agreement.

3. METHOD OF PAYMENT

Payment for services will be approved by the Agency's representative only if all contract requirements have been met.

Invoices must be submitted monthly, 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. *Invoices that are over 6 months old will not be approved or paid by the Agency*. **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. To be approved by payment, any allowed reimbursable expenses will need supporting written documentation such as receipts and mileage logs.

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, 2025**, 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.

(Note: this paragraph is optional) Any change in the scope of the professional services to be done, method of performance, nature of materials or price thereof, or to any other matter materially affecting the performance or nature of the professional services will not be paid for or accepted unless such change, addition or deletion be approved in advance, in writing, by the Agency's General Manager.

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. **PERMITS** ***(Note: include only if permits are required)***

Permits required by governmental authorities will be obtained at the Contractor's expense, and the Contractor will comply with local, state and federal regulations and statutes including Cal/OSHA requirements.

7. INDEMNIFY AND HOLD HARMLESS

To the extent permitted by law, Contractor 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 Contractor or its officers, agents, or employees in rendering services under this contract; excluding, however, such liability, claims, losses, damages or expenses arising Solano County Water Agency's sole negligence or willful acts.

8. **INSURANCE**

Minimum Insurance Requirements: Contractor 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 Contractor, 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 Contractor 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 Contractor 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 Contractor. 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 Contractor including materials, parts, or equipment furnished in connection with such work or operations.
   2. **Primary Coverage:** For any claims related to this project, the Contractor'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 Contractor'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 Contractor 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 – Contractor 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 Contractor'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 - Contractor shall require and verify that all sub-contractor maintain insurance meeting all the requirements stated herein, and Contractor 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.

9. **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.

10. **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.

11. **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.

12. **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)***

13. **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.

14. **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	CONTRACTOR
Roland Sanford, General Manager Solano County Water Agency 810 Vaca Valley Parkway, Suite 203 Vacaville, CA 95688	Chris Rose, Executive Director Solano Resource Conservation District 1170 N Lincoln St., Suite 110 Dixon, CA 95620

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

By:_____	By: _____
Roland Sanford General Manager	Chris Rose, Executive Director

FOR SCWA USE ONLY

Contract Period: July 1, 2022 to June 30, 2025
File Number: AG-S-9
Account Manager: C.Lee
G/L Account #: 6612AC
Job Cost #: Watershed Explorers-3307, Suisun Marsh-3306, Biomonitoring-3305, Welcome to Watershed-3308
Contract Type: Professional Services

EXHIBIT A

SCOPE OF SERVICES

Watershed Explorers Program
Scope of Work *FY 2022/2023 - 2024/2025*

Solano Resource Conservation District

Program Period

August- June

Goals and Objectives

1. Provide Solano County third grade classes with locally relevant, meaningful outdoor environmental education.

A. Work with county funding sources to develop, manage and implement the third grade *Watershed Explorers Program,* available to all classes either in-person with students at their local park/open space or virtually with Solano RCD streaming live from the field trip site.

B. The program will use standards-aligned science and place-based learning strategies to introduce concepts that include the path water takes through a watershed, drought, water conservation and storm water pollution.

C. Provide introductory programing to help students develop an awareness of the outdoor, natural world. Offer local school children an experiential introduction to their watershed, its essential role in their lives and how they can become stewards of our local natural resources.

Program Deliverables

- **3 one-hour in-class pre-field trip lessons (classroom teacher led), covering:**
  - Water use in urban areas and the importance of conserving water.
  - Home activity water challenge to illustrate and consolidate concepts.
  - The characteristics of a watershed; how storm water pollution affects creeks, marsh, and ocean; incorporating the practice of reduce, reuse, recycle.

- **Program manuals for students and teachers**
  Revised and updated each year to current environmental stewardship issues.

- **Field trip to a local park or open space**
  Students participate in outdoors, hands-on study, hiking to learning stations for lessons about basic watershed ecology. Topics include:
  - The path water takes from the highest points in the watershed and out to the ocean.
  - Impacts of trash, oil, and animal waste on stormwater.
  - Impacts of drought on our native flora and fauna.
  - Behaviors to reduce students impact on watershed health.

- **Assessments analysis and program reports**
  Pre and post student assessment results and analysis provided in the yearly program report.

Virtual Adaptation of Program

In the event that in-person field trips and/or lessons are not permitted due COVID-19 related restrictions, the program will be adapted to be provided virtually in the following ways:

- Field trips will be live streamed to a classroom projector/television (in person cohorts) or individual computers (virtual cohorts).
- During the virtual activities, students engage with educators by typing in the chat, discussing with peers and providing responses on via video.

All of the programs foster literacy in the environmental science fields that are relevant to students' lives, and can be explored even in their own backyards.

Watershed Explorers Program 2022-2023

Total Classes 54 **Total Students** 1404

Task	Hours / Class	Total hours	Rate	Cost
Outreach/Scheduling and Staff Hiring				
Executive Director: Oversight, Final interviews, Troubleshooting		40.00	$121.00	$ 4,840.00
Education Director: Communicate with funders to maintain financial support/positive relationships, create/administer budgets, monitor/track expenditures, invoice support, staff supervision/evaluation, expand relationships with teachers, troubleshooting, project refinement, program outreach to school boards, contracts	2.00	108.00	$89.50	$ 9,666.00
Program Manager 2: Project Management (includes contact teachers/schedule for classroom and field visits/continued correspondence)	3.00	162.00	$70.50	$ 11,421.00
Education Director: Oversee recruitment, hiring process (25 hrs), end-of-year evals (25hrs), weekly staff meetings (50hrs), mentor staff (30hrs)		130	$ 89.50	$ 11,635.00
Program Manager 2: Hiring (5hrs), end-of-year evals (10hrs), weekly staff meetings (60hrs), quarterly invoice preparation (40hrs), logistics with various sites (8hrs/site) 40hrs		155	$ 70.50	$ 10,927.50
Program Coordinator 1: Weekly staff meetings (60hrs)		60	$ 64.00	$ 3,840.00
Program Manager 1: GRANT WRITING		80	$ 71.00	$ 5,680.00
Intern: Stipend for education scholarship (given to low income, first generation college student). Student attends twice/week for a quarter.				$0.00
Program Manager 2: Plan and implement yearly outreach tour for funders and partner agencies		60.0	$70.50	$ 4,230.00
Program Manager 2: Educator staff training in August, planning and implementation		80.0	$70.50	$ 5,640.00
			Sub-Total	**$ 67,879.50**
Curriculum and Program Preparation				
Program Manager 2: Refine curriculum (40 hrs)		40.00	$70.50	$ 2,820.00
Program Manager 2: Press releases and website updates (20 hrs)		20.00	$70.50	$ 1,410.00
Program Coordinator 1: Supply purchases/inventory, schedules, teacher emails, manual drop-off	1.75	94.50	$64.00	$ 6,048.00
Program Coordinator 2: correspondence throughout program season		45.00	$63.00	$ 2,835.00
Contractor: Evaluation Specialist & Program Consultant		58.00	$90.00	$ 5,220.00

Program Educators: Process evaluation data (.3hr /class to count and randomize) + (1 hr. /30 assessments to grade) number graded will be a % sample of the total number	0.30	24.00	$36.00	$ 864.00
Program Manager 2: Teach program educators how to conduct virtual lesson, observe educators performing lesson		40.00	$70.50	$ 2,820.00
Program Educators: Training for post lessons (3 educators)	3.00	15.00	$36.00	$ 540.00
Education Director: pre-program meeting (3hr x 5 sites) & observe 1 field trip at 5 locations (6hrs/each) & 10 hrs teacher training, Beetles in-staff training (15hrs)		70.00	$89.50	$ 6,265.00
Program Manager 2: pre-program meeting (3hr x 5 sites) & observe 4 field trips for each of the 5 sites (6hrs/each) + 40 (correspondence, schedules) + 10 hrs teacher training, Beetles in-staff training (15hrs)		200.00	$70.50	$ 14,100.00
Program Coordinator 1: pre-program meeting (3hr x 5 sites) + 35 hrs correspondence + 10 hrs teacher training + 15 hrs Beetles in-staff training + 60 hrs program support		135.00	$64.00	$ 8,640.00
Program Educators: pre-program meeting (7 educ x 3hrs x 5 sites) & staff meetings (7 educators x 18 hours)		231.00	$36.00	$ 8,316.00
Program Educators: Program Training (7 educ x 10hrs), Beetles in-staff training (7 educ x 12hrs), Program coorrispondance (7 educ x .25 x classes)		248.50	$36.00	$ 8,946.00
			Sub-Total	**$ 68,824.00**
Implementation				
Program Educators: 20 minute post-assessment and field trip debrief. Directly following field trip. Takes place back at the school. 2 educators needed x 2 hrs/each	4.00	108.00	$36.00	$ 3,888.00
Program Educators: Field Trip observation 7 ppl x 3 trips x 5.75 hrs		120.75	$36.00	$ 4,347.00
Program Manager 2: Observe field trips and coach staff (2 field trips at 5 sites) x 8hrs/day		80.00	$70.50	$ 5,640.00
Program Coordinator 1: Hauling portopotty cost of 1.5hr for each of Vallejo/Benicia/Vaca trips	1.50	24.00	$64.00	$ 1,536.00
Program Manager 2: prepare for & manage field trips (9 hrs/trip) 1 field trip/week + 36 hrs of plug planting coordination	9.00	99.00	$70.50	$ 6,979.50
Program Coordinator 1: prepare for & manage field trips (9 hrs/trip) + 36 hrs of plug planting coordination	9.00	171.00	$64.00	$ 10,944.00
Program Educators: field trips (5 educators x 5.75hrs per trip)	28.75	632.50	$36.00	$ 22,770.00
WQ Manager: program support with supplies, budget tracker, tech support		10.00	$70.00	$ 700.00
Program Assistant: behind the scenes field trip support, safety support, setting up	5	110.00	$35.00	$ 3,850.00
Restoration Manager: planning, preparation and implementation for student planting (16 Pond A, 24 Lagoon, 32 Rock, 32 GC, 8 Sandy Beach) CHANGED TO 60		60.0	$83.50	$ 5,010.00

			Sub-Total	**$ 65,664.50**
Materials, Transportation and Non Personnel Expenses				
Student & teacher manuals (additional - 5% more teacher copies & 2% more student copies)		57	$ 4.00	$ 226.80
		1432	$ 3.00	$ 4,296.24
	miles	*miles*	*$/mile*	
Solano RCD Personal Miles - estimate		1000	$ 0.600	$ 600.00
Solano RCD Vehicle Miles - Field Trips and Site Visits (xx trips + 30 (addition trips for manager and director) x 60 miles)		3120	$ 0.600	$ 1,872.00
Transportation - FF/Suisun		8.00	$ 400.00	$ 3,200.00
Transportation - Benicia		6.00	$ 1,200.00	$ 7,200.00
Transportation - VV		9.00	$ 525.00	$ 4,725.00
Transportation - Travis		0.00	$ 1,200.00	$ -
Transportation - Vallejo		8.00	$ 350.00	$ 2,800.00
Transportation - Rio V		2.00	$ 300.00	$ 600.00
Transportation - Dixon (paid by City of Dixon)		0.00	$ -	$ -
Port-o-Potty Expenses for Vallejo/Benicia - rental fee		10.00	$ 60.00	$ 600.00
Port-o-Potty Expenses for Vallejo/Benicia - cleaning fee		10.00	$ 40.00	$ 400.00
First Aid				$ 1,000.00
Field trip materials per class			$ 20.00	$ 1,080.00
Videographer: Creation of program materials				$ 2,000.00
Plugs		0.8	1404	$ 1,123.20
Staff Team Training				$ -
			Sub-Total	**$ 31,723.24**
Contingency				
				$ -
			Program Cost	**$ 234,091.24**

per class cost	*$*	*4,335.02*
per student cost	*$*	*166.73*
3rd graders countywide	*4493*	*31%*

Field Trips, Classes & Students

School District	Field Trips		Total Classes	# Students per District
Dixon	0.0		0	0
Vacaville	6.0		15	390
Fairfield/Suisun	6.0		15	390
Vallejo	6.0		15	390
Benicia	4.0		9	234
Rio Vista	0.0		0	0
Travis	0.0		0	0
Totals	**22**		**54**	**1404**
C Trips	15			
PM Trips	7			

	Rates & Hours		Total Costs
	Billable Rates	Hours	
Executive Director	$ 121.00	40.00	$4,840.00
Education Director	$ 89.50	308.00	$27,566.00
Program Manager 1	$ 71.00	80.00	$5,680.00
Program Manager 2	$ 70.50	936.00	$65,988.00
Program Coordinator 1	$ 64.00	484.50	$31,008.00
Program Coordinator 2	$ 63.00	45.00	$2,835.00
Educators	$ 36.00	1379.75	$49,671.00
Contractor 1: KR	$ 90.00	58.00	$5,220.00
Videographer			$ 2,000.00
Assistant Project Manager	$ 70.00	10.00	$700.00
Restoration Manager	$ 83.50	60.00	$5,010.00
Intern			$0.00
Program Assistant	$ 35.00	110.00	$3,850.00
	hrs/educator	197.107	
		Program Total	**$204,368.00**

Watershed Explorers Funding Per Fiscal Year	**Amount**	
Solano County Water Agency	**$ 155,000.00**	
SC Dept. of Resource Mgmt.	**$ 20,189.25**	
Oil Funds - SOLANO COUNTY ($452.35)	**$ 452.35**	
Oil Funds Funds - RIO VISTA ($187.02)	**$ 187.02**	
Oil Funds & Bev Container Funds - Suisun City ($672.96 + $200)	**$ 872.96**	
Oil Funds & Bev Container Funds - BENICIA ($647.14 + $500)	**$ 1,147.14**	
Oil Funds & Bev Container Funds - VALLEJO ($2792.57 + $3000)	**$ 5,792.57**	
Oil Funds & Bev Container Funds - FAIRFIELD ($2593.34 + $3000)	**$ 5,593.34**	
Oil Funds & Bev Container Funds - VACAVILLE ($2206.64 + $3000)	**$ 5,206.64**	
Oil Funds & Bev Container Funds - DIXON ($1500 + $3000)	**$ 4,500.00**	
ROGER Vallejo Water Conserve. Program	**$ 3,500.00**	
Vallejo San and Flood	**$ 3,500.00**	
FSSD	**$ 3,000.00**	
Potrero Hills Landfill	**$ 1,500.00**	
Putah Creek Council - In-Kind	**$ 1,123.20**	
Solano County Office of Education - Transportation Match		10k year one only
City of Vacaville - One Time Boost		10k year one only
TOTAL	**$ 211,564.47**	

Match funding **$ 56,564.47**

Suisun Marsh Watershed Program
Scope of Work *FY 2022/2023 - 2024/2025*

Solano Resource Conservation District

Program Period

August-March

Goals and Objectives

1. Develop place-based, environmental literacy for Solano County 6th grade class in the context of the Suisun Marsh and their local watershed.
   A. Work with county funding sources to develop, manage, and implement the sixth grade *Suisun Marsh Program,* available to all students either in-person with students at Rush Ranch Open Space or virtually with Solano RCD streaming live from the field trip site.
   B. The program will use standards-aligned science and place-based learning strategies to introduce and explain how stormwater pollution impacts the unique ecosystem of the Suisun Marsh.
   C. The program will help students understand that drought is inevitable in the CA landscape and teach students to conserve water and lessen their impact on the water system.
   D. Programing will guide students to develop an awareness of the outdoor, natural world offering students an experiential introduction to this watershed. Students develop stewardship practices they can use to protect our local resources and environment.

Program Deliverables

- **Two, one-hour in-class pre-field trip lessons (RCD Educator-led), covering:**
  - Interconnection of natural resources and environmental stewardship
  - Contextual understanding of the features and functions of the Suisun Marsh
  - Mapping and modeling activities

- **Poster Session (optional)** - Students research an endangered or threatened species found in and around the Suisun Marsh watershed, working in teams to create a presentation about the species and presenting their findings to their classmates.

- **Program manuals for students**

  Revised and updated each year to reflect current environmental stewardship issues.

- **Field trip to Rush Ranch Open Space in the Suisun Marsh**

  Students participate in a full-day field trip, where they:

  - Rotate through hands-on learning stations about the marsh's soil, water, and plants.
  - Discuss the data they collect, the ramifications for marsh health, and how stormwater pollution impacts this fragile ecosystem.
  - Participate in a nature journaling activity highlighting the impact drought has on the local flora and fauna.
  - Spend time writing about their experience and impressions of the wetland. Teachers have the option to submit students' work to the River of Words watershed contest.

- **One-hour, in-class post-field trip lesson**

  Students participate in the Water Conservation Challenge home water-logging activity to examine their daily use of water and consider how they would survive with extremely limited water resources.

- **Assessments analysis and program reports**

  Students' pre- and post- assessment results and analysis provided in the yearly program report.

Virtual Adaptation of Program

In the event that in-person field trips and/or lessons are not permitted due COVID-19 related restrictions, the program will be adapted for virtual instruction in the following ways:

- Field trips will be live-streamed to a classroom projector/television (for in-person cohorts) or individual computers (for virtual cohorts).
- During the virtual activities, students engage with educators by typing in the chat, discussing with peers, and providing response via video. Students interact with program staff through PearDeck loaded on an individual computer.

