



NORTH BAY WATER REUSE PROGRAM

Expanding Water Supplies with Regional Reuse



BOARD OF DIRECTORS MEETING

AGENDA

**Monday, March 27, 2023
9:30 AM**

**Due to Shelter in Place Orders, and Board Policy this meeting will be a Zoom Meeting only.
Meeting participants and the public may participate via the following:**

Join Zoom Meeting

<https://us02web.zoom.us/j/83910720383>

Meeting ID: 839 1072 0383

One tap mobile +16699009128, 83910720383# US (San Jose)

Dial in +1 669-900-9128 US (San Jose)

Meeting ID: 839 1072 0383

1. Call to Order (1 minute)

2. Roll Call (1 minute)

3. Public Comment (3 minutes)

(Any member of the public may address the Board at the commencement of the meeting on any matter within the jurisdiction of the Board. This should not relate to any item on the agenda. It is the policy of the Authority that each person addressing the Board limit their presentation to three minutes. Non-English speakers using a translator will have a time limit of six minutes. Any member of the public desiring to provide comments to the Board on an agenda item should do so at the time the item is considered. It is the policy of the Authority that oral comments be limited to three minutes per individual or ten minutes for an organization. Speaker's cards will be available in the Boardroom and are to be completed prior to speaking.)

4. Introductions (2 minutes)

**Action
Pages 4 – 6**

5. Board Meeting Minutes of June 27, 2022 (2 minutes)

(The Board will consider approving the minutes from the June 27, 2022 Board meeting.)

**Action
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6. Election of Officers (5 minutes)

(The Board will elect a Chair and Vice Chair for 2023.)

**North Bay Water Reuse Authority • c/o Sonoma County Water Agency, 404 Aviation Boulevard, Santa Rosa, CA 95403
707-235-8965 • NBWRA.org**

County of Marin • Las Gallinas Valley Sanitary District • Novato Sanitary District • Marin Municipal Water District • North Marin Water District • Sonoma County Water Agency
City of Petaluma • Sonoma Valley County Sanitation District • County of Napa • Napa Sanitation District • City of American Canyon

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|--|--|
| <p>Information
Page 8</p> <p>Pages 9 - 62</p> <p>Pages 63 - 72</p> <p>Information
Pages 73 - 89</p> <p>Information
Pages 90 - 113</p> <p>Action
Page 114 - 121</p> <p>Information
Pages 122 - 123</p> <p>Discussion
Page 124 - 128</p> <p>Discussion
Page 129</p> <p>Discussion</p> | <p>7. Report from the Chair (5 minutes)
(The Chair will report on items of interest to the Board.)</p> <p>7.a Report from the Technical Advisory Committee (5 minutes)
(The Board will review the Report on the TAC meetings of November 3, 2022 and February 2, 2022 and consider recommendations from the TAC included in this agenda.)</p> <p>7.b Consultant Progress Reports (5 minutes)
(The Board will review the consultant progress reports.)</p> <p>8. History of NBWRA (10 minutes)
(The Board will receive a brief report on the history of NBWRA for the benefit of new Board members and staff from the member agencies.)</p> <p>9. Financial Reports for the Fiscal Years Ending June 30, 2022 and June 30, 2023 (5 minutes)
(The Board will review the Financial Reports for Fiscal Years Ending June 30, 2022 and June 30, 2023.)</p> <p>10. Approval of the Amended Scope of Work for the Sea Level Rise Adaptation Vision (5 minutes)
(The Board will consider approving the Amended Scope of Work for the Sea Level Rise Adaptation Vision with no change in the originally approved budget.)</p> <p>11. Status of Phase 1 Reconciliation and Closeout Activities (5 minutes)
(The Board will be updated on Phase 1 status of reconciliation and closeout activities.)</p> <p>12. Status of Phase 2 and Financial Capability Analysis Report Update (5 minutes)
(The Board will be updated on the status of the Phase 2 EIR/EIS and the funding application to USBR.)</p> <p>13. Items for the Next Agenda (5 minutes)
(The Board will consider items for the next Agenda.)</p> <p>14. Comments from the Chair, Board, and Member Agencies (5 minutes)
(The Board will discuss items for future discussion and the Chair, Board, or Member Agencies may make brief announcements or reports on their own activities, pose questions for clarification, and/or request that items be placed on a future agenda. Except as authorized by law, no other discussion or action may be taken.)</p> <p>15. Adjournment (1 minute)</p> |
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<p>Next Board Meeting Tentatively Scheduled April 24, 2023</p>
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(In compliance with the Americans with Disabilities Act of 1990, if you need special assistance to participate in a Board meeting, or you need a copy of the agenda, or the agenda packet, in an appropriate alternative format, please contact the Program Manager at (510) 410-5923. Notification of at least 48 hours prior to the meeting or time when services are needed will assist in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service. A copy of all the documents constituting the agenda packet

is available for public inspection prior to the meeting at 404 Aviation Boulevard, Santa Rosa, CA 95403. Any person may request that a copy of the agenda or the agenda packet be mailed to them for a fee of \$.10 per page plus actual mailing costs. If you wish to request such a mailing, please contact Chuck Weir, Weir Technical Services, 3026 Ferndale Court, Pleasanton, CA 94588, 510-410-5923, chuckweir@sbcglobal.net. The agenda for each meeting is also available on-line at www.nbwra.org and will be available at the meeting.)

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**North Bay Water Reuse Authority
Board of Directors Meeting
June 27, 2022**

Draft

1. Call to Order

Chair Rabbitt called the meeting to order at 9:32 a.m. on Monday, June 27, 2022. Due to Shelter in Place Orders, this meeting was a Zoom only meeting. Meeting participants and the public participated via the following link: <https://us02web.zoom/j/85825934397>.

2. Roll Call

PRESENT:	David Rabbitt, Chair	Sonoma Water
	Jack Gibson, Vice Chair	Marin Municipal Water District
	Brian Barnacle	City of Petaluma
	Susan Gorin	Sonoma Valley County Sanitation District
	Jack Baker	North Marin Water District
	Dennis Rodoni	Marin County
	Scott Sedgley	Napa Sanitation District

ABSENT: City of American Canyon, Napa County, Napa Sanitation District

OTHERS

PRESENT:	Chuck Weir, Program Manager	Weir Technical Services
	Kevin Booker	Sonoma Water
	Grant Davis	Sonoma Water
	Chris DeGabriele	Las Gallinas Valley Sanitary District
	Akin Fayehun	City of Petaluma
	Rene Guillen	Brown & Caldwell
	Pam Jeane	Sonoma Valley County Sanitation District
	Sandeep Karkal	Novato Sanitary District
	Mark Millan	Data Instincts
	Jim O'Toole	ESA
	Mike Savage	Data Instincts
	Paul Sellier	Marin Municipal Water District
	Jake Spaulding	Sonoma Water
	Tony Williams	North Marin Water District

3. Public Comments

There were no members of the public.

4. Introductions

Introductions were not made.

5. Board Meeting Minutes of March 28, 2022

On a motion by Director Baker, seconded by Vice Chair Gibson, the minutes of the March 28, 2022, meeting were unanimously approved by the Board by a roll call vote.

6. Report from the Chair

Chair Rabbitt noted that there were reports from the Technical Advisory Committee, Item No. 6.a and the Consultant Progress Reports, Item No. 6.b as part of his report. He stated that action items for the Board included Item No. 9, FY2022/23 Budget and Resilience Arena Projects and approval of meeting dates for FY2022/23. The Board concurred with the proposed meeting dates of September 26, 2022, January 30, 2023, April 24, 2023, and June 26, 2023.

6.a Report from the Technical Advisory Committee

TAC Vice Chair Jeane provided a summary of the April 7, April 14, and June 2, 2022 TAC meetings. She indicated that the TAC was successful in resolving the budget issues such that there was a recommended FY2022/23 Budget for the Board to consider. This item is considered separately in Agenda Item No. 9.

6.b Consultant Progress Reports

The consultant progress reports were included in the packet. This was an information item requiring no action by the Board.

7. Review of Board Policy Adopted March 28, 2022 to Conduct Future Board Meetings Via Zoom to Reduce its Carbon footprint and to Reduce Staff and Consultant Travel Costs

Sonoma County Counsel has indicated that publishing a Zoom meeting website address likely does not meet the strict requirements of the Brown Act. However, the Board continues to be in compliance with the Brown Act due to the State of Emergency. There is state legislation being considered to allow for ongoing Zoom meetings through a hybrid process. Until the legislation is completed, NBWRA will publish the agency addresses and allow public participation at their sites. As a consequence NBWRA will continue with Zoom meetings.