Suisun Marsh Watershed Program 2022-2023

Total Classes 46 **Total Students** 1426

Task	Hours/ Class	Total hours	Rate	Cost
Outreach/Scheduling and Staff Hiring				
Executive Director: Oversight, Final interviews, Troubleshooting		33.00	$121.00	$ 3,993.00
Education Director: Communicate with funders to maintain financial support/positive relationships, create budgets, staff supervision/evaluation, expand relationships with teachers, troubleshooting, project refinement, program outreach to school boards, contracts	2.00	92.00	$89.50	$ 8,234.00
Program Manager 1: Project Management (includes monitor/track expenditures, invoice, contact teachers/schedule for classroom and field visits/continued correspondence)	3.50	161.00	$71.00	$ 11,431.00
Education Director: Oversee recruitment, hiring process (25 hrs), end-of-year evals (25hrs), weekly staff meetings (50hrs), mentor staff (30hrs)		130.00	$89.50	$ 11,635.00
Program Manager 1: Hiring (5hrs), end-of-year evals, (10hrs), weekly staff meetings (60hrs), quarterly invoice preparation (40hrs)		115.00	$71.00	$ 8,165.00
Program Coordinator 1: Interview process (10hrs), end-of-year staff evals (10 hrs), weekly staff meetings (60hrs), creation of final report w/ assessment results and photo documentation (12hrs), staff training support (16hrs)		108.00	$64.00	$ 6,912.00
Program Manager 1: Grant Writing (10hr/month)		80.00	$71.00	$ 5,680.00
Intern: stipend for education scholarship (given to low income, first generation college student). Student attends twice/week for a quarter.				$ -
Program Manager 1: Plan and implement yearly outreach tour for funders and partner agencies		60.0	$71.00	$ 4,260.00
Program Manager 2: Educator staff training in August, planning and implementation		80.0	$71.00	$ 5,680.00
			Sub-Total	**$ 65,990.00**
Curriculum and Program Preparation				
Program Manager 1: Refine curriculum (40 hrs)		40.00	$71.00	$ 2,840.00
Program Manager 1: Press releases and website updates (20 hrs)		20.00	$71.00	$ 1,420.00
Program Coordinator 1: Supply purchases/inventory, teacher emails, supply drop-off	1.50	69.00	$64.00	$ 4,416.00
Contractor 1: Evaluation Specialist and Program Consultant		58.00	$90.00	$ 5,220.00

Educators: Process evaluation data (.3hr /class to count and randomize) + (1 hr. /30 assessments to grade) number graded will be a % sample of the total number	0.30	21.00	$36.00	$ 756.00
Education Director: pre-program meeting (5) & observe lessons (20) observe field trips (20), Beetles in-staff training (15hrs)		60.00	$89.50	$ 5,370.00
Program Manager 1: pre-program meeting (5) & train lessons (8) observe lessons (16) observe field trips (6 x 9 = 54), Beetles in-staff training (15hrs)		98.00	$71.00	$ 6,958.00
Program Coordinator 1: pre-program meeting (5), correspondence throughout program season (35), Beetles in-staff training (15hrs), program support (60hrs)		115.00	$64.00	$ 7,360.00
Program Coordinator 2: correspondence throughout program season		45.00	$63.00	$ 2,835.00
Program Educators: pre-program meeting (7 educators x 5 hours) & staff meetings (7 educators x 18 hours)		161.00	$36.00	$ 5,796.00
Program Educators: Program Training (7 educ x 10 hrs), Beetles in-staff training (7 educ x 12hrs), Program coorrispondance (7 educ x .25 x classes)		234.50	$36.00	$ 8,442.00
			Sub-Total	**$ 51,413.00**
Implementation				
Program Educators: Field Trip observation (7 educators x 3 trips x 5.75 hours) + In-class Lessons observation (3 educators x 3 in-class lessons x 2.5 hrs)		143.25	$36.00	$ 5,157.00
Program Educators: instruct pre and post-field trip classroom sessions (3 lessons per class x 2hrs)	6	276.00	$36.00	$ 9,936.00
Program Coordinator 1: support on program lessons		40.00	$64.00	$ 2,560.00
Program Manager 1: Observe field trips and coach staff (5 field trips) x 8hrs/day		40.00	$71.00	$ 2,840.00
Program Manager 1: prepare for & manage field trips (9 hrs/trip) 1 field trip/week	9.00	90.00	$71.00	$ 6,390.00
Program Coordinator 1: prepare for & manage field trips (9 hrs/trip)	9.00	126.00	$64.00	$ 8,064.00
Program Educators: 5 educators x 5.75 hrs per field trip	28.8	690.00	$36.00	$ 24,840.00
Program Educators: Email Correspondence (15min/class x 7 educators)	1.8	80.50	$36.00	$ 2,898.00
Assistant Program Manager: program support with supplies, budget tracker, tech support		10.00	$70.00	$ 700.00
			Sub-Total	**$ 63,385.00**
Materials and Non Personnel Expenses				
Printing costs for student manuals		1451	$ 3.00	$ 4,353.00
	miles		*$/mile*	

Solano RCD personal miles (20 trips x 55 miles)	1100		$ 0.600	$ 660.00
Solano RCD vehicle mileage - 3 trips to classroom per class (x 30 miles) divided by three to account for teaching classes in a row + trips to RR for sessions SRCD leads (x 55 miles)	2700.00		$ 0.600	$ 1,620.00
Nature Center - Flat fee of $2,000 to reserve the Nature Center 10 days. Solano RCD can reserve additional days for $200/day and/or by request. SLT is willing to drop the Nature Center fee on a given day if Solano RCD happens to be there and no one else is renting that day.		10	$ 200.00	$ 2,000.00
FT Transportation for Benicia, Dixon		11	$ 1,200.00	$ 13,200.00
FT Transportation for Travis, Vallejo, Rio Vista, Fairfield		22	$ 400.00	$ 8,800.00
FT Transportation for Vacaville		9	$ 525.00	$ 4,725.00
Field trip materials per class		46	$ 20.00	$ 920.00
First Aid/CPR Training for field trips				$ 1,000.00
Videographer: Creation of program materials				$ 2,000.00
Staff Team Training				$ -
			Sub-Total	**$ 39,278.00**
Contingency				
				$ -
			Program Cost	**$ 220,066.00**

per class cost	***$***	***4,784.04***
per student cost	***$***	***154.32***
6th graders countywide	***4535***	***31%***

Field Trips, Classes & Students

School District	Field Trips	Total Buses	Total Classes	Total Students
Fairfield/Suisun	5	10	10	310
Benicia	5	9	9	279
Vacaville	5	9	9	279
Travis	3	4	6	186
Vallejo	4	6	8	248
Rio Vista	1	2	2	62
Dixon	1	2	2	62
Totals	**24**	**42**	**46**	**1426**

		Rates & Hours	Total Costs
Executive Director	$ 121.00	33.00	$ 3,993.00
Program Coordinator 2	$ 63.00	45.00	$ 2,835.00
Education Director	$ 89.50	282.00	$ 25,239.00
Program Manager	$ 71.00	784.00	$ 55,664.00
Program Coordinator 1	$ 64.00	458.00	$ 29,312.00
Educators	$ 36.00	1606.25	$ 57,825.00
Contractor 1: KR	$ 90.00	58.00	$ 5,220.00
Videographer			$ 2,000.00
Assistant Project Manager	$ 70.00	10.00	$ 700.00
Intern	stipend		$ -
	hrs/educator	229.464	
		Program Total	**$ 182,788.00**

Suisun Marsh Program Funding Per Fiscal Year	Amount
Solano County Water Agency	$ 192,471.40
Solano County	$ 7,500.00
Fairfield Suisun Sewer District	$ 3,500.00
Total	$ 203,471.40

Match funding $ 11,000.00

Solano County Biomonitoring Program
Scope of Work *FY 2022/2023 - 2024/2025*

Solano Resource Conservation District

Program Period

January-June

Goals and Objectives

1. Provide a citizen science-focused environmental literacy program to at least one upper-level class from every Solano County high school.
   A. Work with county funding sources to develop, manage, and implement the *Solano County Biomonitoring Program* utilizing local creeks as outdoor learning laboratories and to demonstrate the interconnectedness of stream ecology and water quality.
   B. Provide a micro-perspective, looking at a single reach of a local creek, evaluating watershed health through physical, chemical, and biological assessments.
   C. Use standards-aligned science and place-based learning strategies to introduce and explain the concepts of stream ecology and stream health, as well as teach stewardship practices students and their families can use to protect our local water resource.
   D. Provide students with an experiential introduction to hands-on citizen science in their local environment by collecting and analyzing scientific data related to their watershed and expanding their thinking about current and future roles in environmental protection.

Program Deliverables:

- **Three student online modules or activities (classroom teacher-led)**
  Nearpod or Peardeck (interactive online learning module) will be completed by each student, introducing basic concepts relevant to the program and providing additional assessment opportunities.
- **Three fifty-minute in-class lessons (RCD Educator-led):**
  Lesson 1: Describe and interpret watersheds; identify the key factors influencing stream ecology and water quality.
  Lesson 2: Benthic macroinvertebrates identification and description of organism structures, behaviors, feeding functions, and life cycles.
  Lesson 3: Post-final monitoring trip. Step-by-step analysis of the macroinvertebrate data collected in the field to grade creek's health and compare to results from previous years. Teachers have the option to have students complete a scientific report and presentation.

Field Trip:

Students conduct the California Streamside Biosurvey, a catch and release method to assess invertebrate populations for water quality and a chemical analysis of their study creek. Students also have the opportunity to plant native grass plugs to enhance the riparian corridor (tentative).

Program manuals for students and teachers

Revised and updated each year to reflect current environmental stewardship issues.

Assessments analysis and program reports

Student Pre- and post-assessment results and analysis provided in the yearly program report.

Solano County Biomonitoring Program 2022-2023

Total Classes 20 **Total Students** 600

Task	Hours/ Class	Total hours	Rate	Cost
Outreach/Scheduling and Staff Hiring				
Executive Director: Oversight, Final interviews, Troubleshooting		15	$121.00	$ 1,815.00
Education Director: Communicate with funders to maintain financial support/positive relationships, create/administer budgets, monitor/track expenditures, invoice support, staff supervision/evaluation, expand relationships with teachers, troubleshooting, project refinement, program outreach to school boards, contracts	2.00	40	$89.50	$ 3,580.00
Program Manager 1: Project Management (includes contact teachers/schedule for classroom and field visits/continued correspondence)	3.50	70	$71.00	$ 4,970.00
Education Director: Hiring (10 hrs), end-of-year evals (5hrs), weekly staff meetings (20hrs), mentor staff (30hrs)		65	$89.50	$ 5,817.50
Program Manager 1: Hiring (5hrs), end-of-year evals, (10hrs), weekly staff meetings (60hrs), invoice preparation (30hrs)		105	$71.00	$ 7,455.00
Program Coordinator 1: Interview process (5hrs), end-of-year staff evals (5 hrs), weekly staff meetings (60hrs)		70	$64.00	$ 4,480.00
Program Manager 1: Plan and implement yearly outreach tour for funders and partner agencies		60	$71.00	$ 4,260.00
			Sub-Total	**$ 32,377.50**
Curriculum and Program Preparation				
Program Manager 1: Refine curriculum (40 hrs), press releases (5 hrs), website (5 hrs)		50.00	$71.00	$ 3,550.00
Program Coordinator 1: Supply purchases/inventory, teacher emails, supply drop-off	1.75	35.00	$64.00	$ 2,240.00
Contractor 1: Evaluation Specialist and program consultant		38.00	$90.00	$ 3,420.00
Educator: Process evaluation data (.3hr /class to count and randomize) + (1 hr /30 assessments to grade)	0.30	9.00	$36.00	$ 324.00
Contractor 2: Creek data analysis (25hrs). Time for in-person training with staff (20hrs) (+$500/airfare)		45.00	$60.00	$ 3,200.00
Education Director: pre-program meeting (5) & lesson and field trip observation (20)		25.00	$89.50	$ 2,237.50
Program Manager 1: pre-program meeting (5) & train lessons (8) observe lessons (16)		29.00	$71.00	$ 2,059.00
Program Coordinator 1: pre-program meeting (5), correspondence throughout program season (35), lesson support (60)		100.00	$64.00	$ 6,400.00
Program Educators: pre-program meeting (3 educators x 4 hours) & staff meetings (3 educators x 20 hours)		72.00	$36.00	$ 2,592.00

Program Educators: program training (3 educ x 10 hrs)		30.00	$36.00	$ 1,080.00
			Sub-Total	**$ 27,102.50**
Implementation				
Program Educators: Field Trip observation (3 educators x 3 trips x 5.75 hours) + In-class Lessons observation (3 educators x 3 in-class lessons x 2 hrs)		69.75	$36.00	$ 2,511.00
Program Educators: instruct pre and post-field trip classroom sessions (3 lessons per class @ 2 hrs)	6	120.00	$36.00	$ 4,320.00
Program Coordinator 1: Assist on lessons		40.00	$64.00	$ 2,560.00
Program Manager 1: Observe field trips and coach staff (4 field trips) x 8hrs/day		32.00	$71.00	$ 2,272.00
Program Manager 1: prepare for & manage field trips (9 hrs/trip) + plug coordination (36 hrs)	10.00	96.00	$71.00	$ 6,816.00
Program Coordinator 1: Observe field trips (4 field trips) x 8hrs/day		32.00	$64.00	$ 2,048.00
Program Coordinator 1: prepare for & manage field trips (9 hrs/trip) + plug coordination (36 hrs)	10.00	176.00	$64.00	$ 11,264.00
Program Educators: field trips (2 educators x 5.75 hrs/event)	11.50	230.00	$36.00	$ 8,280.00
Program Educators: Email Correspondence (.5 hr/class x 4 educators)	2.0	40.00	$36.00	$ 1,440.00
Assistant Project Manager: budget tracker support, uploading receipts, miles, schedule interviews		10.00	$70.00	$ 700.00
Program Assistant: behind the scenes field trip support, safety support, setting up	5.0	100.00	$35.00	$ 3,500.00
Restoration Manager: planning, preparation and implementation for student planting for lower county (32), middle county (32), upper county (32)		40.0	$83.50	$ 3,340.00
			Sub-Total	**$ 49,051.00**
Materials and Non Personnel Expenses				
Printing costs for student manuals		625	$ 3.00	$ 1,875.00
	miles		*$/mile*	
Solano RCD vehicle mileage - 3 trips to classroom per class (x 66 miles) + field trips (trips x 66 miles) + 10 site visits with two vehicles (20 trips)	6600		$ 0.600	$ 3,960.00
FT Transportation for Benicia, Dixon		4	$ 1,200.00	$ 4,800.00
FT Transportation for Vacaville		4	$ 525.00	$ 2,100.00
FT Transportation for Rio Vista, Fairfield (Vallejo paid directly by VFWD)		4	$ 400.00	$ 1,600.00
Port-o-Potty Expenses for Vallejo/Benicia/Vacaville - rental fee		10	$ 60.00	$ 600.00
Port-o-Potty Expenses for Vallejo/Benicia/Vacaville - cleaning fee		5	$ 40.00	$ 200.00

Field trip materials per class		40	$ 27.50	$ 1,099.60
Videographer: Creation of program materials				
Plugs		0.8	600	$ 480.00
				$ 16,714.60
Contingency				
				$ -
			Program Cost	**$ 125,245.60**
			per class cost	***$ 6,262.28***
			per student cost	***$ 208.74***

Field Trips, Classes & Students

School District	Total Field	Total Buses	Total Classes	Total Students
Fairfield/Suisun	4	4	4	
Benicia	2	2	2	
Vacaville	4	4	4	
Vallejo	8	0	8	
Rio Vista	0	0	0	
Dixon	2	2	2	
Totals	**20**	**12**	**20**	**600**
C	14			
PM	6			

			Rates & Hours	Total Costs
Executive Director	$	121.00	15.00	$ 1,815.00
Education Director	$	89.50	130.00	$ 11,635.00
Program Manager	$	71.00	442.00	$ 31,382.00
Coordinator 1	$	64.00	453.00	$ 28,992.00
Educators	$	36.00	570.75	$ 20,547.00
Contractor 1: KR	$	90.00	38.00	$ 3,420.00
Contractor 2: PE	$	60.00	45.00	$ 3,200.00
Videographer				$ -
Assistant Project Manager	$	70.00	10.00	$ 700.00
Restoration Manager	$	83.50	40.00	$ 3,340.00
Program Assistant	$	35.00	100.00	$ 3,500.00
Intern		stipend		
		hrs/educator	190.250	
			Program Total	**$ 108,531.00**

Solano County Biomonitoring Program Funding Per Fiscal Year	Amount
Solano County Water Agency	$ 81,265.60
Solano County	$ 20,000.00
Vallejo Flood and Wastewater District	$ 20,000.00

City of Benicia	$	3,500.00
Putah Creek Council	$	480.00
Total	$	125,245.60
Match funding	$	43,980.00

Welcome to the Watershed Program
Scope of Work *FY 2022/2023 - 2024/2025*

Solano Resource Conservation District

Program Period

Year-round

Goals and Objectives

Solano RCD staff provide resource conservation education and *Welcome to the Watershed* kits to Solano County residents and growers at conservation-related community events and workshops. These kits include water saving devices, educational information, and opportunities for individuals to learn more. The concepts conveyed to Solano County residents through these outreach efforts include:

- The sources of Solano County's drinking and irrigation water and how that water moves through a constructed watershed.
- The importance of water conservation and stewardship in Solano County to protect water resources and improve water quality.
- The importance of groundwater sustainability as a source of both drinking water and for agriculture use in the Solano subbasin.
- The impact of storm water on the watershed, particularly the impacts of human debris and contaminants in storm water.
- Best practices for soil and water conservation, providing native wildlife habitat, creating urban gardens, and agricultural/rangeland management.