8. Financial Reports for Fiscal Year Ending June 30, 2022.

The Board reviewed the financial reports and noted that expenses were tracking normally and that funds for the consultants were running low and would be addressed by Agenda Item No. 9. This was an information item only, requiring no action by the Board.

9. FY2022/23 Budget and Resilience Arena Projects

This item was reviewed and recommended by the TAC. The Program Manager provided a summary of the recommendations as described in the staff report. The FY2022/23 Budget will include the following projects:

Resilience Arena for Recycled Water = \$209,000

Resilience Arena for Drought Contingency Planning = \$56,000

Resilience Arena for Sea Level Rise Adaptation = \$125,000

Joint Use for Program Management and Sonoma Water Administration = \$105,500

Total Budget = \$495,500

The Program Manager also indicated which agencies will become Associate Members, which agencies are participating in each project, and the cost sharing among the agencies. There may be some minor modification to cost sharing depending on Marin County participation.

A motion by Director Gorin, seconded by Vice Chair Gibson, to approve a FY2022/23 Budget and Resilience Arena Projects unanimously approved by a roll call vote.

10. Phase 1: Status of Reconciliation and Closeout Activities

Jake Spaulding provided an update on Phase 1. USBR has approved the final payment and checks have been issued to the agencies. We are still awaiting USBR's final report. Once that is received the Phase 1 reconciliation can be completed. There may still be some minor administrative costs for the close out, but that will not require any additional funds from Phase 1 agencies. That will be resolved through the reconciliation and true up process.

11. Status of Phase 2

Jake Spaulding indicated that we are still waiting to hear the results from USBR. Rene Guillen indicated that he has been told that should be in a week or two.

12. Items for the Next Agenda

Items for the next Agenda include a report and recommendations from the TAC, regular reports, Phase 1 and Phase 2 Status Reports, and progress reports on the FY2022/23 resilience arena projects.

13. Comments from the Chair, Board, and Member Agencies.

Grant Davis suggested that the joint effort between NBWRA and NBWA reviewed. This item has been delayed while the TAC resolved budget issues. Chair Rabbitt and Vice Chair Gibson spoke in favor of it. The Program Manager and Mark Millan will meet with Andy Rogers, discuss potential opportunities, and set up a meeting with the leadership of each organization.

14. Adjournment

Chair Rabbitt adjourned the meeting at 10:11 a.m. The next meeting will be Monday, September 26, 2022, at 9:30 a.m. via Zoom.

Minutes approved by the Board _____.

Charles V. Weir
Program Manager

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Agenda Explanation
North Bay Water Reuse Authority
Board of Directors
March 27, 2023

ITEM NO. 6 ELECTION OF OFFICERS

Action Requested

Elect a Chair and Vice Chair for 2023.

Summary

Sonoma County Supervisor David Rabbitt is the current Chair and the Vice Chair position is currently open. Supervisor Rabbitt is unable to attend this meeting. Therefore, the Board may chose to wait until the next meeting scheduled for April 24, 2023 for this item.

Recommendation

Elect a Chair and Vice Chair for 2023 as required by the Memorandum of Understanding. The Board may chose to wait until the April 24, 2023 meeting for this item.

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Agenda Explanation
 North Bay Water Reuse Authority
 Board of Directors
 March 27, 2023

ITEM NO. 7 REPORT FROM THE CHAIR

Action Requested

Approve the TAC recommended Amended Scope of Work for the Sea Level Rise Adaptation Vision with no change in the original cost of \$125,000. Please refer to Agenda Item No. 10.

Summary

The Chair will report on items of interest to the Board. This includes the following items:

Item No. 7.a, Report from the Technical Advisory Committee.

Item No. 7.b, Consultant Progress Reports.

At the last meeting, it was suggested that meetings for FY2022/23 include the following:

September 26, 2022 (cancelled)

January 30, 2023 (cancelled)

April 24, 2023 (should consider a budget for FY2023/24)

June 26, 2023 (may not be needed if the FT2023/24 budget is approved in April)

A schedule for FY2023/24 will need to be considered at the next meeting once the budget is approved.

All meetings are proposed to be via Zoom at 9:30 a.m. Zoom meetings are recommended even though the Governor's emergency declaration has been ended. New legislation is not very helpful in terms of holding remote meetings. One possibility is to have Board members and staff participate via Zoom from their agency offices, which would need to be posted in the agenda. This would avoid having to publish participant home addresses. An other alternative is to just continue with Zoom meetings and disregard the fact that the MOU indicates NBWRA will follow the Brown Act. This is allowable since NBWRA is not an official governmental body and acts under an MOU and not a Joint Exercise of Powers Agreement.

Recommendations

1. Approve Agenda Item No. 10, Approval of the Amended Scope of Work for the Sea Level Rise Adaptation Vision with no change in the approved budget of \$125,000.
2. Consider meetings for the remainder of FY2022/23.

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Agenda Explanation
North Bay Water Reuse Authority
Board of Directors
March 27, 2023

ITEM NO. 7.a REPORT FROM THE TECHNICAL ADVISORY COMMITTEE

Action Requested

Approve Agenda Item No. 10, as recommended by the TAC, Approval of the Amended Scope of Work for the Sea Level Rise Adaptation Vision with no change in the approved budget of \$125,000.

Summary

The TAC continues to meet monthly or as needed and has met twice since the last Board meeting in June 2022. The following items are attached for the Board's information:

1. June 2, 2022 approved TAC meeting minutes
2. November 3, 2022 TAC Agenda Packet
3. November 3, 2022 approved TAC meeting minutes
4. February 2, 2023 TAC Agenda Packet
5. Draft February 2, 2023 TAC meeting minutes

February 2, 2023 Meeting.

The TAC reviewed and approved the Amended Scope of Work for the Sea Level Rise Adaptation Vision with no change in the approved budget of \$125,000. Please refer to Agenda Item No. 10.

Recommendation

The TAC recommends that the NBWRA Board approve Item No. 10, Approval of the Amended Scope of Work for the Sea Level Rise Adaptation Vision with no change in the approved budget of \$125,000.

Attachments

1. June 2, 2022 approved TAC meeting minutes
2. November 3, 2022 TAC Agenda Packet
3. November 3 approved TAC meeting minutes
4. February 2, 2023 TAC Agenda Packet
5. Draft February 2, 2023 TAC meeting minutes

**North Bay Water Reuse Authority
Technical Advisory Committee
Zoom Meeting Minutes
June 2, 2022
Approved November 3, 2022**

1. Call to Order and Self Introductions

Chair Healy called the Technical Advisory Committee (TAC) meeting to order at 2:05 p.m. on Thursday, June 2, 2022. The meeting was a Zoom meeting only and attendees participated via the following link: <https://us02web.zoom.us/j/87698404530>.

Committee Members Present

Tim Healy, Chair	Napa Sanitation District
Pam Jeane, Vice Chair	Sonoma Valley County Sanitation District
Christopher Bolt	City of Petaluma
Liz Lewis	Marin County
Dale McDonald	Las Gallinas Valley Sanitary District
Dominic Patrick	City of American Canyon
Paul Sellier	Marin Municipal Water District
Jake Spaulding	Sonoma Water
Tony Williams	North Marin Water District

Others Present

Member Agencies

Brad Sherwood	Sonoma Water
Akin Fayahun	City of Petaluma

Consultant Team

Chuck Weir, Program Manager	Weir Technical Services
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2. Approval of the Agenda

The Agenda was approved with no changes.

3. Public Comments

There were no public comments.

4. TAC Meeting Minutes of April 14, 2022

The minutes from the April 14, 2022 meeting have not been prepared. The Program Manager noted that the TAC did not reach consensus on a budget for FY2022/23 and decided that all agencies would complete a questionnaire that indicated interest in participating in each resilience arena and at what cost. It would also indicate those agencies desiring to become associate members.