Program Deliverables

- Prepare approximately **150 *Welcome to the Watershed* kits per year** and distribute them to Solano County residents at conservation events and workshops throughout the County. (Create, purchase, or otherwise procure and organize water and resource conservation supplies for these kits.)
- Develop and prepare additional displays, interactive tools, or materials for public conservation education **(1 or 2 displays, tools, or materials per year**).
- Educate approximately **500 Solano County residents per year** through a combination of distributing *Welcome to the Watershed* kits and other direct outreach and education efforts.
- Teach a minimum of **two conservation workshops per year**, on topics such as lawn replacement, water conservation, wildlife habitat creation, etc.
- Attend a minimum of **two conservation-based community events per year** with a table presenting relevant information for attendees and distributing Welcome to the Watershed kits.
- Host a minimum of **two volunteer events** for conservation activities **per year.**

Welcome to the Watershed Program - Adult Education	
Planning and Administration	
	$ 4,500.00
Develop and Prepare Conservation Education Materials and Tools	
	$ 3,500.00
Outreach and Education to Solano County Residents	
	$ 10,500.00
Materials and Non Personnel Expenses	
	$ 1,500.00

Program Cost	$	20,000.00
SCWA Funding/year	$	20,000.00
TOTAL SCWA FUNDING	**$**	**60,000.00**

Total Solano County Residents Educated	500
Total Residents over 3 years	**1,500**

Estimated FY 22-23 Billing Rates based on 7-6-22 DRAFT Budget	
Staff Person	**Billable Rates**
Executive Director	**$ 121.00**
Assistant Project Manager	**$ 70.00**
Education Director	**$ 89.50**
Program Manager 1 (SK)	**$ 71.00**
Program Manager 2 (LA)	**$ 70.50**
Program Coordinator 1 (SC)	**$ 64.00**
Program Coordinator 2 (M)	**$ 63.00**
Program Assistant	**$ 35.00**
Educators	**$ 36.00**
Interns	**$ 26.00**

EXHIBIT B

RATE OF COMPENSATION

Solano Resource Conservation District - Education Programming (FY 2022/2023 - 2024/2025)

	FY 2022-2023	FY 2023-2024	FY 2024-2025	TOTAL
		*yearly increase: 8% staff/labor & 10% supplies/transportation		
Watershed Explorers Program - 3rd grade classes				
Outreach/Scheduling and Staff Hiring	$ 67,879.50	$ 73,309.86	$ 79,174.65	$ 220,364.01
Curriculum and Program Preparation	$ 68,824.00	$ 74,329.92	$ 80,276.31	$ 223,430.23
Implementation	$ 65,664.50	$ 70,917.66	$ 76,591.07	$ 213,173.23
Materials, Transportation and Non Personnel Expenses	$ 31,723.24	$ 34,895.56	$ 38,385.12	$ 105,003.92
2.5% Contingency				$ -
Watershed Explorers TOTAL Cost	$ 234,091.24	$ 253,453.00	$ 274,427.16	$ 761,971.40
SCWA FUNDING	$ 155,000.00	$ 155,000.00	$ 155,000.00	$ 465,000.00
Match FUNDING	$ 66,564.47	$ 66,564.47	$ 66,564.47	$ 199,693.41
	**$10,000 additional commitment for year one only from SCOE*			
Suisun Marsh Watershed Program - 6th grade classes				
Outreach/Scheduling and Staff Hiring	$ 65,990.00	$ 71,269.20	$ 76,970.74	$ 214,229.94
Curriculum and Program Preparation	$ 51,413.00	$ 55,526.04	$ 59,968.12	$ 166,907.16
Implementation	$ 63,385.00	$ 68,455.80	$ 73,932.26	$ 205,773.06
Materials, Transportation and Non Personnel Expenses	$ 39,278.00	$ 43,205.80	$ 47,526.38	$ 130,010.18
5% Contingency				$ -
Suisun Marsh Watershed Program Total Cost	$ 220,066.00	$ 238,456.84	$ 258,397.50	$ 716,920.34
SCWA FUNDING	$ 192,471.40	$ 192,471.40	$ 192,471.40	$ 577,414.20
Match FUNDING	$ 11,000.00	$ 11,000.00	$ 11,000.00	$ 33,000.00
Biomonitoring Program - 20 high school classes involved in Solano County				
Outreach/Scheduling and Staff Hiring	$ 32,377.50	$ 34,967.70	$ 37,765.12	$ 105,110.32
Curriculum and Program Preparation	$ 27,102.50	$ 29,270.70	$ 31,612.36	$ 87,985.56
Implementation	$ 49,051.00	$ 52,975.08	$ 57,213.09	$ 159,239.17
Materials, Transportation and Non Personnel Expenses	$ 16,714.60	$ 18,386.06	$ 20,224.67	$ 55,325.33
5% Contingency				$ -
Biomonitoring Program Total Cost	$ 125,245.60	$ 135,599.54	$ 146,815.22	$ 407,660.36
SCWA FUNDING	$ 81,265.60	$ 81,265.60	$ 81,265.60	$ 243,796.80
Match FUNDING	$ 43,980.00	$ 43,980.00	$ 43,980.00	$ 131,940.00
Welcome to the Watershed Program - Adult education				
Planning and Administration	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 6,000.00
Develop/Prepare Conservation Ed, Materials and Tools	$ 3,000.00	$ 3,000.00	$ 3,000.00	$ 9,000.00
Outreach and Education to Solano County Residents	$ 11,000.00	$ 11,000.00	$ 11,000.00	$ 33,000.00
Materials and Non Personnel Expenses	$ 4,000.00	$ 4,000.00	$ 4,000.00	$ 12,000.00
Welcome to the Watershed Program Total Cost	$ 20,000.00	$ 20,000.00	$ 20,000.00	$ 60,000.00
SCWA FUNDING	$ 20,000.00	$ 20,000.00	$ 20,000.00	$ 60,000.00

Total Program Cost FY 2022-2023	$	599,402.84
Total Program Cost FY 2023-2024	$	647,509.38
Total Program Cost FY 2024-2025	$	699,639.88
Total Program Cost Over 3 Years	**$**	**1,946,552.11**
Total Funding Each Year	$	570,281.47
Total Funding Over 3 years	$	1,710,844.41
SCWA FUNDING OVER 3 YEARS	$	1,346,211.00
MATCH FUNDING Over 3 Years	$	364,633.41
FUNDING NEEDED Year ONE (30% students)	**$**	**29,121.37**
FUNDING NEEDED Over 3 years (30% students)	**$**	**235,707.70**
FUNDING NEEDED Year ONE (50% students)	**$**	**74,783.40**
FUNDING NEEDED Over 3 years (50% students)	**$**	**749,219.63**

*yearly increase: 8% staff/labor & 10% supplies/transportation

FUNDING IMPACT	FY 2022-2023	FY 2023-2024	FY 2024-2025	TOAL IMPACT OVER 3 YEARS
Total Classes	120	120	120	**360**
Total Students	3,430	3,430	3,430	**10,290**
Adult Education	500	500	500	**1,500+**

SCWA FUNDING PER YEAR	
WE	**$ 155,000.00**
SMP	**$ 192,471.40**
BIOM	**$ 81,265.60**
W2W	**$ 20,000.00**
TOTAL	**$ 448,737.00**

ACTION OF
SOLANO COUNTY WATER AGENCY

DATE: **July 14, 2022**

SUBJECT: **Lake Berryessa Mussel Prevention Program Grant Application**

RECOMMENDATIONS:

Adopt Resolution 2022-05 authorizing General Manager or designee to file grant application and execute grant agreements and any other documents necessary to secure California State Parks Division of Boating and Waterways Quagga and Zebra Mussel Infestation Prevention Grant.

FINANCIAL IMPACT:

Possibility of obtaining up to $374,800 in grant funds.

BACKGROUND:

Since 2008 the Water Agency has implemented the Mussel Prevention Program for Lake Berryessa. Lake Berryessa, by virtue of its water quality and the fact that it is a popular destination for boaters and other recreational enthusiasts is highly susceptible to Quagga and/or Zebra mussel infestations. Both Quagga and Zebra mussels are extremely prolific and as a result, capable of causing significant ecological and water infrastructure damage. Accordingly, the prevention of mussel infestations at Lake Berryessa is one of the Water Agency's priority projects – annual expenditures on the order of $400,000 per year.

This past June, the Solano County Water Agency was tentatively selected by California State Parks Division of Boating and Waterways to receive a 2-year Quagga and Zebra Mussel Infestation Prevention grant. If awarded, the grant would provide $374,800 to fund existing and additional mussel infestation prevention activities – staff and intern labor, educational signage, literature, and general public outreach - at Lake Berryessa, through August 2024. In order to secure the award, the Water Agency must complete a formal Resolution and Agreement documents that are favorably received by the Division of Boating and Waterways management.

Recommended: _____
Roland Sanford, General Manager

☐ Approved as Recommended	☐ Other (see below)	☐ 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 July 14, 2022 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

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

RESOLUTION NUMBER 2022-05

A RESOLUTION OF THE SOLANO COUNTY WATER AGENCY QUAGGA/ ZEBRA MUSSEL INFESTATION PREVENTION FEE GRANT PROGRAM APPLICATION AND FUNDING AGREEMENT RESOLUTION

WHEREAS, prior to the State of California Parks and Recreation, Division of Boating and Waterways approving an Application and executing a Funding Agreement, the Solano County Water Agency is required to pass a resolution, authorizing a designated representative(s) to execute said Application, Funding Agreement, amendments, and certifications, designating a representative to approve claims for reimbursement, designating a representative to sign Project Completion Certification, and designating a representative to sign the Contractor's Release Form: and

WHEREAS, the U.S. Bureau of Reclamation has the legal authority to manage the water, construct, operate, maintain infrastructure, post signage, and marinas at Lake Berryessa, and has the authority to contract with concessionaires to manage marinas at Lake Berryessa on the U.S. Bureau of Reclamation's behalf under the Solano Project, and the Solano County Water Agency manages the Solano Project on behalf of the U.S. Bureau of Reclamation, the Solano County Water Agency has legal authority to prepare Prevention Plan documentation, monitor for water chemistry and quagga and zebra mussels, conduct and monitor boater inspections and decontamination activities, and conduct public outreach for Lake Berryessa; and to apply to the State California Parks and Recreation, Division of Boating and Waterways for grant funding up to the amount of $374,800 pursuant to the California Harbors and Naviation Code, Section 676.1 and Fish and Game Code Section 2302.

WHEREAS, the Solano County Water Agency desires to implement a plan for the prevention of an infestation of the quagga and zebra mussel for Lake Berryessa; and

WHEREAS, the Solano County Water Agency pursuant and subject to all of the terms and provision of the Quagga and Zebra Mussel Infestation Prevention Grant Program, application is hereby made to California Parks and Recreation, Division of Boating and Waterways for funding.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors does hereby authorize staff of Solano County Water Agency are hereby authorized and directed to do the following acts, including but not limited to:

1. Cause the necessary data to be prepared and application to be signed and filed with California Parks and Recreation, Division of Boating and Waterways; and
2. Sign the California Parks and Recreation, Division of Boating and Waterways Quagga and Zebra Mussel Infestation Prevention Grant Agreement and any amendments thereto; and
3. Approve Claims for Reimbursement; and
4. Execute the Budget and Expenditure Summary; and
5. Sign the Contractor’s Release Form; as applicable; and
6. Certify that the project is complete, and ready for final inspection, as applicable.

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 14 day of July 2022, by the following vote:

Ayes:

Noes:

Abstain:

Absent:

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

ACTION OF
SOLANO COUNTY WATER AGENCY

DATE: **July 14, 2022**

SUBJECT: **Agreement with A2Z Landscaping for Landscape Assistance Program**

RECOMMENDATIONS:

Authorize General Manager to execute agreement with A2Z Landscaping for the Landscape Assistance Program.

FINANCIAL IMPACT:

Cost of services for this agreement is $250,000. There is adequate funding in the Fiscal Year 2022-2023 Budget.

BACKGROUND:

In 2018, the Board directed staff to expand the Landscape Assistance Program for Low-Income Seniors and Residents with Disabilities. With an overwhelmingly popular Program, the funding slated each fiscal year was quickly allocated for several deserving Solano County residential projects. After several years of success, Agency staff, at Board direction, advertised a Request for Proposals (RFP) for this fiscal year. Staff solicited proposals from qualified firms and organizations including the CalWEP and BayQWEL Communities (large water conservation organizations).

The Water Agency received one application in response to the RFP, a veteran owned landscape installation and design firm based in Vacaville. This is the same firm the Water Agency has consulted with in the past, A2Z Landscaping. Given the prior success and highly praised service from the public, the Agency is recommending the Board authorize the General Manager to execute a contract with A2Z Landscaping for this Fiscal year in the amount of $250,000.

Recommended: _____
Roland Sanford, General Manager

☐ Approved as Recommended	☐ Other (see below)	☐ Continued on next page

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 July 14, 2022 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

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

SOLANO COUNTY WATER AGENCY

MEMORANDUM

TO: **Board of Directors**

FROM: **Roland Sanford, General Manager**

DATE: **July 6, 2022**

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

Lake Berryessa Storage

As of this writing Lake Berryessa storage is just under 925,000 acre-feet (approximately 60 percent of capacity). Assuming typical summer and fall water demands, Lake Berryessa storage is expected to be between 825,000 and 800,000 by the end of October – with the lake's resulting water surface elevation roughly 48 feet below the spillway. Should drought conditions continue through the 2023 rainy season, lake storage will likely be below 800,000 on April 1, 2023, thereby triggering modest allocation cutbacks – approximately 5 percent – pursuant to the Drought Measures Agreement. The last time Lake Berryessa storage was below 800,000 acre-feet was during the final two years of the 1987-1992 six year drought, with an all-time low, other than during the initial filling of the reservoir, of 422,000 acre-feet on November 30, 1992.

2022 Water Awareness Video Contest Winners

Each spring the Water Agency hosts a water awareness video contest for middle school and high school students in Solano County. The 2022 video theme was "Saving Water is Saving Our Future". Students were tasked with creating a compelling and original 60-second Public Service Announcement. The Water Agency received 125 video entries. A team of water efficiency experts selected the top finalists, and the contest winners selected from the pool of finalists by a panel of community of leaders that included Ron Turner of Senator Bill Dodd's office, John Young with 94.5 KUIC radio, and Jim Reikowsky, longtime Film Office Liaison (now retired) with the Solano County Film Commission. First place went to Peyton Post, Haley Naga and Kezla Pierce of Buckingham Charter High School in Vacaville; second place to Samantha Abelon of Buckingham Charter High School in Vacaville. There was a tie for third place: Mackenzie Wade of Vanden High School in Fairfield, and Analicia Douglas also of Vanden High School in Fairfield. The winning videos can be viewed at: https://www.youtube.com/channel/UCEGZPaOYYn_uwg8uklfENNQ/feed?view_as=public

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

August Board Meeting Tentatively Cancelled

Unless a time sensitive matter emerges that requires Board direction, staff is anticipating that the regularly scheduled August 11, 2022 Board meeting will be cancelled. A final decision regarding the August 11, 2022 Board meeting will be made prior to the end of July.