5. Results of Survey and Consideration of FY2022/23 Budget and Resilience Arena Projects

The Program Manager gave a summary of the results of the survey and the conclusions that could be drawn from the survey. Both Napa San and American Canyon do not have Phase 2 projects that will be ready for construction for at least five years and possibly longer. The interest of both agencies is to see the EIR/EIS completed so that their projects will only need minor modifications to be eligible for federal funding when they are ready for construction. Minor modifications to the conclusions were made during the course of the TAC's discussion. Chair Healy summarized the following conclusions for the FY2022/23 Budget:

Agencies becoming Associate Members effective July 1, 2022

- LGVSD
 - NMWD
 - Novato San
 - Napa County
 - Marin County is already an Associate Member
- Phase 2 Agencies with a Phase 2 Construction Project
 - MMWD
 - Sonoma Water
 - SVCSD
 - Petaluma
 - American Canyon (Included in FY2022/23 with expectation that the EIR/EIS will be completed. They plan to become an associate member in FY2023/24)
 - Napa San (Included in FY2022/23 with expectation that the EIR/EIS will be completed. They plan to become an associate member in FY2023/24)
 - Resilience Arena for Recycled Water FY2022/23 Budget
 - There is support for a project of \$209,000 which is the original estimate of \$205,000 plus \$4,000 for Sonoma Water. This is an average cost of \$34,833 for each of the six agencies. The actual percentages will be based on the existing cost percentages and are subject to modification once Phase 2 is completed.
 - Resilience Arena for Drought Contingency Plan for Sonoma and Marin Agencies
 - There is support from LGVSD, NMWD, Sonoma Water, SVCSD, Petaluma, and Marin County
 - Support varied among the agencies, but there is adequate support to fund the original proposed scope
 - The proposed scope of \$52,000 plus \$4,000 for Sonoma water is \$56,000 and will be shared equally by all the participating agencies, or \$9,333. The cost could be \$11,200 per agency if Marin County does not participate.
 - Resilience Arena for Sea Level Rise Adaptation
 - There is support from LGVSD, Sonoma Water, SVCSD, Petaluma, and Marin County
 - Total support cost is \$125,000 plus an unknown amount from Marin County

- Conclusion is there is adequate support for a modified sub-regional study with a cost ceiling of \$125,000 or
- Conclusion is there is adequate support for a modified sub-regional study with a cost ceiling of \$125,000 or \$31,250 for each of the four agencies. The cost would decrease with Marin County participation. The current estimated cost for a sub-regional study is \$119,000 so a modified scope is reasonable. B&C will be asked to revise the scope with a cost of \$121,000 (plus \$4,000 for Sonoma Water for a total of \$125,000) and LGVSD, Sonoma Water, SVCSD, and Petaluma as participants. B&C will include a couple of sentences as to how it would differ if Marin County participated.
- Joint Use Costs
 - \$40,000 for Program Management for Weir Technical Services. Note that the term will be through December 31, 2023 so not all costs would be in FY2022/23. In addition, costs are likely to be lower as it appears that the activity for NBWRA over all is declining and fewer meetings are likely.
 - \$65,500 for Sonoma Water. In addition, costs are likely to be lower as it appears that the activity for NBWRA over all is declining and fewer meetings are likely.
 - Total cost is currently \$105,500 for Joint Use which would be shared by the five Phase 2 agencies, or \$21,156 per agency.
 - Currently since there are no specific guidelines for DCP and Sea Level Rise in the MOU, it seems reasonable that associate members that participate in those projects should pay a share of joint use costs. LGVSD and NMWD will be in that position effective July 1, 2022. Assessing an additional \$7,500 to help offset joint use costs is acceptable to those agencies. This may also effect Marin County.
 - In conclusion, the \$105,500 joint use costs will likely be spread over two fiscal years and associate members participating in DCP and Sea Level rise will pay an additional fee of \$7,500 to help offset joint use costs. Cost for each of the five Phase 2 agencies would be $(\$105,500 - \$15,000 = \$18,100 \text{ each})$. LGVSD and NMWD pay \$7,500 each.

A motion by Pam Jeane, seconded by Christopher Bolt to recommend an FY2022/23 Budget as described above for Board approval was unanimously approved.

10. Next Meeting

The next meeting is scheduled for July 7, 2022

11. Adjournment

There being no further business Chair Healy adjourned the meeting at 3:10 p.m.

Item No. 7.a.2

NORTH BAY WATER REUSE AUTHORITY TECHNICAL ADVISORY COMMITTEE

Thursday, November 2, 2022

Agenda

2:00 PM

Zoom Meeting: <https://us02web.zoom.us/j/87698404530>

	1.		Call to Order and Self Introductions
	2.	Action	Approval of Agenda
	3.		Public Comments
Pages 2 - 4	4.	Action	TAC Meeting Minutes of June 2, 2022
Page 5	5.	Information	Status of Consultant Agreements
Pages 6 - 27	6.	Action	Revised Scope of Work and Cost Sharing for Sea Level Rise Adaptation Plan
	7.	Information	Next Meeting, December 1, 2022
	8.		Adjournment

**North Bay Water Reuse Authority
Technical Advisory Committee
Zoom Meeting Minutes
June 2, 2022**

DRAFT

Approved _____ 2022

1. Call to Order and Self Introductions

Chair Healy called the Technical Advisory Committee (TAC) meeting to order at 2:05 p.m. on Thursday, June 2, 2022. The meeting was a Zoom meeting only and attendees participated via the following link: <https://us02web.zoom.us/j/87698404530>.

Committee Members Present

Tim Healy, Chair	Napa Sanitation District
Pam Jeane, Vice Chair	Sonoma Valley County Sanitation District
Christopher Bolt	City of Petaluma
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Tony Williams	North Marin Water District

Others Present

Member Agencies

Brad Sherwood	Sonoma Water
Akin Fayehun	City of Petaluma

Consultant Team

Chuck Weir, Program Manager	Weir Technical Services
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2. Approval of the Agenda

The Agenda was approved with no changes.

3. Public Comments

There were no public comments.

4. TAC Meeting Minutes of April 14, 2022

The minutes from the April 14, 2022 meeting have not been prepared. The Program Manager noted that the TAC did not reach consensus on a budget for FY2022/23 and decided that all agencies would complete a questionnaire that indicated interest in participating in each resilience arena and at what cost. It would also indicate those agencies desiring to become associate members.

5. Results of Survey and Consideration of FY2022/23 Budget and Resilience Arena Projects

The Program Manager gave a summary of the results of the survey and the conclusions that could be drawn from the survey. Both Napa San and American Canyon do not have Phase 2 projects that will be ready for construction for at least five years and possibly longer. The interest of both agencies is to see the EIR/EIS completed so that their projects will only need minor modifications to be eligible for federal funding when they are ready for construction. Minor modifications to the conclusions were made during the course of the TAC's discussion. Chair Healy summarized the following conclusions for the FY2022/23 Budget:

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 - There is support for a project of \$209,000 which is the original estimate of \$205,000 plus \$4,000 for Sonoma Water. This is an average cost of \$34,833 for each of the six agencies. The actual percentages will be based on the existing cost percentages and are subject to modification once Phase 2 is completed.
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 - Resilience Arena for Sea Level Rise Adaptation
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- Conclusion is there is adequate support for a modified sub-regional study with a cost ceiling of \$125,000 or
- Conclusion is there is adequate support for a modified sub-regional study with a cost ceiling of \$125,000 or \$31,250 for each of the four agencies. The cost would decrease with Marin County participation. The current estimated cost for a sub-regional study is \$119,000 so a modified scope is reasonable. B&C will be asked to revise the scope with a cost of \$121,000 (plus \$4,000 for Sonoma Water for a total of \$125,000) and LGVSD, Sonoma Water, SVCSD, and Petaluma as participants. B&C will include a couple of sentences as to how it would differ if Marin County participated.
- Joint Use Costs
 - \$40,000 for Program Management for Weir Technical Services. Note that the term will be through December 31, 2023 so not all costs would be in FY2022/23. In addition, costs are likely to be lower as it appears that the activity for NBWRA over all is declining and fewer meetings are likely.
 - \$65,500 for Sonoma Water. In addition, costs are likely to be lower as it appears that the activity for NBWRA over all is declining and fewer meetings are likely.
 - Total cost is currently \$105,500 for Joint Use which would be shared by the five Phase 2 agencies, or \$21,156 per agency.
 - Currently since there are no specific guidelines for DCP and Sea Level Rise in the MOU, it seems reasonable that associate members that participate in those projects should pay a share of joint use costs. LGVSD and NMWD will be in that position effective July 1, 2022. Assessing an additional \$7,500 to help offset joint use costs is acceptable to those agencies. This may also effect Marin County.
 - In conclusion, the \$105,500 joint use costs will likely be spread over two fiscal years and associate members participating in DCP and Sea Level rise will pay an additional fee of \$7,500 to help offset joint use costs. Cost for each of the five Phase 2 agencies would be $(\$105,500 - \$15,000 = \$18,100 \text{ each})$. LGVSD and NMWD pay \$7,500 each.

A motion by Pam Jeane, seconded by Christopher Bolt to recommend an FY2022/23 Budget as described above for Board approval was unanimously approved.

10. Next Meeting

The next meeting is scheduled for July 7, 2022

11. Adjournment

There being no further business Chair Healy adjourned the meeting at 3:10 p.m.

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Agenda Explanation
North Bay Water Reuse Authority
Technical Advisory Committee
November 3, 2022

ITEM NO. 5 STATUS OF CONSULTANT AGREEMENTS

Action Requested

None at this time.

Summary

The consultant team and Sonoma Water staff will provide an oral update on the status of the consultant agreements.

Recommendation

No action is required at this time.

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Agenda Explanation
 North Bay Water Reuse Authority
 Technical Advisory Committee
 November 3, 2022

ITEM NO. 6 REVISED SCOPE OF WORK AND COST SHARING FOR SEA LEVEL RISE ADAPTATION PLAN

Action Requested

It is requested that the TAC review and approve the revised Scope of Work and Cost Sharing for the Sea Level Rise Adaptation Plan.

Summary

The NBWRA Board approved the Sea Level Rise Adaptation Plan (SLRAP), **Item No. 6.1**, at the June 27, 2022 Board meeting. The draft minutes from that meeting included the following:

This item was reviewed and recommended by the TAC. The Program Manager provided a summary of the recommendations as described in the staff report. The FY2022/23

Budget will include the following projects:

Resilience Arena for Recycled Water = \$209,000

Resilience Arena for Drought Contingency Planning = \$56,000

Resilience Arena for Sea Level Rise Adaptation = \$125,000

Joint Use for Program Management and Sonoma Water Administration = \$105,500

Total Budget = \$495,500

The Program Manager also indicated which agencies will become Associate Members, which agencies are participating in each project, and the cost sharing among the agencies. There may be some minor modification to cost sharing depending on Marin County participation.

A motion by Director Gorin, seconded by Vice Chair Gibson, to approve a FY2022/23 Budget and Resilience Arena Projects unanimously approved by a roll call vote.

For the last several months, there have been several Zoom meetings and email discussions with staff from Marin County in an effort to gain their support and participation in the SLRAP. A revised version has been developed based upon discussions with LGVSD and Marin County, and reframes the scope of work to provide more flexibility for the individual agencies as noted below.

- 1) Use of objectives and sub-objectives to provide more flexibility for the participating agencies;
- 2) Focused agency collaboration to establish a common vision, which can then be articulated to other stakeholders.
- 3) Creation of an adaptation vision and roadmap, with individual projects identified as appropriate.

A redline version of the revised scope as compared with the Board approved version is included as **Item No. 6.2**. The clean version of the revised scope of work is included as **Item No. 6.3**.

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Agenda Explanation
North Bay Water Reuse Authority
Technical Advisory Committee
November 3, 2022

The cost estimate remains unchanged, but now that Marin County has confirmed its participation, the share for each participating agency drops from \$31,250 to \$25,000. As a reminder, the other four agencies are LGVSD, SVCSD, SCWA, and Petaluma.

Since there is a change in scope, the TAC will need to review, concur with the revised scope, and recommend that the Board approve the revised scope at its next meeting, scheduled for January 30, 2023.

Recommendation

It is recommended that the TAC review the revised scope of work for the Sea Level Rise Adaptation Vision and determine if it should be presented to the Board for approval at the January 30, 2023 Board meeting.

Scope of Work – Sea Level Rise Adaptation Plan

The following scope describes the services to develop a Sea Level Rise (SLR) Adaptation Plan, which will be used to develop a Marin County focused plan.

Task 1 – Project Management

The Consultant will provide monthly progress reports via email to the Project Manager summarizing project status, identifying outstanding data needs, and noting challenges or risks that may impact budget or schedule. Prepare monthly invoices and track schedule and progress of project.

Task 1 Deliverables

- Monthly progress reports and invoices.

Task 1 Assumptions

- Up to 12 months of PM services and monthly progress reports.

Task 2. Strategic Outreach and Coordination

The Consultant will work with Member Agencies to develop a strategic outreach plan aimed at validating SLR risks and vulnerabilities and building stakeholder (landowner) support for future adaptation concepts. Anticipated aspects of the outreach plan are described below:

1. **Strategic Outreach/Coordination Plan.** A strategic outreach plan (draft and final) will be developed that identifies the goals of outreach, key stakeholders, the number of stakeholder outreach meetings, and the content and objectives of each outreach meeting.
2. **External Stakeholder Outreach Meetings.** In partial implementation of the strategic outreach plan, the Consultant will meet twice with key stakeholders. The first meeting will likely explain risks and vulnerabilities to landowners identified in the Strategic Outreach/Coordination Plan to solicit input on adaptation strategies. This meeting will provide refinement of the screening criteria in Task 3 and development and evaluation of adaptation concepts in Task 5. In a second meeting, both stakeholders and also select members of the broader community (to be determined by the project team and potentially, the TAC) will be invited. The preliminary adaptation options developed in Task 5 will be shared and feedback received. The Consultant will support facilitation of these meeting with the development of materials, presentation, and agendas for the meetings
3. **Stakeholder Public Meeting/Charette.** A public meeting will be facilitated to review adaptation strategies and garner input.

Task 2 Deliverables:

- Draft and final Strategic Outreach Plan.

Task 2 Assumptions:

- Quality reviews will be conducted on deliverables prior to submittal to NBWRA member agencies. Deliverables will be submitted to NBWRA member agencies initially as a draft for review, then as final to address review comments.
- NBWRA member agencies will provide a single set of collated comments using a comment log. Consultant team will document follow-up actions or rationale (if not revising a work product to incorporate one or more NBWRA member agencies comment[s]) in the comment log.
- The NBWRA member agencies will have 10 days to review the Strategic Outreach Plan.
- Up to two (2) meetings with external stakeholders including meeting attendance/facilitation, technical content development/presentation, and action items. It is assumed that the meetings will be attended by up to three Consultant staff and be up to two hours in duration.
- One (1) Public Meeting including meeting attendance/facilitation, presentations as appropriate, and action items follow up. It is also assumed that TAC meeting content, agendas, etc. will be identical to the content developed for external stakeholder meetings. It is assumed that the meeting will be attended by up to three Consultant staff and be up to two hours in duration.
- Attendance at additional stakeholder meetings and/or City Council briefings identified in Strategic Outreach plan are not included in the scope. Addition of the activities will require an amendment.

Task 3. Decision Making Framework

This task provides the framework in which the NBWRA and stakeholders will consider and decide about their shoreline adaptation. The goals/vision/and screening criteria that form part of the framework may need to be vetted with stakeholders at a future date in order to get buy-in. A vetting may be identified in the Strategic Outreach Plan.

- A risk-informed decision-support framework will be drafted that includes an initial vision, goals, and objectives of adaptation planning. The framework will include recommended preliminary screening/and evaluation criteria that can be modified with city and stakeholder input as appropriate. Starting with standard criteria often used in flood risk management (such as frequency of flooding, reduced damages, etc.), and then possibly adding up to 8 NBWRA or stakeholder-driven criteria such as i) the types of permits needed, ii) potential acquisition issues for various concepts, and/or iii) those criteria developed in the Adapting to Rising Tides program, to support decision-making and better reflect unique interests and value of NBWRA.
- The Consultant will meet with the NBWRA project manager to discuss the framework in the context of the memo, solicit input, and revise as necessary. General feedback from external stakeholder Meeting #1 in Task 2 may also inform the draft or revision of the decision framework.

Task 3 Deliverables:

- Draft and final Decision-Support Technical Memorandum (TM).

Task 3 Assumptions:

- Quality reviews will be conducted on deliverables prior to submittal to NBWRA member agencies. Deliverables will be submitted to NBWRA member agencies initially as a draft for review, then as final to address review comments.
- NBWRA member agencies will provide a single set of collated comments using a comment log. Consultant team will document follow-up actions or rationale (if not revising a work product to incorporate one or more NBWRA member agencies comment[s]) in the comment log.
- The NBWRA member agencies will have 10 days to review the draft TM.
- A maximum of eight (8) hours has been budgeted for responding to comments and questions on the submitted TM.

Task 4. Understand Risks and Vulnerabilities

Existing studies will be reviewed and synthesize the primary concerns identified therein, studies include: Marin County Hazard Management Plan, BayWave vulnerability assessment; Marin County General Plan update, the latest FEMA FIRM mapping, BCDC Guidance; and other studies. Our focus will be applying work completed to date to adaptation strategies that can inform a list of projects for funding. New analyses or data will not be developed.

Key risks and vulnerabilities in the project area will be identified. This includes highlighting where risks may be the greatest or most urgent, and whether there are areas or risks which would be considered intolerable. This information will be used to identify key or priority areas. The Consultant will meet with County and City Floodplain Administrators to validate findings in terms of key vulnerabilities/risks, and to collect additional critical information from those staff that may be discussed in the meeting. The key risks and priorities identified in this task will be used for the set of concepts/alternatives developed in Task 5.