Time Period Covered: JUNE 2022

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

BENICIA HERALD

A First Street business since 1898 | BeniciaHeraldOnline.com; Find us on Facebook and Twitter | Vol 126 No. 79 | Always $0.50

Friday
July 1
2022

A special good morning to subscriber
Jennifer Franz-Castellano

Sunrise 5:49 a.m.
Sunset 8:35 p.m.
High /Low Tides
2:39 a.m. 5.57' 5:36 p.m. 4.33'
10:36 a.m. -0.39' 10:02 p.m. 2.81'

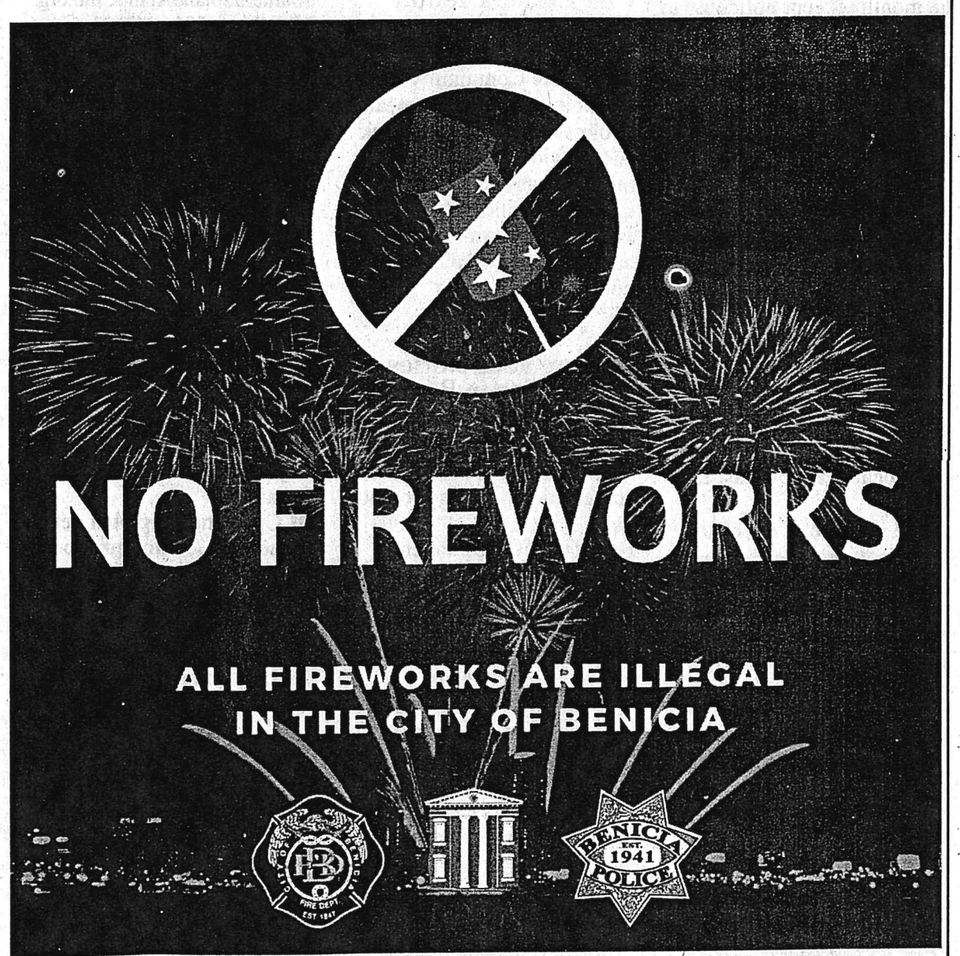
High 73 Low 53
Winds SW up to 20 mph
Mainly sunny

"A person without imagination is like a teabag without water."

- Alan Fletcher

The A Cappella Handyman

Personal fireworks illegal in Benicia



BENICIA - As the celebration of Independence Day approaches, the Benicia Fire Department wants to remind everyone about the regulations and dangers associated with the private use of fireworks. The sale and private use of fireworks is banned in the City of Benicia, including fireworks

See **FIREWORKS**, *Page A3*

Solano County leads the way in agricultural water conservation

Cary Keaten
General Manager
Solano Irrigation District

In response to Gov. Gavin Newsom's March 28 Executive Order, home and business water use has been cut, leaving some to ask what the agriculture industry, which accounts for the majority of California water usage, is doing to be part of the solution. The simple answer is, "a lot". State-wide, water agencies serving agricultural water have seen their supplies significantly cut. Many have seen a zero percent (0%) allocation from the State or Federal Water Projects. Good water stewardship is integral to Solano County's ability to continue to produce food, feed, and jobs, and the Solano Irrigation District (SID) and our partners take this responsibility very seriously.

More than 60 percent of land in Solano County is dedicated to agriculture – growing wheat, corn, tomatoes, and other vegetables. The county is responsible for feeding millions of Californians. Although our agricultural water supply is relatively stable, we are implementing technologies and practices focused on conserving water. The SID has made significant strides in investing in canal automation technology, as well as common-sense approaches to reduce agricultural water use. And we are yielding excellent results.

Over the past decade, SID has invested millions of dollars in irrigation canal automation that has reduced water loss equivalent to up to 3,000 households per year. Utilizing cutting edge hardware and software, this automated system includes a series of monitored flume gates, slip meters and pumps that have taken water

See **WATER**, *Page A3*

The Early Works...

Berkeley October

A Berkeley girlie with frosted cheek
who looked my way though as not to speak,
and a campus gardener with hand held rigid
numbed to the bone by water frigid
that splashed to a concrete walk.
I came, I saw, and I went.

Peter Bray ©1970
All rights reserved

November

Tan leather boots that once felt the heat
and sweat of summer, that later carried
the brown dust of autumn
are now to be found tracking mud down the
hallways, bringing in a reminder that the rainy
season has just begun.

Droplets run from the toe forming a slurry
at the bottom where the autumn's dust has met
with the early rain. And the leaves
hanging from the eucalyptus, refreshed by the
early rain, seem cautious of the months
to come. November has well begun.

Peter Bray ©1970
www.peterbray.org/pedro
www.Handymanservicespeterbray.com

Kite Fly High
Two Right Shoes
Colitis Blue
You and Fyodor
and Change
Writing Poems
Only at High Tide
Berkeley October
Ladies of Age
November
Ducks and Ammo
Bottom Back
My Son Chris
The Compost News Blues
Can't Find the Pharaoh/
Quarry Song/
Rooms and Brooms
Handyman Song #12
I've Been Better and
I've Been Worse
The East Benicia Jail Song
Methane Jane
Buy The Farm
The Box Top Shop
Dog Food Commercial
I Buy Jam
The Dogs of Poetry
Life's Just a John Prine Song
Daddy Was a Hard Drive
Laid Off American Man
You Are The Song
Dear Writer
Wingman

Peter Bray © 3/22/2020
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The Box Top Shop Benicia, CA USA ™

FIREWORKS

Continued from front

hat are referred to as "safe and sane."

Thousands of people are injured each year by fireworks t around the 4th of July. Not only do fireworks present a danger by potentially causing physical injuries, they also may cause fires. Recent wildfires cause concern for the potential for fire by the sparks generated from fireworks.

Do the right thing by your pets, neighbors, and emergency responders. Keep Benicia safe this 4th of July.

WATER

Continued from front

efficiency from 75% to about 95 percent on these systems. These benefits come from the 20 percent of our irrigation canals that have been automated thus far. We are working to achieve full automation of our canals over the next 20 years.

In Solano County, regional farmers have also heavily invested in efficient water delivery systems. For example, local farmers have invested in micro irrigation drip irrigation and buried drip irrigation.

Buried drip irrigation delivers water to crops at their root zones. This reduces water usage, spills, and evaporation. Significantly, for tomatoes it increases crop yield by a factor of two to four. Expanding drip irrigation has required investment in tractors that monitor the location of drip lines when digging furrows, also in the buried drip but the return on this investment has been far worth the cost.

A third water conservation initiative is increased capture of return water flows for fields that have not been able to take advantage of water saving technologies. When fields are flooded to provide irrigation to these crops, SID and Solano County Water Agency infrastructure allows for the capture of excess water that is then reused multiple times on downstream fields before the water is returned to the Ulatis Creek system.

SID continues to pursue these and other water conservation efforts to ensure that, despite California's ongoing water challenges, Solano County can continue to lead in conservation while preserving its significant contributions to putting food on our tables and providing jobs that fuel our local and state economies.

SCHEME

Continued from front

hid the company's lack of third-party lease revenue, caused fake engineering reports for MSGs that the company sold but never built, and helped fool investors into thinking that DC Solar was a success. Eventually, DC Solar simply stopped building the mobile-solar generators that it claimed to be selling to investors.

While carrying out the contacts," said Acting Special Agent in Charge Dennis Guertin of the FBI Sacramento Field Office. "Complex cases like these are truly a team effort. I am grateful to the dedicated FBI special agents, forensic accountants and professional staff who worked tirelessly to investigate this case in concert with our equally dedicated partners at IRS Criminal Investigation, FDIC Office of Inspector General, and U.S. Attorney's Office. Our office is deeply Corporation Office of Inspector General (FDIC OIG). "The FDIC OIG is committed to working with our law enforcement partners to bring to justice those who undermine the integrity of the Nation's financial system."

This case was the product of an investigation by the Federal Bureau of Investigation, IRS Criminal Investigation, and the Federal Deposit Insurance Corporation Office of Inspector General. Assistant U.S. Attorneys

PAYROLL

Continued from front

California law requires cities, in 2010, it has registered more than 14 million page views. The site contains pay and benefit information on more than two numerous financing authorities, and fiscal and financial oversight entities including the Franchise Tax Board. She also

businesswire
A BERKSHIRE HATHAWAY COMPANY

New Studies Show Metropolitan's Grass Removal Incentives Are Driving Transformation of Southern California's Landscapes

More non-functional lawns removed through "multiplier effect"

July 05, 2022 03:41 PM Eastern Daylight Time

LOS ANGELES--(BUSINESS WIRE)--As Southern California faces the most challenging drought in its history, two new studies highlight the value and wide-ranging success of Metropolitan Water District's Turf Replacement Program, which gives cash rebates to residents who swap their water-guzzling lawns for more water-efficient California Friendly® and native plants.

One study found that for every 100 homes that converted their yards using a rebate, an additional 132 nearby homes were inspired to convert their own grass without receiving a rebate to help fund the projects. This "multiplier effect" more than doubled the value of Metropolitan's investment in making Southern California more sustainable.

The second study found that less than 4 percent of participants who received a turf rebate to transform their yards later replanted grass.

"Metropolitan has been working for decades to transform Southern California's landscapes to more climate-appropriate plants. These studies show those efforts are working and valuable water is being saved," Metropolitan General Manager Adel Hagekhalil said. "As climate change challenges all of our water supplies, we have to ask ourselves – are maintaining decorative lawns that no one ever steps on, what we call non-functional turf, really the best use of this precious resource?"

Metropolitan's Turf Replacement Program provides residents and businesses with $2 per square foot of lawn converted in front or back yards (many local water agencies offer additional incentives as well). The rebates have helped facilitate the removal of more than 200 million square feet of grass, saving enough water to serve 62,000

Southland homes annually.

Both of the latest studies were conducted by Dr. Andrew Marx, CEO of PlanetScape AI, in an effort to help Metropolitan better understand the overall water savings of its Turf Replacement Program.

The Multiplier Effect Study used aerial imagery to look at nearly 800 homes within 20 Southern California neighborhoods between 2012 and 2018 to determine how many of them converted their grass to drought-tolerant landscaping without a rebate and their proximity to homes that did receive a rebate.

"Our rebates are not only saving water in the homes that have replaced their lawns, but these participants are showcasing to their neighbors just how beautiful this type of conversion can be. And we're seeing real results," said Metropolitan board Chairwoman Gloria D. Gray.

The Reversion Study analyzed more than 2,000 yards that received a rebate from 2014-2018 to determine how many people replanted their grass after previously converting their yards to drought-tolerant landscaping. It found a small percentage did revert, with most of them only resulting in residents re-installing grass in a portion of their yard.

So far in 2022, Metropolitan has seen a month-by-month uptick in applications for turf rebates, from 223 applications in January, to 364 in April and 870 in May.

"The studies quantify what we see walking around neighborhoods. One person converts to a beautiful California Friendly landscape, their neighbor sees it, is inspired, and does the same," said Metropolitan Water Efficiency Manager Bill McDonnell. "Summer is a perfect time to apply for a rebate, let your lawn die during the hot summer months and wait for the fall when it's cooler to plant natives."

For more information on Metropolitan's rebates and tips for removing and replacing your lawn, visit bewaterwise.com.

The Metropolitan Water District of Southern California is a state-established cooperative that, along with its 26 cities and retail suppliers, provides water for 19 million people in six counties. The District imports water from the Colorado River and Northern California to supplement local supplies, and helps its members to develop increased water conservation, recycling, storage and other resource-management programs.

Contacts

Rebecca Kimitch, (213) 217-6450; (202) 821-5253, mobile, rkimitch@mwdh2o.com
Maritza Fairfield, (213) 217-6853; (909) 816-7722, mobile, mfairfield@mwdh2o.com

WATER ADVISORY COMMISSION UPDATES

Solano Water Advisory Commission
Meeting Minutes
May 25, 2022

Present:

Agency	Members
SCWA	Roland Sanford, Chris Lee, Thomas Pate, Alex Rabidoux, Andy Florendo, Jeff Barich
Benicia	Kyle Ochenduszko
Dixon	Jordan Santos
Fairfield	Michael Hether
Vacaville	Curtis Paxton, Justen Cole
Vallejo	Beth Schoenberger, Melissa Cansdale
Solano County	Misty Kaltreider
SID	Cary Keaten
RD 2068	Bryan Busch
Dixon RCD	Kelly Huff
FSSD	Talyon Sortor, Jordan Damerel

The meeting was called to order at 12:33 PM.

1. Minutes of April 27, 2022 meeting:
   The minutes of the April 27, 2022 meeting were approved.

2. Presentation on Agricultural Water Conservation & Efficiency:
   Cary Keaten (SID) gave a presentation to the group that he gave at an ACWA conference about automation goals for SID's lateral system, and how this is reducing costs and water spills, all while improving water efficiency. The presentation highlighted SID's two largest irrigation canals, the Vaughn and the Weyand. The overall automation progress is about 20% complete, and is dependent on money and timing, and is expected to be completed over about 20-years. To date, SID has received about $3 million of Bureau of Reclamation grants to aid in the funding of the automation program. Alex Rabidoux (SCWA) will distribute the presentation and program to the group.

3. Updates from the Legislative & Water Policy Committees:
   Roland Sanford (SCWA) talked about possibly engaging a federal lobbyist to help with obtaining infrastructure funding. AB 2201 has been discussed at the committee meetings regarding groundwater basins under SGMA and new well permits and what it would mean to the GSAs. Roland Sanford talked about Napa County having a 1,500-AF contract with the Bureau of Reclamation for Berryessa water and the interest they have in Solano wheeling this through the Putah South Canal and into the NBA for urban Napa County usage. Napa is likely to come back to SCWA with a request for support for this as an emergency water supply. The Water Policy Committee is extremely cautious about this approach. The Advisory Commission

members had similar thoughts, but felt a Water Market approach may make sense, should anything move forward.

4. Emerging Issues:
   a. Water Conservation & Governor's Executive Order: Roland Sanford (SCWA) explained that the SCWA Board is interested in what the Executive Order means for the cities in Solano County. Alex Rabidoux (SCWA) talked about the letter that SCWA sent out to the State Water Resources Control Board (State Board), seeking clarification and the concern with cumulative and compounded water conservation mandates. The cities are still a bit unclear as to what the State Board is asking for. Most of the Solano cities indicated that they were meeting the 20% water conservation goal by 2020-2021. Roland requested that the Commission put together a few slides showing the conservation efforts and what has been done already.
   b. NBA Water Rights Curtailment: Alex Rabidoux (SCWA) submitted a regional letter from the Napa and Solano NBA agencies, regarding the State Board's recent NBA curtailment. Napa and Solano also co-presented these concerns at the State Board's virtual workshop. DWR submitted a letter to the State Board as well. SCWA will continue to track this issue as it moves forward and submit additional comments as needed. Jeff Barich (SCWA) mentioned that Term 91 is likely to go into effect based on a letter received this morning from the State Board. Thomas Pate (SCWA) talked about how the Table A allocation (15% NOD, 5% SOD) is likely to hold for the remainder of this year.

5. SCWA General Manager's Report:
   a. SCWA Board Items: The top priority for the June Board meeting will be the upcoming FY budget as well as a drought update.
   b. North Bay Aqueduct: None.
   c. Solano Project: Berryessa is in good shape, currently around 950-TAF, but there have been some challenges meeting compliance flows at the end of Lower Putah Creek associated with the Riparian Diverters. Under the Accord, the required flows decrease when the lake hits 800-TAF. SCWA is operating Putah Creek flows carefully and in close coordination with the Streamkeeper.
   d. Bay Delta Planning Issues: None.
   e. Flood Management Issues: None.
   f. Other Regional and State Issues: None.
   g. Other Issues: None.

6. Groundwater Planning:
   SGMA Update: Chris Lee (SCWA) said that the Solano GSA is sending out Prop-218 notices this week for implementation of the GSP and the flat per-acre charge.

7. Solano County Report:
   Misty Kaltreider (Solano County) is still working through updates to the well permit process associated with the Governor's Executive Order.

8. PSC/NBA Maintenance:
   None.

9. Legislative/Initiative/Court Decision Issues (Not Discussed Above):
   None.

10. New Business:
    None.

11. Public Comments:
    None.

The next meeting will be June 22, 2022 at 12:30 PM. The meeting will be a hybrid meeting format.

The meeting adjourned at 1:52 PM.

ACTION OF
SOLANO COUNTY WATER AGENCY

DATE: **July 14, 2022**

SUBJECT: **Contract for Hydrodynamics Feasibility Study in Support of Water+ (aka North Bay Aqueduct Alternate Intake Project)**

RECOMMENDATIONS:

Authorize General Manager to execute contract with Resources Management Associates (RMA) for hydrodynamic modeling feasibility studies in support of North Bay Aqueduct Alternate Intake Project.