Following the review, possible information gaps to more fully understanding risks will be identified. Recommendations for filling those gaps will be provided as part of Task 7, along with preliminary cost estimates associated with the recommendations.

Task 4 Deliverables:

- Draft and final TM that summarizes key risks and vulnerabilities.

Task 4 Assumptions:

- Member Agencies will provide noted studies and other pertinent documents within 5 days of the submitted request.
- Quality reviews will be conducted on deliverables prior to submittal to NBWRA member agencies. Deliverables will be submitted to NBWRA member agencies initially as a draft for review, then as final to address review comments.
- NBWRA member agencies will provide a single set of collated comments using a comment log. Consultant team will document follow-up actions or rationale (if not revising a work product to incorporate one or more NBWRA member agencies comment[s]) in the comment log.
- The NBWRA member agencies will have 10 days to review the draft TM.
- TM is intended for an educated lay-person audience, i.e., memo will assume readers understand what SLR is, its causes, etc. and will focus on highlighting key risks that will be addressed by adaptation concepts identified in subsequent tasks.

Task 5. Identify and Screen Adaptation Options to Reduce Risks and Vulnerabilities

The Consultant will identify up to three (3) concepts to reduce the risks and vulnerabilities identified in Task 4 above. Adaptation concepts will include a range of structural and nonstructural options, and at least one nature-based or multi-benefit strategy.

The Consultant will then use a matrix to screen/evaluate the adaptation concepts with the screening criteria established in Task 3. This screening/evaluation will consider how well each of the concepts perform compared to the criteria and whether or how they work toward the established goals.

As appropriate, one-page project summary sheets and background information will be developed to support funding applications. A CIP list of projects will be developed for articulation at both an individual project and overall program. Up to ten project descriptions will be developed.

Task 5 Deliverables:

- Preliminary Draft, Administrative Draft, and final TM describing the adaptation concepts and the results of the evaluation process.

Task 5 Assumptions:

- Quality reviews will be conducted on deliverables prior to submittal to NBWRA member agencies. Deliverables will be submitted to NBWRA member agencies initially as a draft for review, then as final to address review comments.
- North Bay Watershed Association (NBWA) will review the Preliminary Draft and provide a single set of collated comments using a comment log. Consultant team will document follow-up actions or rationale (if not revising a work product to incorporate one or more NBWA comment[s]) in the comment log.
- The Administrative Draft TM will be presented to stakeholders at External Stakeholder meeting #2, and the Final TM will incorporate feedback (as appropriate) from External Stakeholder meeting #2.
- NBWRA member agencies will provide a single set of collated comments using a comment log. Consultant team will document follow-up actions or rationale (if not revising a work product to incorporate one or more NBWRA member agencies comment[s]) in the comment log.
- The NBWRA member agencies will have 10 days to review the draft TM.
- Services will be provided up to the limit of the budget.

Task 6. Advance and Illustrate Concepts for Further Consideration

The Consultant and the NBWRA Member Agencies will come to an agreement on the two highest scoring adaptation concepts to illustrate and advance for future consideration. Illustrating the concepts will give stakeholders and Member Agencies a better vision for what future adaptation concepts could look like on the ground with context which can offer clarity, generate enthusiasm for concepts, and dispel fears about the unknowns. It is assumed that illustrations will demonstrate concepts in context but will not be detailed enough to support feasibility or engineering analyses.

- The Consultant will work with NBWRA to select 2 top concepts for advancement that consider the results of the screening evaluation and stakeholder input received from Stakeholder Meeting #2.

- Create graphic renderings of the 2 selected adaptation concepts.

Task 6 Deliverables:

- Draft and final illustrations of two selected adaptation concepts.

Task 6 Assumptions:

- Services will be provided up to the limit of the budget.

Task 7. Next Steps Strategy and Final Presentation

A memo will be developed that identifies the next steps for the NBWRA to advance shoreline adaptation. The memo will recommend sequencing, and may include items like:

- Key studies gaps that must be filled, and why
- Hydraulic and hydrologic modeling that may be needed to better evaluate how adaptation concepts reduce flood risks.
- Additional studies or analysis needed to refine the adaptation concepts evaluation, i.e., economics/benefit-cost analysis, cost estimates of adaptation concepts
- Key Projects that Can be applied for funding programs
- Anticipated permitting, rights of way, policy challenges that may need to be addressed, as identified through screening in task 5b.
- Potential land use changes or zoning updates that may be required.
- List of additional agencies/stakeholders likely needed to advance the effort and/or fund, permit, construct, implement.
- Sequencing of the steps with rough time frame.

As part of this task, a final summary presentation will be developed to identify the key messages for the NBWRA Member Agencies and stakeholders, likely including an overview of the project process, the key findings, and next steps.

Task 7 Deliverables:

- Draft and final TM that summarizes next steps strategy.
- Draft and final summary presentation.

Task 7 Assumptions:

- Quality reviews will be conducted on deliverables prior to submittal to NBWRA member agencies. Deliverables will be conducted to NBWRA member agencies initially as a draft for review, then as final to address review comments.
- NBWRA member agencies will provide a single set of collated comments using a comment log. Consultant team will document follow-up actions or rationale (if not revising a work product to incorporate one or more NBWRA member agencies comment[s]) in the comment log.
- The NBWRA member agencies will have 10 days to review the draft TM.
- It is assumed that the meeting will be attended by up to three Consultant staff and be up to two hours in duration.

Budget

Sea Level Rise Adaptation Plan															
Phase	Phase Description	Rene Guillen	Jacki Bates	Bernadette Visitacion-Sumida	Sara Romero	Total Labor Hours	Total Labor Effort	APC	Expenses	Total ODCs	ESA Cost	Total Sub Cost	Total Expense Cost	Total Expense Effort	Total Effort
		PM	PA	Project Oversight	Finance										
		\$203.00	\$122.00	\$268.00	\$98.00										
001	Project Management	20	16	2	4	42	\$7,148	\$336	\$0	\$0	\$6,000	\$6,000	\$6,000	\$6,636	\$13,784
002	Strategic Outreach and Coordination	0	0	0	0	0	\$0	\$0	\$1,000	\$1,000	\$13,100	\$13,100	\$14,100	\$14,805	\$14,805
003	Decision Making Framework	0	0	0	0	0	\$0	\$0	\$500	\$500	\$13,000	\$13,000	\$13,500	\$14,175	\$14,175
004	Risks and Vulnerabilities	0	0	0	0	0	\$0	\$0	\$500	\$500	\$19,800	\$19,800	\$20,300	\$21,315	\$21,315
005	Adaptation Options	0	0	0	0	0	\$0	\$0	\$500	\$500	\$29,000	\$29,000	\$29,500	\$30,975	\$30,975
006	Concepts for Consideration	0	0	0	0	0	\$0	\$0	\$500	\$500	\$19,500	\$19,500	\$20,000	\$21,000	\$21,000
007	Next Steps Strategy	0	0	0	0	0	\$0	\$0	\$500	\$500	\$4,250	\$4,250	\$4,750	\$4,988	\$4,988
GRAND TOTAL		20	16	2	4	42	\$7,148	\$336	\$3,500	\$3,500	\$104,650	\$104,650	\$108,150	\$113,894	\$121,042
Hours and Dollars are rounded to nearest whole number. To display decimals, change the format of the cells.															

Amended Scope of Work – Sea Level Rise Adaptation ^{Plan} Vision

~~The following scope describes the services to develop a Sea Level Rise (SLR) Adaptation Plan, which will be used to develop a Marin County focused plan.~~

The Board Approved scope of work identifies \$125,000 for a SLR Adaptation Plan, focused on specific agencies that were interested in participating, as opposed to the entire NBWRA service area. Agencies that agreed to participate include, LGVSD, SCWA, SVCSD and the City of Petaluma. At the time of Board Approval, Marin County was a potential participant.

Subsequent discussions held with LGVSD and Marin County (both Public Works and Parks) indicate interest in participation, but requested that the scope of work be amended for the Gallinas Watershed area to focus on establishing a collective vision for sea level rise adaptation, rather than focusing on identification of specific projects for implementation. In this way, the Adaptation Vision for the Gallinas Watershed can provide a framework for member agencies in the area to develop and implement individual projects in the context of a common vision. To that end, we've adjusted our scope to focus on participating member agency collaboration to establish a common vision that can then be articulated to other stakeholders.

The amended scope of work is slightly modified to addresses these comments, and is intended to accomplish the following:

- 1) Development of Adaptation Vision
 - a. Identify overarching objectives that can apply to all 3 NBWRA facilities and study areas.
 - b. Identify Specific Sub-Objectives for each facility and their associated study area (Gallinas Watershed, Petaluma River, Sonoma Creek).
- 2) Review and Integrate Work to Date
 - a. Articulation of a No-Adaptation Scenario
 - b. Vulnerabilities of each Facility
 - c. Identification of Adaptation Strategies
- 3) Provide Road Map for Adaptation
 - a. Identification of adaptation strategies, potential projects, next steps

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[Sea Level Rise Adaptation – Building Infrastructure and Communities Grant Application](#)

Task 1 – Project Management

The Consultant will provide monthly progress reports via email to the Project Manager summarizing project status, identifying outstanding data needs, and noting challenges or risks that may impact budget or schedule. [Include summaries of meetings conducted, including meeting attendees and key decisions and outcomes.](#) Prepare monthly invoices and track schedule and progress of project.

Task 1 Deliverables

- Monthly progress reports and invoices.

Task 1 Assumptions

- Up to ~~12~~2 months of PM services and monthly progress reports.
- [It is assumed that any potential meetings will be held by videoconference.](#)

~~Task 2. Participating Agency~~Task 2. Strategic Outreach and Coordination

~~The Consultant~~ESA will work with [participating](#) Member Agencies to ~~develop a strategic outreach plan aimed at validating SLR risks and vulnerabilities and building stakeholder (landowner) support for future adaptation concepts.~~ Anticipated aspects of the outreach plan are described below:

- ~~1. Strategic Outreach/Coordination Plan.~~ A strategic outreach plan (draft and final) will be developed that identifies the goals of outreach, key stakeholders, the number of stakeholder outreach meetings, and the content and objectives of each outreach meeting.
- ~~2. External Stakeholder Outreach Meetings.~~ In partial implementation of the strategic outreach plan, the Consultant will meet twice with key stakeholders. The first meeting will likely explain risks and vulnerabilities to landowners identified in the Strategic Outreach/Coordination Plan to solicit input on adaptation strategies. This meeting will provide refinement of the screening criteria in Task 3 and development and evaluation of adaptation concepts in Task 5. In a second meeting, both stakeholders and also select members of the broader community (to be determined by the project team and potentially, the TAC) will be invited. The preliminary adaptation options developed in Task 5 will be shared and feedback received. The Consultant will support facilitation of these meeting with the development of materials, presentation, and agendas for the meetings

Stakeholder Public Meeting/Charette. A public meeting will be facilitated to [review and present existing information regarding sea level rise vulnerability, create a common understanding among agencies as to vulnerability, identify individual and collaborative objectives, and identify potential strategies available.](#) This discussion will begin to frame available adaptation strategies ~~and garner input that can be integrated into an Adaptation Vision.~~

Task 2-

Deliverables:

- ~~Draft and final Strategic Outreach Plan.~~

Task 2 Assumptions:

- ~~Quality reviews will be conducted on deliverables prior to submittal to NBWRA member agencies. Deliverables will be submitted to NBWRA member agencies initially as a draft for review, then as final to address review comments.~~
- ~~NBWRA member agencies will provide a single set of collated comments using a comment log. Consultant team will document follow up actions or rationale (if not revising a work-product to incorporate one or more NBWRA member agencies comment(s)) in the comment log.~~

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- ~~The NBWRA member agencies will have 10 days to review the Strategic Outreach Plan.~~
- a. Up to ~~two (2) meetings with external stakeholders including meeting attendance/1~~ video conference with each participating agency, and 1 collective video conference (Collaborative Meeting 1). Our scope includes facilitation, technical content development/presentation, and action items. ~~It is assumed that the meetings will be attended by up to three Consultant staff and be up to two hours in duration.~~
- ~~One (1) Public Meeting including meeting attendance/facilitation, presentations as appropriate, and action items follow up. It is also assumed that TAC meeting content, agendas, etc. will be identical to the content developed for external stakeholder meetings. It is assumed that the meeting will be attended by up to three Consultant staff and be up to two hours in duration.~~
- ~~Attendance at additional stakeholder meetings and/or City Council briefings identified in Strategic Outreach plan are not included in the scope. Addition of the activities will require an amendment.~~

Task 3. Decision-Making Framework Development:

This task ~~provides~~ will develop the framework in which the NBWRA and stakeholders will ~~consider and decide about their~~ participating member agencies will review potential shoreline adaptation. ~~The goals/ strategies and develop an adaptation vision/and screening criteria that form part of the framework may need to be vetted with stakeholders at a future date in order to get buy in. A vetting may be identified in the Strategic Outreach Plan.~~

- a. ~~A~~ Based on discussions in Task 2, and other successful SLR planning efforts, ESA will draft a risk-informed decision-support framework ~~will be drafted~~ that includes an initial vision, goals, and objectives of adaptation planning.
- a.b. ~~The~~ The framework will include recommended preliminary screening/and evaluation criteria that can be modified with ~~city and stakeholder~~ participating agency input as appropriate. ~~Starting~~ We will start with standard criteria often used in flood risk management (such as frequency of flooding, reduced damages, etc.), and ~~then possibly adding~~ we may add up to 8 ~~NBWRA or stakeholder driven~~ participating agency identified criteria such as i) the types of permits needed, ii) potential acquisition issues for various concepts, and/or iii) those criteria developed in the Adapting to Rising Tides program, to support decision-making and better reflect unique interests and value of NBWRA. participating agencies.
- b.c. ~~The Consultant~~ ESA will meet with the NBWRA project manager facilitate a collective agency discussion (Collaborative Meeting 2) to discuss the framework ~~in the context of the memo~~ and criteria, solicit input, and revise as necessary. ~~General feedback from external stakeholder Meeting #1 in Task 2 may also inform the draft or revision of the decision framework.~~

Task 3 Deliverables:

- ~~Draft and final~~ Decision Support Technical Memorandum (Framework TM).

Task 3 Assumptions:

~~Quality reviews will be conducted on deliverables prior to submittal to NBWRA member agencies. Deliverables will be submitted to NBWRA member agencies initially as a draft for review, then as final to address review. Assumes one rounds of ESA revision and consolidated comments.~~

- ~~• NBWRA member agencies will provide a single set of collated comments using a comment log. Consultant team will document follow up actions or rationale (if not revising a work product to incorporate one or more NBWRA member agencies comment(s)) in the comment log.~~
- ~~• The NBWRA member agencies will have 10 days to review the draft TM.~~

~~A maximum of eight (8) hours has been budgeted for responding to comments and questions on the submitted TM.~~

Task 4. Understand Risks Risk and Vulnerabilities Vulnerability TM

~~Existing~~ ESA will leverage existing information to identify key risks and vulnerabilities to facilities managed by the participating member agencies. The key risks and vulnerabilities identified in this task will directly inform the set of adaptation concepts and strategies developed in Task 5.

- ~~ESA will review existing studies will be reviewed~~ and synthesize the primary concerns identified therein, studies include: Marin County Hazard Management Plan, BayWave vulnerability assessment; ~~Marin County General Plan update~~ Sonoma Water Resiliency Plan; LGVSD Vulnerability Study, Marin County Flood Control District planning efforts in the Gallinas Watershed, the latest FEMA FIRM mapping, BCDC Guidance; and other studies. *Our focus will be applying work completed to date to adaptation strategies that can inform a list of projects for funding. New* ESA will not generate any new analyses or data will not be developed, in this effort.
- ~~Key~~ ESA will then identify key risks and vulnerabilities in the project area ~~will be identified.~~ This includes highlighting where risks may be the greatest or most urgent, and whether there ~~are~~ any areas or risks which would be considered intolerable. ~~This~~ They will use this information ~~will be used to~~ identify key or priority areas. ~~The Consultant~~

~~ESA will meet with County and City Floodplain Administrators to validate findings in terms of key vulnerabilities/risks, and to collect additional~~ identify critical information ~~from those staff gaps that may be discussed in the meeting. The key risks and priorities identified in this task will be used for the set of concepts/alternatives developed in Task 5.~~

- ~~b.c.~~ Following the review, possible information gaps essential to more fully understanding risks ~~will be identified.~~ Recommendations for filling those gaps will be provided ~~as part of in Task 7, along with~~ 6. Road Map and preliminary cost estimates associated with the recommendations.

Task 4 ESA will submit the Deliverables:

- ~~Draft and final~~ Vulnerability TM that summarizes key risks and vulnerabilities.