FINANCIAL IMPACT:

Total cost: $494,262. Sufficient funding has been included in the Water Agency's FY 2022-2023 budget for these studies.

BACKGROUND

The North Bay Aqueduct (NBA) component of the State Water Project (SWP) provides municipal water to over 500,000 residents in Napa and Solano County. 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.

Recommended: _____
Roland Sanford, General Manager

☐	Approved as Recommended	☐	Other (see below)	☒	Continued on next page

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 July 14, 2022 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

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

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

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. Simply stated, the NBA is already an unreliable water supply and the future prospects are bleak, particularly if large scale habitat restoration continues in the YBCSC. 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 NBA water supply reliability while simultaneously providing ecological benefits to the YBCSC that support the Central Valley Flood Protection Plan and the Delta Stewardship Council's Delta Plan objectives and goals.

Feasibility studies – hydrodynamic modeling - are needed to evaluate the potential ecological benefits of the proposed NBA Alternate Intake Project. In January 2022 the Board approved an agreement between the Water Agency and the United States Geological Survey (USGS) to develop a hydrodynamic modeling study plan (scope of work) for investigating how the proposed NBA Alternate Intake Project could be operated to enhance the hydrodynamic features of the YBCSC for the benefit of fish and other aquatic life.

Staff is recommending Resource Management Associates (RMA), a consulting firm based in Fairfield, execute the hydrodynamic modeling study plan developed by the USGS. RMA specializes in modeling the hydrodynamics and hydrology of the Delta and is very familiar with the YBCSC. All work products produced by RMA would be subject to peer review by the USGS.

RELEVANCE TO 2016-2025 SCWA STRATEGIC PLAN:
Approval of the proposed RMA contract 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.

INTRODUCTION – OVERVIEW of the ALTERNATE INTAKE PROGRAM (AIP)

The overarching objectives of the proposed (NBA AIP) are to preserve access to regional water supply investments of 500,000 people in Napa and Solano Counties when available, improve water supply reliability, resilience and quality for the NBA service area while simultaneously potentially enhancing listed species populations by, reducing direct entrainment, 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; 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?"). For example, "…it is now recognized that wetlands provide ecosystem services valued higher (per unit area) than other biomes) (De Groot et al., 2012) and Cloern et al., 2021 found "that a 77% loss of wetland habitats [in the San Francisco Estuary]… reduced ecosystem net primary production (NPP) by 94%, C (energy) flow to herbivores by 89%, and detritus production by 94%".

Yet the NBA and agricultural users remove wetland primary production 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 primary production from phytoplankton in the channels, from marsh plants (made up of mostly emergent vascular plants but also a small, but significant contribution of attached microalgae) where "most of the marsh-plant (median 94%) is converted into detritus, whereas most of the phytoplankton production is consumed by herbivores Cloern et al., 2021 (which include zooplankton, the primary food source for native fish) that could instead be used to fuel food webs in downstream habitats associated with the 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 Low Salinity Zone (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 both 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), and coinciding with peak municipal and agriculture diversion seasons (e.g. Summer/Fall). (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, detrital and secondary production (e.g. fish food") from these systems and to reduce their export to downstream habitats. An NBA AIP can provide an adaptive management tool to protect and enhance significant public restoration investments in the YBCS in the face of a changing future condition driven by climate shift.

Why is it OK to remove "food" from the YCBS, one of only two places in the Delta where we can significantly increase primary and secondary production, in a system where food limitation is likely severely constraining native fish populations? We are cropping the very thing that our marsh restoration efforts are producing and exporting that native fish need to maintain self-staining, resilient populations.

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 the export of primary, detrital, and secondary production from water diversions in the YBCS (Figure 2) by providing an alternative diversion point for the NBA and possibly a few large agriculture diversions from the NBA AIP to reduce net upstream flow during opportune and critical conditions.
- 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 pelagic (e.g. phytoplankton) primary production 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 reverse flow conditions that occur seasonally to promote physical processes that enhance ecosystem services in the YCBS and in downstream habitats through balancing the net flow of diversions from the YCBS with strategic releases of water from the AIP. The "starred" locations in figure 1 are the points of consideration for releases of functional flow (e.g. pulse flows timed with the spring/neap cycle) for ecosystem service benefits.

NUMERICAL MODELING APPROACH

The general modeling approach is aimed at investigating the possibility of improving local,

regional and systemwide ecosystem function by:

(1) By guiding marsh restoration designs that maximize primary and detrital production and its export out of the marsh through recommendation of specific marsh landscape features (e.g. the berm height at MHHW in Figure 3); then,

(2) Leveraging these investments by optimizing the abiotic conditions to enhance biotic responses associated with the connection between primary, detrital, and secondary 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 primary, detrital, and secondary 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) Potential to provide a supplemental means to divert local water supplies from the AIP to large diverters (NBA, RD 2068/2060) to allow reduction of direct diversions from the CSC during critical periods. This will minimize seasonal reverse net flows 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. This analysis is aimed at determining if an AIP facility could be practically sized to augment the water supply needs for the large YBCS diverters. Reduction of agriculture diversions is purely conceptual at this juncture, any modifications or reductions in direct diversions from the CSC in practice would need to be collaboratively agreed upon by diversion owners. This could also benefit the mitigation requirements of the proposed Habitat Conservation Plan being developed by the State to protect most water diversions from the CSC into the future.

(3) Increasing the net flow in Cache Slough through releases of redirected outflow or environmental water ("functional flows") through the AIP 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) tides coupled with possible strategic optimization with large diverters operations to maximize the export of extremely long residence time (low nutrient content, high temperature) water and wetland 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 stared 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 moderated during neap tides. If scaling of the initial 2D results based on the analysis in Lenoch 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 2020.

Primary production and its transport within the YBCS will also be evaluated using the phytoplankton model described in RMA 2020.

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 at fortnightly timescales (e.g. spring/neap cycle), 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.

FIGURES

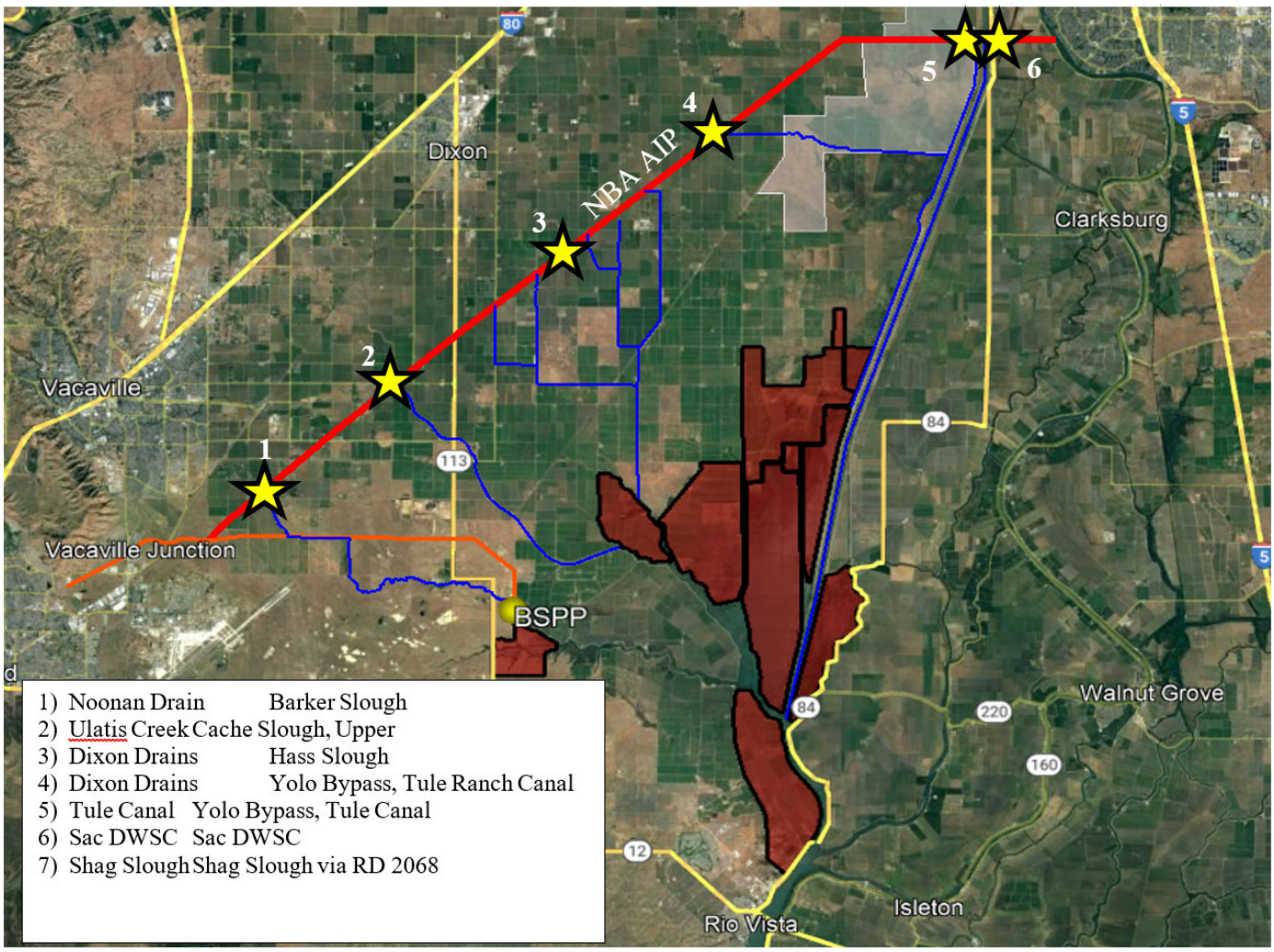

Figure 1 – The NBA AIP alignment and YBCS tributaries.

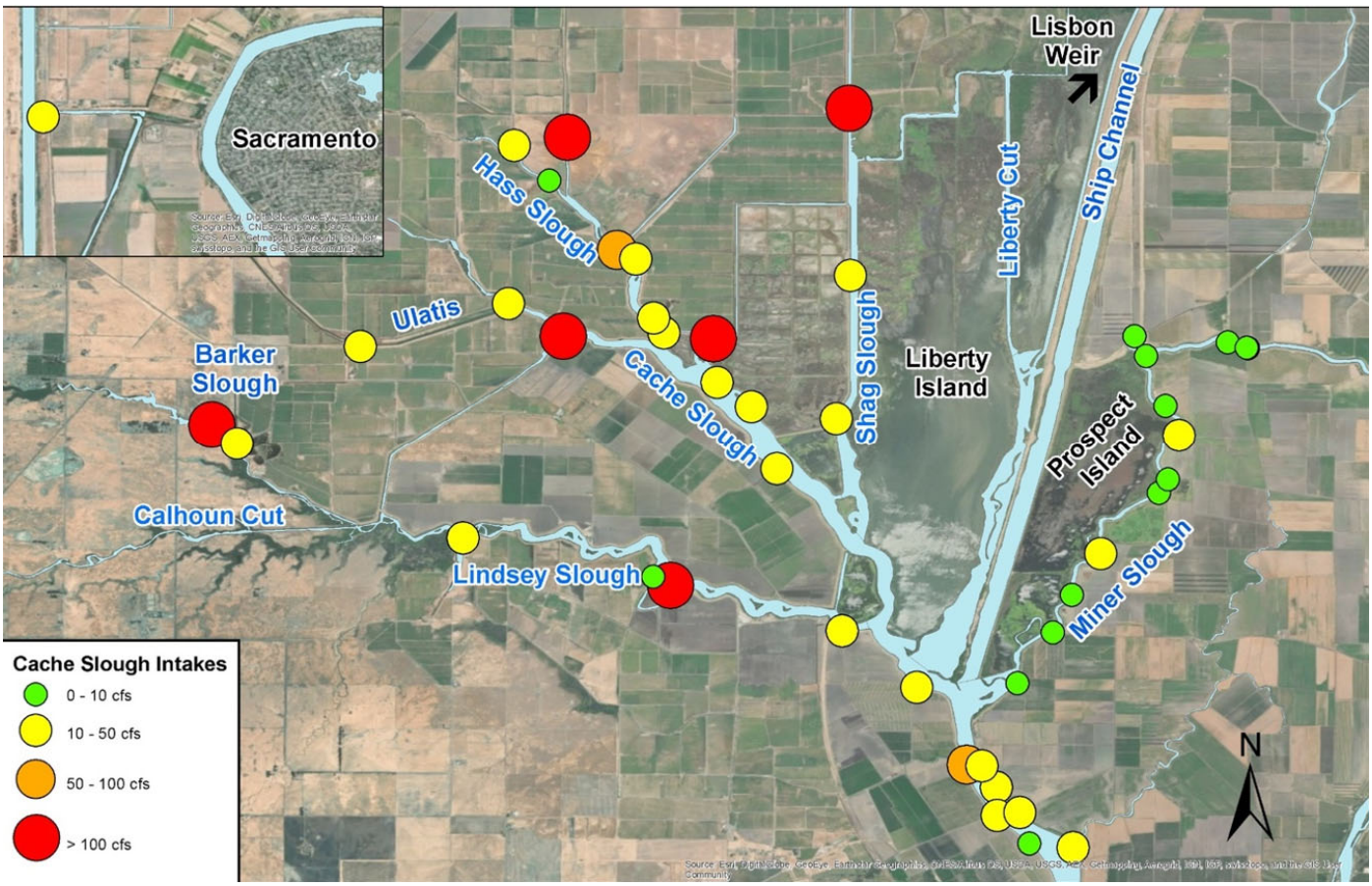

Figure 2 – Map of Municipal and Agricultural Diversions within the YBCS system

**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 may be restricted to max 60 CFS from Jan through June in dry years when juvenile smelt are present.*

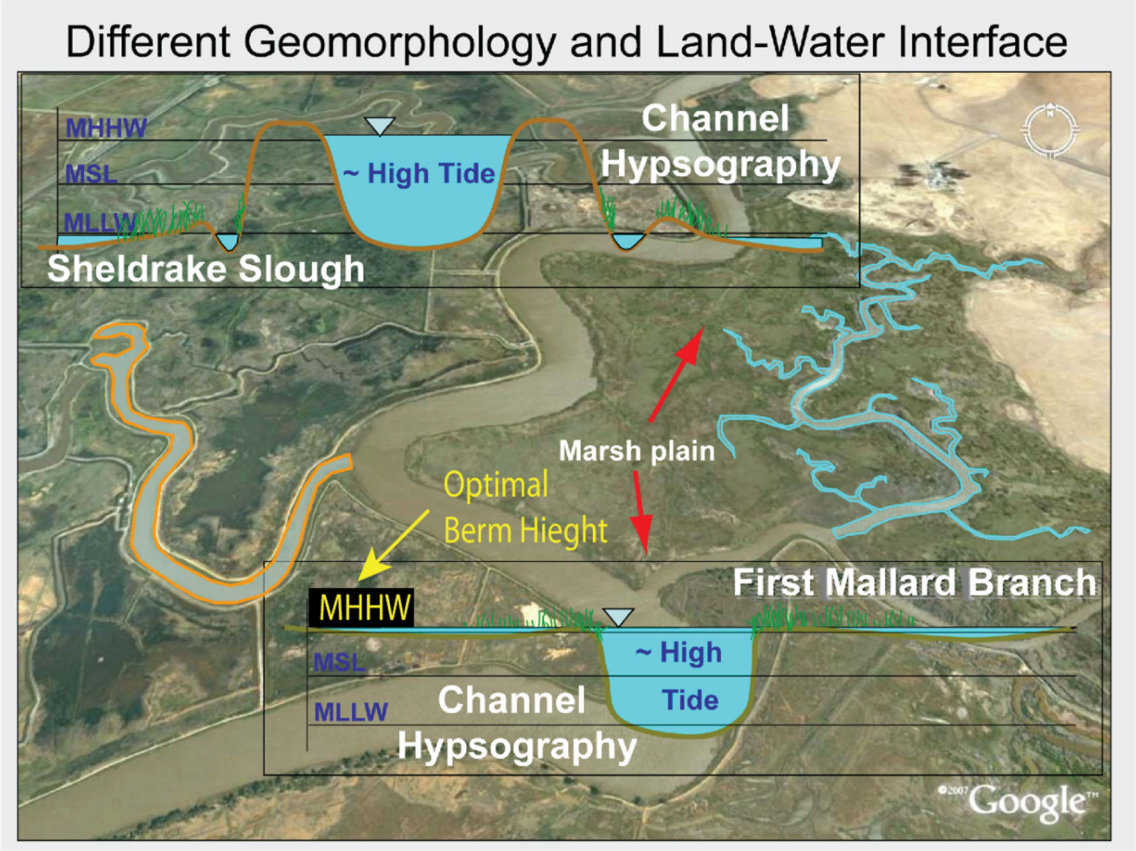

Figure 3 – Example of two different channel geomorphologies in Rush Ranch in Suisun Marsh: Sheldrake Slough a single leveed-off channel and First Mallard Branch a natural dendritic marsh system that maintains an optimal berm height at Mean Higher High Water (MHHW) that maximizes spring-tide marsh plain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