Task 4 Assumptions:

- ~~Member Agencies will provide noted studies and other pertinent documents within 5 days of the submitted request.~~

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- ~~Quality reviews will be conducted on deliverables prior to submittal to NBWRA member and convene a video conference (Collaborative Meeting 3) with participating agencies. Deliverables will be submitted to NBWRA member agencies initially as a draft for review, then as final to address review comments.~~
- d. ~~NBWRA member agencies will provide a single set of collated comments using a to review and solicit input and comment log. Consultant team will document follow-up actions or rationale (if not revising a work product to incorporate~~
- ~~Deliverables: one or more NBWRA member agencies comment(s) in the comment log.~~
- ~~The NBWRA member agencies will have 10 days to review the draft TM.~~
- TM.
- e. Draft and Final Risk and Vulnerability TM. Assumes one round of review with one set of consolidated comments from NBWRA. Memo is intended for an educated lay-person audience, i.e., memo will assume readers understand what SLR is, its causes, etc. and will focus on highlighting key risks that will be addressed by adaptation concepts identified in subsequent tasks.

Task 5. ~~Identify and Screen~~ Develop Adaptation Options to Reduce Risks and Vulnerabilities Vision

~~The Consultant~~ ESA will identify ~~up to three (no more than 3)~~ concepts to reduce the risks and vulnerabilities identified in Task 4 above. Adaptation concepts will include a range of structural and nonstructural options, and at least one nature-based or multi-benefit strategy.

- a. ~~The Consultant~~ ESA will then use a matrix to screen/evaluate the adaptation concepts with the screening criteria established in Task 3. This screening/evaluation will consider how well each of the concepts perform compared to the criteria and whether or how they work toward the established goals.
- b. ~~As appropriate, one-page project~~ ESA will prepare a draft Adaptation Vision document, formatted as an executive summary sheets and. This include vision, objectives, background information will be developed to support funding applications. A CIP list of projects, participating agencies, and will be developed formatted for articulation at both an individual project ease of uptake and overall program. Up to ten project descriptions understanding.
- b.c. ~~ESA will be developed present draft adaptation vision to participating agencies~~ (Collaborative Meeting 4)

Deliverables:

~~Preliminary Draft, Administrative Draft, and final~~ Final Adaptation Vision TM. Draft and Final Adaptation Vision Executive Summary describing the adaptation concepts and the results of the evaluation process.

Task 5 Assumptions:

- ~~Quality reviews will be conducted on deliverables prior to submittal to NBWRA member agencies. Deliverables will be submitted to NBWRA member agencies initially as a draft for review, then as final to address review comments.~~
- ~~North Bay Watershed Association (NBWA) will review the Preliminary Draft and provide a single set of collated comments using a comment log. Consultant team will document follow-up actions or rationale (if not revising a work product to incorporate one or more NBWA~~

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~~comment(s)) in the comment log.~~

- ~~• The Administrative Draft TM will be presented to stakeholders at External Stakeholder meeting #2, and the Final TM will incorporate feedback (as appropriate) from External Stakeholder meeting #2.~~
- ~~• NBWRA member agencies will provide a single set of collated comments using a comment log. Consultant team will document follow-up actions or rationale (if not revising a work product to incorporate one or more NBWRA member agencies comment(s)) in the comment log.~~
- ~~• The NBWRA member agencies will have 10 days to review the draft TM. Services will be provided up to the limit of the budget.~~

Task 6. Advance and Illustrate Concepts for Further Consideration

~~The Consultant and the NBWRA Member Agencies will come to an agreement on the two highest scoring adaptation concepts to illustrate and advance for future consideration. Illustrating the concepts will give stakeholders and Member Agencies a better vision for what future adaptation concepts could look like on the ground with context which can offer clarity, generate enthusiasm for concepts, and dispel fears about the unknowns. It is assumed that illustrations will demonstrate concepts in context but will not be detailed enough to support feasibility or engineering analyses.~~

- ~~• The Consultant will work with NBWRA to select 2 top concepts for advancement that consider the results of the screening evaluation and stakeholder input received from Stakeholder Meeting #2.~~
- ~~• Create graphic renderings of the 2 selected adaptation concepts.~~

Task 6 Deliverables:

- ~~• Draft and final illustrations of two selected adaptation concepts.~~

Task 6 Assumptions:

- ~~• Services will be provided up to the limit of the budget.~~

Task 7. Next Steps Strategy and ~~Final Presentation~~ Road Map

~~A memo~~ ESA will ~~be developed~~ develop a Road Map TM that identifies the next steps for the NBWRA to advance shoreline adaptation. ~~The memo~~ The objective of both the Adaptation Vision Executive Summary and Road Map will to provide a unifying framework for individual agencies to proceed with project development and funding steps with a common set of objectives for SLR Adaptation. Where appropriate, the Road Map will recommend sequencing, and may include items like:

- a. Key studies gaps that must be filled, and why
- b. Hydraulic and hydrologic modeling that may be needed to better evaluate how adaptation concepts reduce flood risks.
- c. Additional studies or analysis needed to refine the adaptation concepts evaluation, i.e., economics/benefit-cost analysis, cost estimates of adaptation concepts.
- d. Key Projects ~~that Can be applied~~ /Project List for funding programs
- e. Anticipated permitting, rights of way, policy challenges that may need to be addressed, as identified through screening in task 5b.
- f. Potential land use changes or zoning updates that may be required.
- g. List of additional agencies/stakeholders likely needed to advance the effort and/or fund, permit, construct, implement.
- h. Sequencing of the steps with rough time frame.

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- i. ~~As part of this task,~~ ESA will convene Collaborative Meeting 5 to review the draft Road Map TM with participating agencies.
- j. Final presentation to NBWRA Board
ESA will develop a final summary presentation will be developed to identify the key messages for the NBWRA Member Agencies and stakeholders, likely including an overview of the project process, the key findings, and next steps.
The powerpoint can be formatted for strategic outreach to key stakeholders as a next step.

Task 7-

Deliverables:

- a. Draft and final ~~TM that summarizes next steps strategy.~~ Next Steps Strategy and Road Map TM
- ~~Draft and final~~ Final summary presentation:

Task 7 Assumptions:

- ~~Quality reviews will be conducted on deliverables prior to submittal to NBWRA member agencies. Deliverables will be conducted to NBWRA member agencies initially as a draft for review, then as final to address review comments.~~
- ~~NBWRA member agencies will provide a single set of collated comments using a comment log. Consultant team will document follow-up actions or rationale (if not revising a work product to incorporate one or more NBWRA member agencies comment[s]) in the comment log.~~
- b. ~~The NBWRA member agencies will have 10 days to review the (draft TM and final)~~

Task 7. OPTIONAL TASK: Advance and illustrate concepts for further consideration

If appropriate based on agency input, up to two adaptation concepts will be identified to illustrate and advance for future consideration. Illustrating the adaptation concepts will give stakeholders and Member Agencies a better vision for what future adaptation concepts could look like on the ground with context which can offer clarity, generate enthusiasm for concepts, and dispel fears about the unknowns. It is assumed that illustrations will demonstrate concepts in context, but will not be detailed enough to support feasibility or engineering analyses.

- a. ESA will work with participating Member Agencies to select 2 top concepts for advancement that consider the results of the screening evaluation.
- Create graphic renderings of the 2 selected adaptation concepts. ~~It is assumed that the meeting will be attended by up to three Consultant staff and be up to two hours in duration.~~

b. *note, this is the more labor intensive of these two sub-tasks—anticipated that 6a can be done rather efficiently. The number of renderings will be determined based on available resources and member agency interest.

c. As appropriate, ESA will develop 1 page project summary sheets and background information to support funding applications. The number of project sheets will be determined based on available resources and member agency interest.

Deliverables: Draft and final illustrations of two selected adaptation concepts.

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Amended Scope of Work – Sea Level Rise Adaptation Vision

The Board Approved scope of work identifies \$125,000 for a SLR Adaptation Plan, focused on specific agencies that were interested in participating, as opposed to the entire NBWRA service area. Agencies that agreed to participate include, LGVSD, SCWA, SVCSD and the City of Petaluma. At the time of Board Approval, Marin County was a potential participant.

Subsequent discussions held with LGVSD and Marin County (both Public Works and Parks) indicate interest in participation, but requested that the scope of work be amended for the Gallinas Watershed area to focus on establishing a collective vision for sea level rise adaptation, rather than focusing on identification of specific projects for implementation. In this way, the Adaptation Vision for the Gallinas Watershed can provide a framework for member agencies in the area to develop and implement individual projects in the context of a common vision. To that end, we've adjusted our scope to focus on participating member agency collaboration to establish a common vision that can then be articulated to other stakeholders.