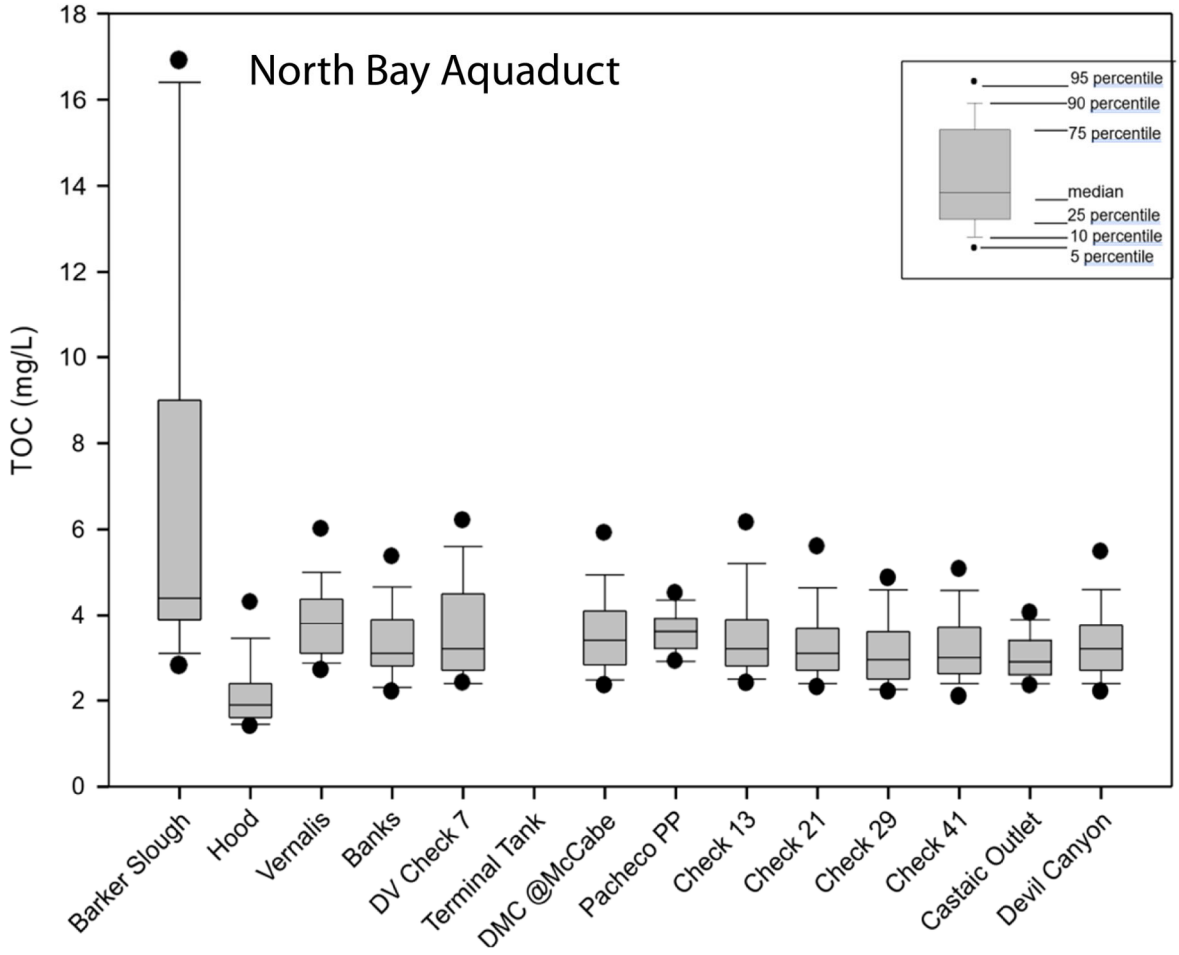

Figure 4 – Total organic content (TOC) in the Delta.

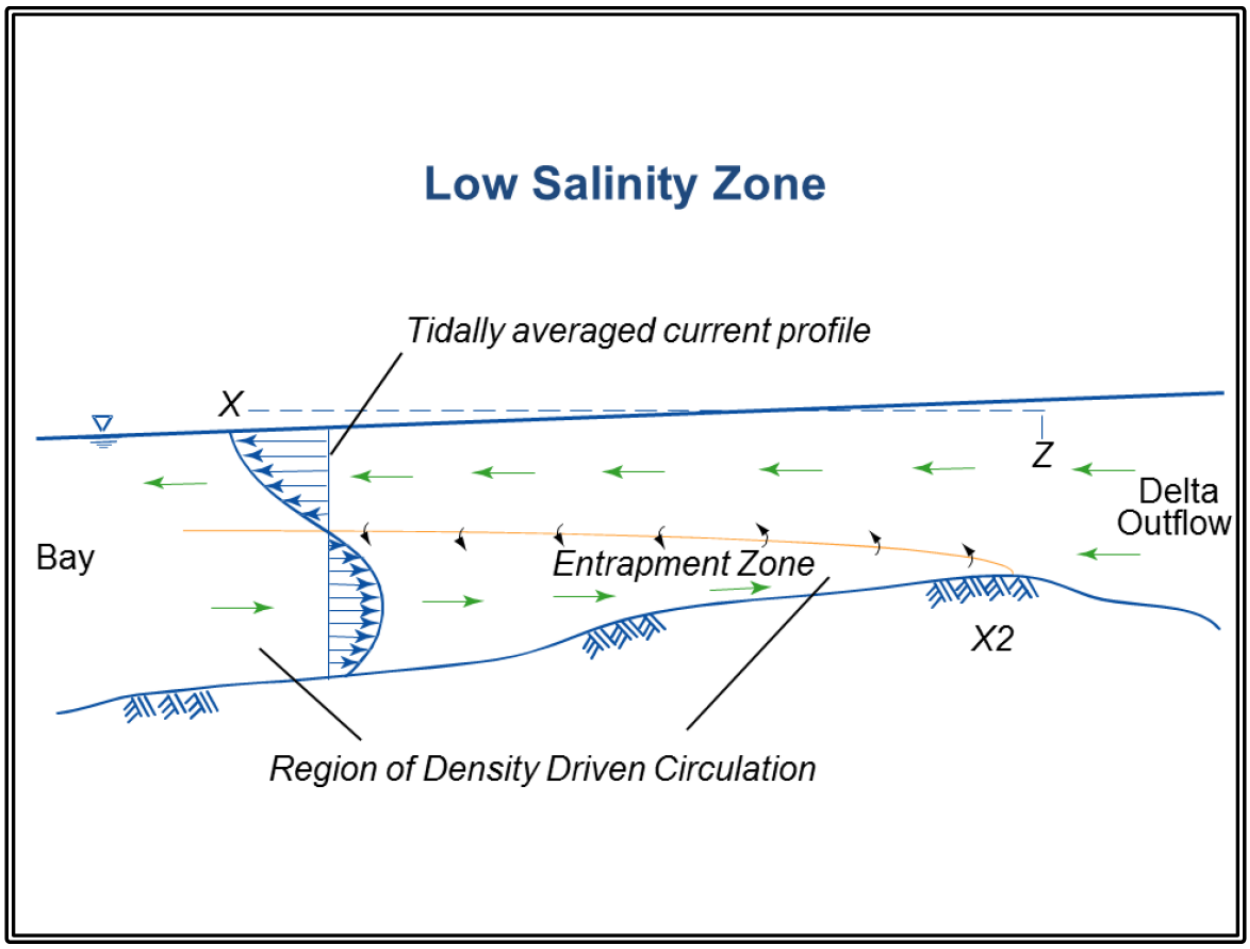

Figure 5 – Schematic of the physics, density driven (or gravitational) circulation of accumulation of negatively buoyant materials, alternatively called the entrapment zone or estuarine turbidity maxima (ETM), that occurs in the low salinity zone of the San Francisco Estuary (Courtesy of Pete Smith,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

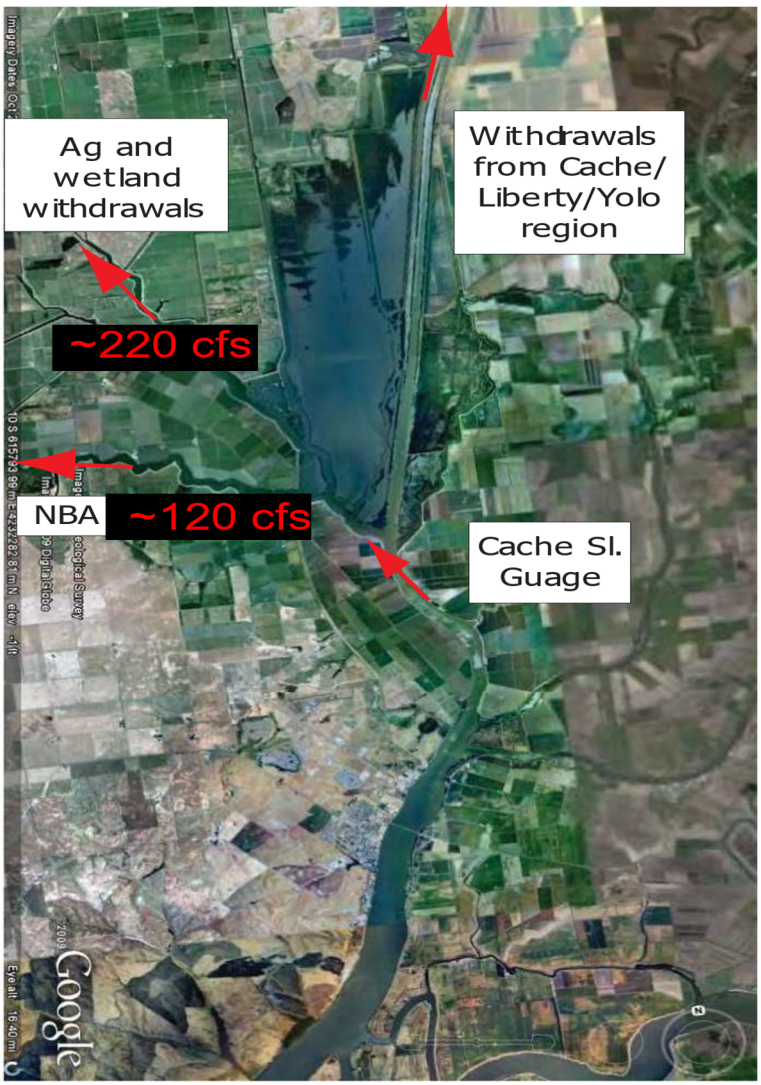

Figure 6 – Conceptual drawing of upstream net flows in Cache Slough due to NBA and agricultural diverters in the YBCS

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RMA RESOURCE MANAGEMENT ASSOCIATES
WATER RESOURCES ENGINEERING

Proposed Modeling Tasks for the North Bay Aqueduct Alternative Intake Project

DRAFT SCOPE OF WORK

June 21, 2022

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BACKGROUND

A number of tidal marsh restoration projects have been developed or are being planned in the Cache Slough Complex (CSC) region for the purpose of generation and export of food web production (Figure 1). However, water diversions for agriculture and municipal users remove this production and create net flows that reduce its export from the CSC to downstream habitats. A North Bay Aqueduct Alternative Intake Project (NBA-AIP) has been proposed to provide both regional water supply resiliency benefits by reducing unplanned operational disruptions at Barker Slough Pumping Plant due to poor water quality and regulatory curtailments to protect endangered species, reducing required treatment risks and costs associated with removal of organic carbon in the NBA source water, and ecosystem benefits. This numerical modeling effort would first explore ecosystem benefits associated with reducing the loss of food web production from the agriculture and municipal diversions. Secondly, this effort will explore the ecosystem benefits associated with strategically timed pulse flows from the NBA-AIP into the east-side terminal channels (Figure 1) as a means of exporting food web production from the CSC channels to downstream habitats. Pulse flows will be synchronized at fortnightly (14-day) timescales with spring tides, when tidal marshes locally export their organic carbon (Figure 2), and at tidal timescales, during ebb tides when the water throughout the CSC is naturally flowing seaward to maximize the export of organic carbon from the CSC, while requiring the minimal capacity and amount of water (redirected outlow) through the AIP.

Marsh primary production, indexed by carbon mass, involves numerous sources that include marsh and aquatic plants, phytoplankton and attached microalgae. The organic carbon from these sources is typically separated into two pools; dissolved and particulate organic carbon (DOC and POC respectively).

The goals of the modeling tasks are to refine existing hydrodynamic, sediment transport and water temperature models, to develop and calibrate a production model of the CSC system, and to use these tools to assess the NBA-AIP goals of improving habitat condition in the CSC system, exporting organic carbon from the CSC and improving water quality for municipal water exports.

This scope of work is expected to fold into a broader numerical-modeling-based multi-project optimization that will investigate the benefits of the NBA-AIP in the context of proposed marsh restoration in the CSC (Figure 1).

OVERVIEW OF APPROACH

The modeling approach will address production of organic carbon by algae and vascular plants such as marsh vegetation. This carbon supports aquatic foodwebs through multiple pathways principally involving the production and transport of pelagic and detrital sources of organic carbon. All aspects of this modeling effort will utilize the RMA Delta model described below, while some aspects will employ age-based modeling approaches driven by hydrodynamic and tracer simulations in RMA2 and RMA11.

Phytoplankton biomass will be modeled as passive (neutrally buoyant) constituents. Production and decay processes will be considered for each. Phytoplankton will first be studied with an age-based approach which has high computational efficiency thereby allowing exploration of alternative model

formulations and rate coefficients. The understanding gained from that step will be incorporated in an NPZ (nutrient, phytoplankton, zooplankton) approach to simulate primary algal production directly in the water quality model of RMA11.

Dissolved organic carbon (DOC) will be modeled using an age-based approach which will allow estimation of the sources, labile fraction and decay rate of the labile fraction. This approach will build on previous fDOM (fluorescent dissolved organic matter) as described below. This analysis may also inform understanding of seasonal or spatial distribution of sources of POC.

In addition to phytoplankton primary production, biomass from marsh plants and aquatic vegetation also fuel a detrital foodweb that is believed to be an important food web component for fish species (Young et al. 2021). Detritus accumulates at Estuarine Turbidity Maxima (ETMs) including the ETM in the Sacramento Deep Water Ship Channel (DWSC). As an index of detrital biomass, particulate organic carbon (POC) will be modeled using a suspended sediment transport model by assuming, as a first cut, that marsh generated POC has similar characteristics to suspended sediment, including negative buoyancy and critical shear stress characteristics. The tool which will be developed to simulate POC is intended to provide qualitative or semi-quantitative insight to the sources, transport pathways, diversion and accumulation of the detrital food web.

In tasks 1-6 described below RMA will develop and calibrate models and analysis tools for all tasks. In task 7 these models and tools will be applied to scenario simulations.

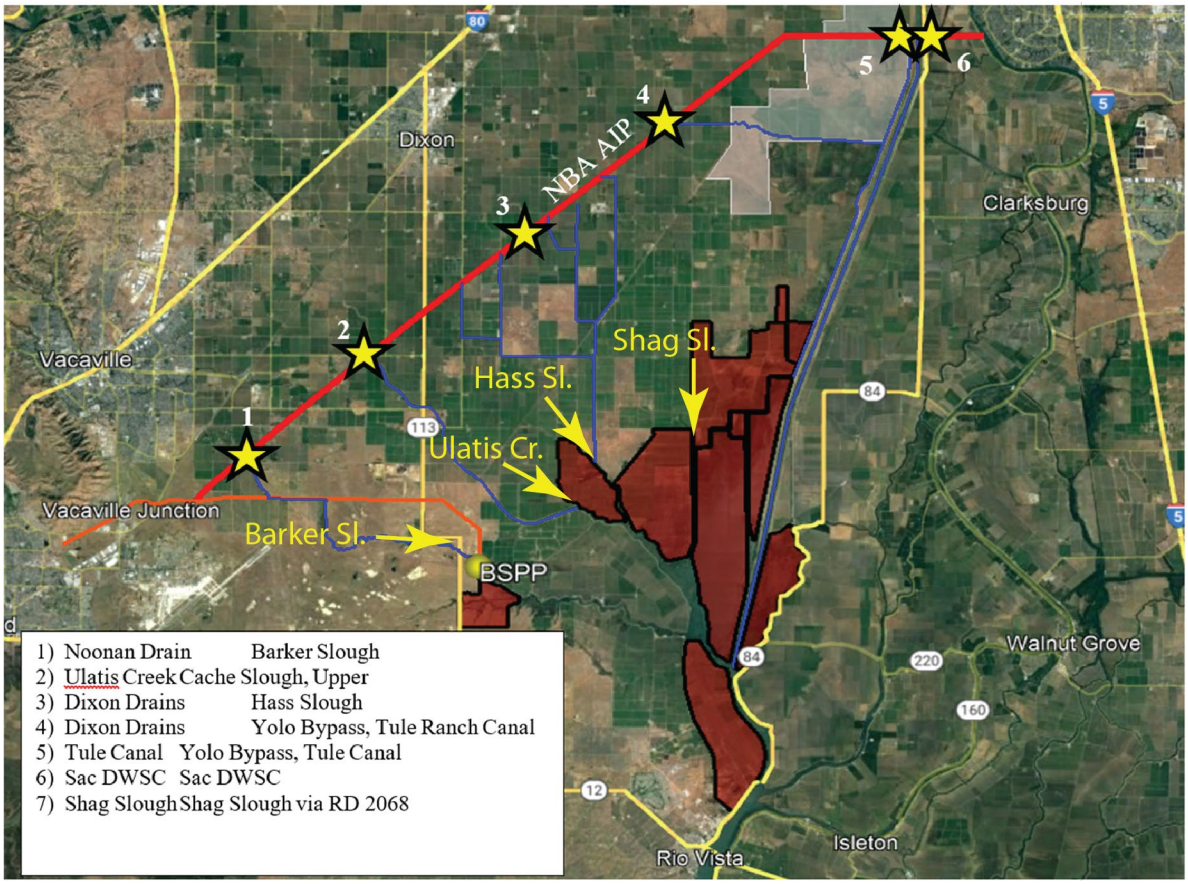

Figure 1 NBA-AIP alignment and Cache Slough tributaries (indicated by the yellow arrows - Shag Slough, Hass Slough, Ulatis Creek and Barker Slough) that could receive strategic releases of water from the NBA-AIP. The red regions indicate existing or proposed restorations.

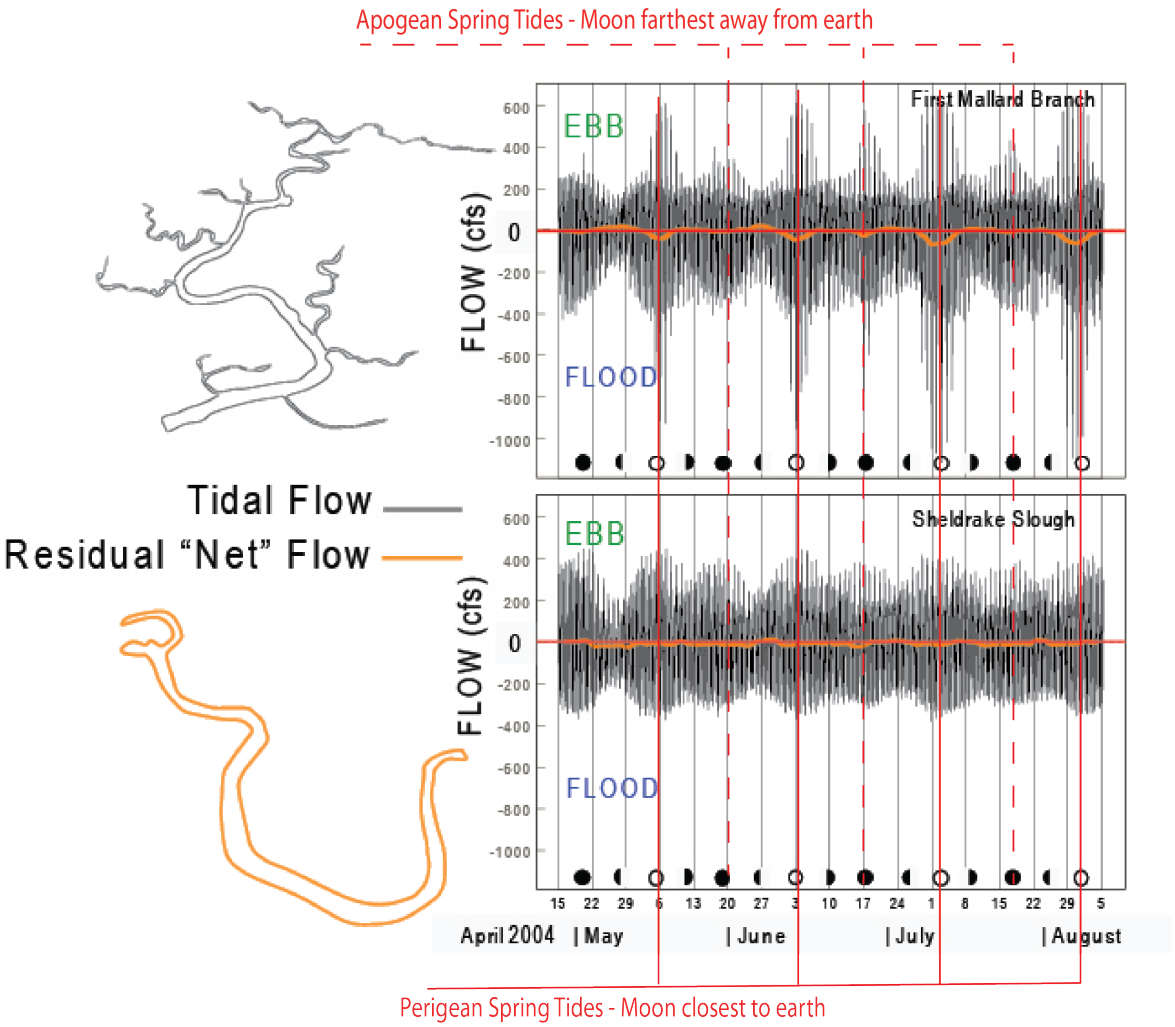

Figure 2 Comparison of the tidal discharge in two channels in Suisun Marsh in which (top) First Mallard Branch is a dendritic tidal marsh system intimately connected to the marsh plain; whereas, (bottom) Sheldrake Slough is leveed off from the marsh plain. Tidal discharge into First Mallard Branch nearly doubles during perigean spring tides as a result of flood plain inundation in which organic carbon from the marsh plain/channel is exported out of First Mallard Branch at the same time nutrients are refreshed. While the Sheldrake Slough discharge time series shows that it is not connected to the marsh plain because spring/neap discharge variability is absent.

THE RMA DELTA MODEL

The RMA Delta model, utilizing the RMA2 and RMA11 computational engines, will be applied to assess hydrodynamic and water quality impacts for this study. This model is a well-established tool for analysis of hydrodynamic and water quality impacts in the Sacramento-San Joaquin Delta. These tools were chosen for this study for their ability to provide sufficiently accurate simulations of Delta-wide hydrodynamics and water quality transport and its ability to perform predictive simulations that can be used to evaluate the effects of tidal marsh restoration locally: within a couple tidal excursions of the marsh entrance channels, within the CSC and within the Delta as a whole. This widely accepted model has been applied to flow and salinity impacts analysis for numerous restoration projects in the Delta system.

TASK OVERVIEW

The tasks proposed for this project are presented in outline form below. Each task is described more completely in the following sections.

Task 1 Hydrodynamic and water quality calibration/validation document: update baseline model configuration and perform calibration for hydrodynamics and transport.

a) Update model grid using the latest Digital Elevation Models of the CSC

b) Implement improved boundary conditions in the CSC (provided by cbec)

c) Calibrate/validate models using 2018 and 2020 data

- Flow and salinity (transport)
- Water temperature
- Turbidity/suspended sediment (as a surrogate for negatively buoyant detritus)
- Water age/residence time

Task 2 Develop grids for planned tidal restoration projects in the CSC, including the latest designs for:

- Lookout Slough
- Little Egbert Tract
- Peter's Pocket
- Tidal marshes in groundwater supported tules north of Liberty Island and Little Holland Tract
- Possible SCWA proposed restoration in Lindsey and Barker Sloughs

Task 3 Develop model to estimate DOC/detritus and their diversion at the NBA intake and the agricultural diversions in Lindsey Slough, Upper Cache Slough, Ulatis Creek, Shag Slough and the Toe Drain.

- Perform hydrodynamic simulations in RMA2
- Perform age tracer simulations in RMA11
- Further develop DOC/fDOM model
- Use fDOM as marker for DOC for model calibration effort (Downing et al. 2012 show that DOC concentration is proportional to fDOM)
    - Continuous monitoring (station data)
    - Underway measurements
- Calibrate DOC model using fDOM data
    - Estimate strength of fDOM source from marsh vegetation and aquatic vegetation (SAV + FAV) and terrestrial sources
    - Estimate fraction of labile material and decay rate of that material

Task 4 Estimate rate coefficients for phytoplankton primary production modeling

- Perform hydrodynamic simulations in RMA2
- Perform age tracer simulations in RMA11
- Further develop existing age-based chl a model
- Estimate rate coefficients
    - Clam grazing rates
    - Phytoplankton mortality
    - Possibly additional terms
- Estimate seasonal variability of rates

Task 5 Develop and Calibrate 2D Nutrient, Phytoplankton Primary Production and Transport Model

- If necessary/appropriate modify existing model to be consistent with conclusions from age-based modeling
- Calibrate model to chlorophyll data

Task 6 Develop POC transport model, calibrate to suspended sediment data

- Estimate POC source rates, possibly using information from Task 3
- Simulate POC as suspended sediment
- Calibrate detritus component of suspended sediment model to available data, if feasible

Task 7 Scenario simulations and analysis (phytoplankton primary production, fDOM, water temperature, turbidity, detritus, residence time or age)

a) Baseline Model simulation
    - Phytoplankton primary production
    - fDOM (DOC)
    - Water temperature
    - Turbidity
    - Detritus (using specified suspended sediment loads)
    - Residence time and/or water age analysis

b) Model simulations with planned marsh restorations

    - Phytoplankton Primary Production
    - fDOM (DOC)
    - Water temperature
    - Turbidity
    - Detritus (using specified suspended sediment loads)
    - Residence time and/or water age analysis

c) Optimize exports of major diverters of water and the above constituents.

d) Pulse discharge into west-side terminal channels in synchrony with spring tides and perigean spring tides (Figure 2) to assess how much water is needed to enhance organic carbon

export from the CSC and nutrient replenishment in terminal channels and tidal marshes in within the CSC.

TASK DESCRIPTIONS

Task 1: Calibration/validation document – update baseline model configuration and perform calibration for hydrodynamics and transport

The objective of the task is to update and enhance representations of the CSC in the model network, refine CSC boundary conditions and calibrate/validate the model for flow, salinity (transport), water temperature and water age/residence time. A standalone calibration/validation document will be produced.

1a) Grid Update

Development of a model grid is an important part of the model calibration/validation process. The RMA model grid of the CSC will be refined in detail and updated with the latest available bathymetry and topography data to best reproduce observed hydrodynamic data collected in the CSC.

During a previous modeling effort for Solano County Water Agency (SCWA) (RMA 2020), the CSC bathymetry was updated with data collected in the CSC during 2015, 2017 and 2018 by the USGS. Marsh topography was developed from DWR's Delta 2017 LiDAR survey. In 2020, the USGS and DWR compiled data from the above sources and other sources and published a detailed DEM of the Cache Slough Complex for bathymetry and topography. We will use this DEM to update CSC elevations and refine the model grid by increasing detail in the grid to more accurately represent Liberty Island breaches. Recently constructed restoration projects, Flyway Farms, Wildlands and Lower Yolo Ranch, are in the latest RMA model grid and will be updated with any newly available data.

1b) Improve boundary conditions in CSC

Detailed flow data are unavailable for agricultural diversions and returns in the CSC. In addition, some of the few stream flow gauges have been removed due to maintenance difficulties, while others may have lost accuracy over time due to changing conditions and need to be recalibrated. It is inevitable that CSC boundary condition estimates will need to be made. Proposed actions to improve these boundary conditions include:

- USGS and cbec to meet with SCWA and reclamation districts in hopes of gaining a better understanding of diversion practices.
- Utilize available Electrical Conductivity (EC) data to help with flow calibration. For example, low modeled EC can indicate a missing agricultural return flow.
- For flow gauges that have drifted out of calibration due to changing conditions, focus on modeling periods immediately following gauge calibration.
  USGS to install additional flow and EC gauges, as needed. EC-only gauges are helpful for flow calibration in channels where aquatic vegetation makes flow gauges unreliable and difficult to maintain.

1c) Calibration/validation

The calibration/validation objective under this task is to reproduce underlying flow and mixing transport processes in the CSC system. Calibration/validation of the primary production models will be addressed under Tasks 3 and 4. Recently RMA conducted a Delta-wide calibration of the Bay-Delta model for flow, salinity and water temperature in support of Reclamation's Summer-Fall habitat study. The focus of this task will be to refine and improve the model calibration for flow, transport (salinity) and water temperature, with a focus on the CSC.

Calibration will focus on the data collected in 2018, a below normal year when the USGS fielded a number of additional flow and water quality stations in the CSC. Some calibration utilizing the 2018 data was performed for the SCWA 2019-2020 study (RMA 2020). The proposed model validation period will be 2020, a dry year.

An important aspect of the calibration is quantifying and locating inflows and diversions. Local creek inflows and agricultural diversions and returns are not well defined. Previous modeling of agricultural diversions and return flows have generally applied flow and water quality values from the DWR-DSM2 inputs of Delta Island Consumptive Use (DICU) or Delta Channel Depletion (DCD). The DICU/DCD flow locations aggregate the individual diversion locations. Additional details have been provided and will be sought to refine the ag flows.

The salinity (EC) calibration process may be used to better quantify the agricultural and local creek flows. During the winter and spring when agricultural diversions are low, the salinity is higher (500-700 µS/cm) due to the inflow to the CSC from the Yolo Bypass, Toe Drain and local creeks, such as Ulatis Creek. EC decreases for most CSC stations as agricultural diversions and NBA pumping draw lower salinity water up from the lower Cache Slough fed by Miner Slough, Steamboat Slough and the Sacramento River. For RMA's Lookout Slough analysis, the salinity calibration was used to estimate local creek inflows to reproduce observed EC. These estimates will be further refined.

Water Temperature

Overall, the 2D and 3D RMA models were well calibrated for water temperature on a Delta-wide basis for the Reclamation study. However, there was no special treatment of the effect of marsh vegetation on heat exchange. RMA will review relevant marsh water temperature studies to incorporate the effects of tidal marsh vegetation on water heat exchange.

Turbidity

During the 2015-2017 period, the USGS conducted wind-wave and suspended sediment studies in Cache Slough Complex. These data will be used to calibrate the RMA 2D suspended sediment-turbidity model, including wind-wave resuspension.

Task 2: Develop grids for planned north Delta tidal restoration projects.

RMA has model grids covering some of the planned tidal restoration projects in the Cache Slough Complex. Existing grids will be updated based on more current designs, if available:

- Lookout Slough
- Little Egbert Tract
- Prospect Island

A grid will be developed for Peters Pocket, possible SCWA proposed restoration in Lindsey and Barker Sloughs, tidal marshes in groundwater supported tules north of Liberty Island and Little Holland Tract, once restoration designs are available.

Task 3: Develop model to estimate DOC at NBA intake and major agricultural diversions

A key study element is predicting how flow and restoration actions influence dissolved organic carbon (DOC) concentrations, particularly at the location of the North Bay Aqueduct intake and estimating the loss of DOC in the major ag diversions. For example, the presence of DOC during water treatment in the NBA can lead to the creation of disinfection byproducts. DOC enters the water in the San Francisco Estuary (SFE) primarily from vascular plant debris, and phytoplankton. A portion of DOC is labile (easily broken down) while other DOC can be in refractory form (Kimmerer 2004). While DOC concentration is not routinely measured in the SFE, it is closely correlated to fluorescent dissolved organic matter, fDOM (Downing et al. 2012), which is measured both continuously at a number of stations and during cruises by the USGS (e.g., Downing et al. 2016). Because fDOM enters the water of the Cache Slough Complex (CSC) both from diffuse sources (vegetation) and point sources (tidal marshes and agricultural returns) and water in the CSC moves tidally and exchanges with seaward (downstream) regions, it is important to represent the effect of hydrodynamic transport processes on fDOM distribution. We propose to develop and test an fDOM model driven by numerical simulations of tracer transport. The tracers will represent at least 3 sources of fDOM: marsh vegetation, aquatic vegetation (submerged and floating), and agricultural returns. These sources can lead to elevated fDOM over values observed at seaward locations such as the Cache Slough at the Ryer Island station. Contributions from phytoplankton will initially be neglected and the validity of this assumption may be re-evaluated after initial simulations. Each source will be assumed to have a fraction of labile material with an associated decay rate and the remaining fraction will be refractory (no decay).

The tracer approach will include fingerprinting tracers representing transport of water from each source location as well as water dispersing into the CSC from its seaward boundary and exiting the system in the diversions. In addition, the spatial distribution of water age associated with each tracer will be simulated using the approach applied, and compared with stable-isotope based estimates, in Gross et al. 2019.

Water age represents the time elapsed since a labelled parcel of water entered the domain, and enables *a posteriori* estimates of biogeochemical transformations such as decay of fDOM. After the hydrodynamic and age tracer simulations are complete, an optimization approach will be used to scale these results to estimate the magnitude of each source and the labile material decay rates for marsh and aquatic vegetation-associated fDOM and a separate rate for fDOM in agricultural returns. The calculated decay of fDOM may provide insight to the detrital food web.

Separating the tracer simulation from the fDOM model will allow for very rapid (< 1 second) predictions of fDOM for any set of assumed source and decay rates using the saved tracer information which is independent of these parameters. This fast model will be run in an optimization approach using standard libraries available for the python programming environment. Once suitable source and decay rates have been estimated, and the accuracy of the predictions are assessed, the hydrodynamic and fDOM modeling approach will be applied to marsh restoration, North Delta flow actions and Ag return scenarios. One critical output of this approach will be a

measure of tidal-marsh-restoration-generated fDOM (and therefore DOC) that would be removed from the CSC in the NBA intake and into the Ag diversions that may be reduced if the AIP is constructed and provides an alternate means of access to local water supplies for these diversions: essentially an estimate of the total loss of organic carbon (lower food web production) from the CSC due to water diversions that would be available to support native fish populations if the AIP were used to provide this water.

The expected simulation approach for fDOM will initially estimate and apply constant-in-time rates. The assumption of constant rates is likely appropriate for limited duration (2-4 months) simulations over which the extent of aquatic vegetation and clams and other attributes influencing predictions can be assumed to be constant. If longer periods are considered, time varying rates will be considered which introduce some additional complexity to the modeling and analysis approach. A result of preliminary fDOM modeling using this age tracer approach is shown in Figure 3, where observed and predicted fDOM at the times when cruise data were collected in the Cache Slough Complex are shown before, during and after the North Delta Flow Action in 2018.

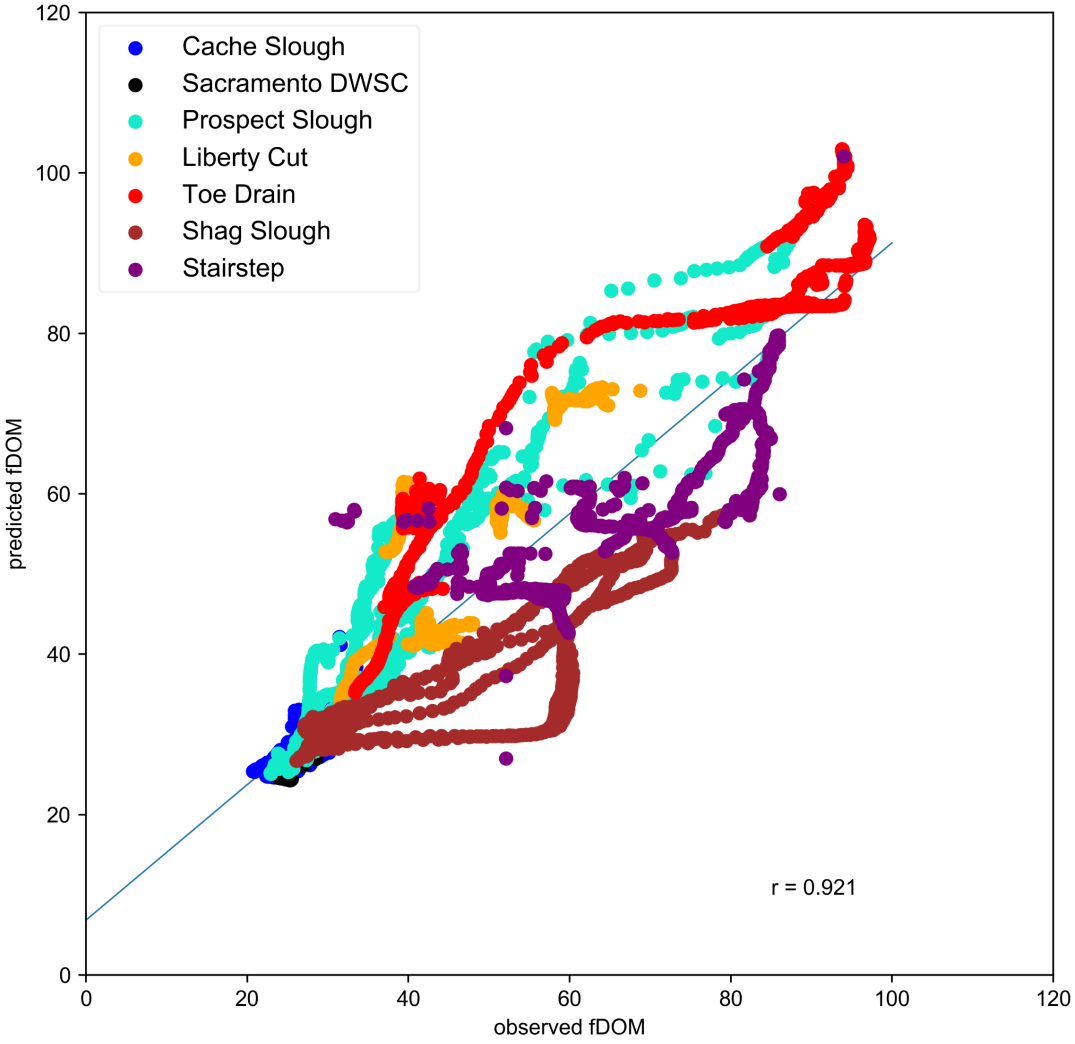

Figure 3 Observed and predicted fDOM at the times of underway data collection in the Cache Slough Complex before, during and after the North Delta Flow Action in 2018.

Task 4: Estimate rate coefficients for primary production modeling

The RMA models have been applied at Bay-Delta-wide spatial scales and in studies focused on the Cache Slough Complex. Most recently, the Bay-Delta model has been calibrated/validated for Delta flow, salinity and water temperature for Reclamation's Summer-Fall Smelt habitat studies. In 2019-2020, RMA performed initial CSC flow augmentation studies for the SCWA (RMA 2020).

The goals of this Phytoplankton Primary Production Modeling task are to implement and calibrate/validate a primary production model for the Cache Slough Complex, then apply it to recent and planned tidal restoration projects in the CSC to explore and optimize flow augmentation from an NBA-AIP to increase primary production and export of the organic carbon produced.

Terminal channels are often productive because of residence times that are long-enough to allow production to occur (Stumpner et al. 2021). However net flows are typically small or even negative

(directed "upstream") in the CSC due to the NBA and ag diversion operations, so this production is (or will be) exported out of the CSC, along with the organic carbon exchanged into the channels from existing (and proposed) tidal marshes. These diversions of organic carbon will not provide food resources for downstream (seaward) portions of the SFE. A primary constraint on native fish populations is food limitation.

Application of relatively small pulse flows, synchronized with periods when tidal marshes export their organic carbon (Figure 2), will likely increase export of organic carbon from terminal channels in the CSC that could provide food web support for threatened species including delta smelt and longfin smelt. One approach to modeling phytoplankton primary production is to use an age tracer-based approach (similar to what is proposed for the fDOM simulations) where a suite of fingerprinting tracers for different sources are tracked in a way that quantifies water age and exposure to environmental conditions – light level, water temperature, and clam grazing. The tracer information is incorporated into a chlorophyll production and loss formulation that can quickly (~1 second) compute phytoplankton concentrations over time and space.

The proposed formulation for chlorophyll (as an index of phytoplankton biomass) prediction follows an approach used successfully in the Suisun Marsh (see Figure 4). Again, age tracers will be used.

One set of tracers will track water entering the southern boundary of the Cache Slough Complex and its associated age. The portion of time spent by the tracer in intertidal habitats will be quantified and distinguished from time in subtidal habitats to allow representation of clam grazing only in subtidal areas where clams may be present. In addition, the average depth and turbidity or light level experienced by tracers will be quantified. This tracer information will then be incorporated in a fast (~1 second) chlorophyll model which will estimate light limited production using the formulation of Cloern (2007) and with several free parameters including clam grazing rate.

In this analysis we may also include a vegetative shading parameter but would likely assume growth rates are not nutrient limited. Nutrient limitation would more likely be considered in the context of a full NPZ model (discussed below). The model parameters, including clam grazing rate, will be fit to best match prediction of chlorophyll at continuous monitoring stations. Underway data collected in the CSC may also be used in the optimization or may be used to validate the predictions. Once parameters are estimated and the accuracy of the modeling approach has been evaluated, it will be applied to scenarios of altered flow and management. Whether or not this chlorophyll modeling approach provides quantitatively accurate predictions of chlorophyll, it will be applied in conjunction with a more conventional NPZ (nutrient, phytoplankton, zooplankton) model in the RMA11 finite element model. The tracer-based approach will likely provide great insight to appropriate parameter values to use in the NPZ model.

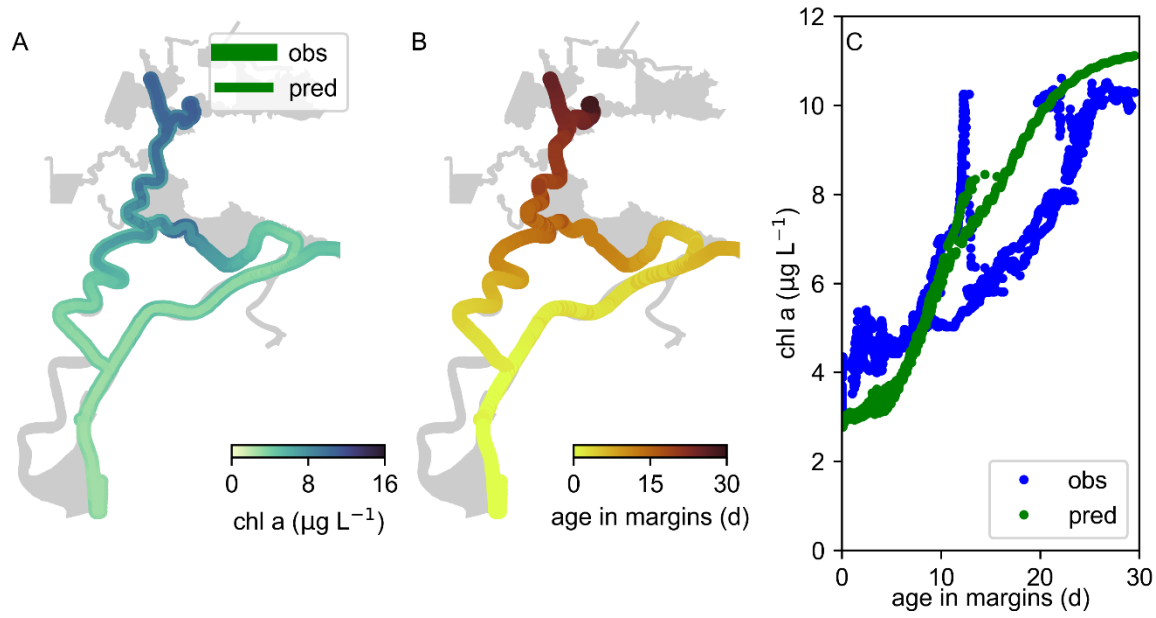

Figure 4 Comparison of predicted chlorophyll and observed synoptic chlorophyll observations (A); computed exposure time to margin (side channel, intertidal and marsh) habitats (B); relationship of predicted and observed chlorophyll with calculated exposure time to margin habitats (C).

The expected simulation approach for this phase of chlorophyll modeling will initially estimate and apply constant-in-time rates. The assumption of constant rates is likely appropriate for limited duration (2-4 months) simulations over which the extent of aquatic vegetation and clams and other attributes influencing predictions can be assumed to be constant. If longer periods are considered, time varying rates will be considered which introduce some additional complexity to the modeling and analysis approach.

Task 5: 2D Nutrient, phytoplankton primary production and transport model

After parameter values have been constrained by the parameter exploration in Task 4, a more complete and computationally intensive phytoplankton primary production quantification approach will be applied. Under this task, a direct nutrient, phytoplankton, zooplankton model (NPZ) (Cloern 2007) will be applied, where nutrient, phytoplankton and zooplankton constituents are formally coupled constituents depending on light and water temperature in the RMA11 finite element water quality model.

RMA's 2D water quality model has been widely applied for the simulation of Bay-Delta salinity, water temperature and sediment transport/turbidity. However, the comprehensive nutrient – production model with constituent relationships for nutrients – algal growth, zooplankton, DO, SAV, sediment diagenesis, water temperature and sources and sinks, has had limited application in the Bay-Delta systema, and some modifications are needed for the treatment of phytoplankton on the marshplain.

RMA (Andrews 2020) developed a separate 2D Primary Production (NPZ) model for flow, transport and water quality transformations to predict primary production in channel-marsh systems of the upper San Francisco Estuary. The model was roughly configured to match the dimensions and bathymetry of the First Mallard Branch in Suisun Marsh. This model was successfully calibrated to observed tidal flow and water temperature over intertidal and neap-spring periods. Results from this simulation configured to First Mallard Branch show the dendritic network of marsh channels, even though taking up only about 5% of the areal marsh extent, was responsible for the majority of the primary production in the system modeled that resulted in the creation of an ideal residence time area midway up the channel network. During high spring tides, the marsh plain is inundated with an influx of water from the main channel containing a relatively high concentration of nutrients. Phytoplankton growth follows, and successive high tides mix with and displace water on the marsh plain. This pumping mechanism creates a large spike in exported production during spring tides.

The RMA11 model includes the same basic formulations of the primary production model described above, with some modification needed for the treatment of phytoplankton on the marsh plain. As the focus of the model is the growth and transport of phytoplankton primary production, the zooplankton component is included as a loss term of phytoplankton to grazing, and not for the development of zooplankton as food.

Task 6: Simulating transport and accumulation of detritus

Young et al. (2021) have identified the importance of the detrital food web to fish in the channels of the CSC. Conceptually, flood dominant sediment dynamics result in detrital material collecting in terminal channels or low velocity environments that are transformed over time into bioavailable forms of organic carbon. This task will estimate transport of inorganic sediment and detritus to form Estuarine Turbidity Maxima (ETMs) which may be colocated with detrital food web maxima. These ETMS are present in several locations in the Cache Slough Complex and their presence, strength and location can be influenced by small changes to net flows. For example, the DWSC has a turbidity maxima zone that is affiliated with a detrital food web maxima.

This task will apply a sediment transport model to simulate transport of negatively buoyuant sediment. For this phase of the work, sediment parameters such as sinking rate, specific gravity, critical shear stress appropriate for detritus will be taken from available USGS data or literature values, if/when available, or assumed to be the same as calibrated parameters for sediment (including inorganic and organic componets). The RMA11 program includes a sediment transport module, and enables the development of a detrital component with settling, deposition at the bed and resuspension. The fDOM age tracer model may provide sources and initial conditions for detrital material in the explicit model, and guide the simulation of biogeochemical transformation processes.

Conceptually, flood dominant sediment dynamics result in detrital material collecting in terminal channels or low velocity environments that are transformed over time into bioavailable forms of organic carbon. Exchange onto and off the marsh plain during spring tides can increase tidal exchange with adjacent channels (in the case of Figure 1, a doubling of the discharge) that can dispersively mix organic carbon downstream. However, releases of water during spring ebb tides will preferentially increase bed shear stress that could both preferentially mobilize near-bed detrital organic carbon on ebb tides and provide the net flow needed to export this material to downstream habitats.

Task 7: Model analysis (phytoplankton primary production, fDOM, water temperature, turbidity, detritus, residence time)

Model simulations for phytoplankton production, fDOM, water temperature, turbidity, detritus and residence time will be performed for the 2018 spring-summer season when diversions are greatest and of biological interest.

7a) Baseline model simulations

Perform hydrodynamic, water temperature and production simulations for 2018 (below normal year type) and 2020 (dry water year type) historical boundary conditions.

7b) Baseline conditions, with planned restoration projects model simulations

Perform hydrodynamic, water temperature and production simulations that include planned tidal restoration projects. These simulations will explore specific marsh landscape features which may enhance primary production and export.

7c) NBA-AIP project used to reduce water diversions in the CSC

Using both current and planned restoration grids, diversions from the NBA intake and agricultural intakes would be reduced or eliminated.

7d) NBA-AIP project used to provide strategically timed pulse flows into terminal channels to enhance export of production

Sensitivity simulations would be conducted to optimize release locations and determine size and time of pulse flows to enhance export of production to downstream habitats and nutrient replenishment.

7e) Residence time and/or water age simulation

Estimate residence time or water age distribution for regions in and around the Cache Slough complex.

Task 8: Meetings

RMA will coordinate modeling and analysis activities with USGS and SCWA in regular meetings.

References

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DELIVERABLES

Task 1. Calibration/validation: automated calibration/validation report

Task 2. Planned restoration grids: No deliverable - grids will be utilized in other tasks

Task 3. Develop model to estimate DOC at NBA intake: Technical Memorandum describing model development

Task 4. Estimate rate coefficients for phytoplankton primary production modeling: Technical Memorandum describing rate coefficient estimation

Task 5. Develop and calibrate 2D nutrient, phytoplankton primary production and transport model: Technical Memorandum describing model development and calibration

Task 6. Develop and calibrate 2D detritus/POC model: Technical Memorandum describing model development and calibration

Task 7. Model Analysis: Technical Memorandum describing model analysis

Task 8. Meetings: Attend and present interim and final results at meetings

BUDGET ESTIMATE

Task 1. Calibration/validation: $77,280

Task 2. Planned restoration grids: $12,584

Task 3. Develop model to estimate DOC at NBA intake: $60,824

Task 4. Estimate rate coefficients for phytoplankton primary production modeling: $60,824

Task 5. Develop and calibrate 2D nutrient, primary production and transport model: $37,340

Task 6. Develop and calibrate 2D detritus/POC model: $52,312

Task 7. Scenario simulation and analysis: $183,632

Task 8. Meetings: $9,736

Modeling Analysis Total: $494,262

SCHEDULE

Work will be completed within approximately 7 months of the notice to proceed.