The amended scope of work is slightly modified to addresses these comments, and is intended to accomplish the following:

- 1) Development of Adaptation Vision
 - a. Identify overarching objectives that can apply to all 3 NBWRA facilities and study areas.
 - b. Identify Specific Sub-Objectives for each facility and their associated study area (Gallinas Watershed, Petaluma River, Sonoma Creek).
- 2) Review and Integrate Work to Date
 - a. Articulation of a No-Adaptation Scenario
 - b. Vulnerabilities of each Facility
 - c. Identification of Adaptation Strategies
- 3) Provide Road Map for Adaptation
 - a. Identification of adaptation strategies, potential projects, next steps

Task 1 – Project Management

The Consultant will provide monthly progress reports via email to the Project Manager summarizing project status, identifying outstanding data needs, and noting challenges or risks that may impact budget or schedule. Include summaries of meetings conducted, including meeting attendees and key decisions and outcomes. Prepare monthly invoices and track schedule and progress of project.

Task 1 Deliverables

- Monthly progress reports and invoices.

Task 1 Assumptions

- Up to 2 months of PM services and monthly progress reports.
- It is assumed that any potential meetings will be held by videoconference.

Task 2. Participating Agency Outreach and Coordination

ESA will work with participating Member Agencies to review and present existing information regarding sea level rise vulnerability, create a common understanding among agencies as to vulnerability, identify individual and collaborative objectives, and identify potential strategies available. This discussion will begin to frame available adaptation strategies that can be integrated into an Adaptation Vision.

Deliverables:

- Up to 1 video conference with each participating agency, and 1 collective video conference (**Collaborative Meeting 1**). Our scope includes facilitation, technical content development/presentation, and action items.

Task 3. Framework Development:

This task will develop the framework in which the participating member agencies will review potential shoreline adaptation strategies and develop an adaptation vision.

- Based on discussions in Task 2, and other successful SLR planning efforts, ESA will draft a risk-informed decision-support framework that includes an initial vision, goals, and objectives of adaptation planning.
- The framework will include recommended preliminary screening/and evaluation criteria that can be modified with participating agency input as appropriate. We will start with standard criteria often used in flood risk management (such as frequency of flooding, reduced damages, etc.), and we may add up to 8 participating agency identified criteria such as i) the types of permits needed, ii) potential acquisition issues for various concepts, and/or iii) those criteria developed in the Adapting to Rising Tides program, to support decision-making and better reflect unique interests and value of NBWRA participating agencies.
- ESA will facilitate a collective agency discussion (**Collaborative Meeting 2**) to discuss the framework and criteria, solicit input, and revise as necessary.

Deliverables: Draft and final Framework TM. Assumes one rounds of ESA revision and consolidated comments.

Task 4. Risk and Vulnerability TM

ESA will leverage existing information to identify key risks and vulnerabilities to facilities managed by the participating member agencies. The key risks and vulnerabilities identified in this task will directly inform the set of adaptation concepts and strategies developed in Task 5.

- a. ESA will review existing studies and synthesize the primary concerns identified therein, studies include: Marin County Hazard Management Plan, BayWave vulnerability assessment; Sonoma Water Resiliency Plan; LGVSD Vulnerability Study, Marin County Flood Control District planning efforts in the Gallinas Watershed, the latest FEMA FIRM mapping, BCDC Guidance; and other studies. *Our focus will be applying work completed to date to adaptation strategies that can inform a list of projects for funding. ESA will not generate any new analyses or data in this effort.*
- b. ESA will then identify key risks and vulnerabilities in the project area. This includes highlighting where risks may be the greatest or most urgent, and whether there any areas or risks which would be considered intolerable. They will use this information to identify key or priority areas.
- c. ESA will identify critical information gaps that will be essential to more fully understanding risks. Recommendations for filling those gaps will be provided in Task 6, Road Map and preliminary cost estimates associated with the recommendations.
- d. ESA will submit the Draft Vulnerability TM and convene a video conference (**Collaborative Meeting 3**) with participating agencies to review and solicit input and comment.

Deliverables:

- e. Draft and Final Risk and Vulnerability TM. Assumes one round of review with one set of consolidated comments from NBWRA. Memo is intended for an educated lay-person audience, i.e., memo will assume readers understand what SLR is, its causes, etc. and will focus on highlighting key risks that will be addressed by adaptation concepts identified in subsequent tasks.

Task 5. Develop Adaptation Vision

ESA will identify no more than 3 concepts to reduce the risks and vulnerabilities identified in Task 4 above. Adaptation concepts will include a range of structural and nonstructural options, and at least one nature-based or multi-benefit strategy.

- a. ESA will then use a matrix to screen/evaluate the adaptation concepts with the screening criteria established in Task 3. This screening/evaluation will consider how well each of the concepts perform compared to the criteria and whether or how they work toward the established goals.
- b. ESA will prepare a draft Adaptation Vision document, formatted as an executive summary. This include vision, objectives, background, participating agencies, and will be formatted for ease of uptake and understanding.
- c. ESA will present draft adaptation vision to participating agencies (**Collaborative Meeting 4**)

Deliverables: Draft, and Final Adaptation Vision TM. Draft and Final Adaptation Vision Executive Summary describing the adaptation concepts and the results of the evaluation process.

Task 6. Next Steps Strategy and Road Map

ESA will develop a Road Map TM that identifies the next steps for the NBWRA to advance shoreline adaptation. The objective of both the Adaptation Vision Executive Summary and Road Map will to provide a unifying framework for individual agencies to proceed with project development and funding steps with a common set of objectives for SLR Adaptation. Where appropriate, the Road Map will recommend sequencing, and may include items like:

- a. Key studies gaps that must be filled, and why
- b. Hydraulic and hydrologic modeling that may be needed to better evaluate how adaptation concepts reduce flood risks.
- c. Additional studies or analysis needed to refine the adaptation concepts evaluation, i.e., economics/benefit-cost analysis, cost estimates of adaptation concepts
- d. Key Projects/Project List for funding programs
- e. Anticipated permitting, rights of way, policy challenges that may need to be addressed, as identified through screening in task 5b.
- f. Potential land use changes or zoning updates that may be required
- g. List of additional agencies/stakeholders likely needed to advance the effort and/or fund, permit, construct, implement
- h. Sequencing of the steps with rough time frame
- i. ESA will convene **Collaborative Meeting 5** to review the draft Road Map TM with participating agencies.
- j. Final presentation to NBWRA Board

ESA will develop a final summary presentation to identify the key messages for the NBWRA Member Agencies, likely including an overview of the project process, the key findings, and next steps. The powerpoint can be formatted for strategic outreach to key stakeholders as a next step.

Deliverables:

- a.** Draft and final Next Steps Strategy and Road Map TM
- b.** Final summary presentation (draft and final)

Task 7. OPTIONAL TASK: Advance and illustrate concepts for further consideration

If appropriate based on agency input, up to two adaptation concepts will be identified to illustrate and advance for future consideration. Illustrating the adaptation concepts will give stakeholders and Member Agencies a better vision for what future adaptation concepts could look like on the ground with context which can offer clarity, generate enthusiasm for concepts, and dispel fears about the unknowns. It is assumed that illustrations will demonstrate concepts in context, but will not be detailed enough to support feasibility or engineering analyses.

- a. ESA will work with participating Member Agencies to select 2 top concepts for advancement that consider the results of the screening evaluation.

- b. Create graphic renderings of the 2 selected adaptation concepts. *note, this is the more labor intensive of these two sub-tasks—anticipated that 6a can be done rather efficiently. The number of renderings will be determined based on available resources and member agency interest.
- c. As appropriate, ESA will develop 1 page project summary sheets and background information to support funding applications. The number of project sheets will be determined based on available resources and member agency interest.

Deliverables: Draft and final illustrations of two selected adaptation concepts.

NBWRA Focused SLR	
ESA Labor Detail and Expense Summary	

27 of 27

**North Bay Water Reuse Authority
Technical Advisory Committee
Zoom Meeting Minutes
November 3, 2022
Approved February 2, 2023**

1. Call to Order and Self Introductions

Chair Healy called the Technical Advisory Committee (TAC) meeting to order at 2:06 p.m. on Thursday, November 3, 2022. The meeting was a Zoom meeting only and attendees participated via the following link: <https://us02web.zoom.us/j/87698404530>.

Committee Members Present

Tim Healy, Chair	Napa Sanitation District
Pam Jeane, Vice Chair	Sonoma Valley County Sanitation District
Erik Brown	Novato Sanitary District
Chris DeGabriele	Las Gallinas Valley Sanitary District
Brad Elliott	Sonoma Water
Curtis Paxton	Las Gallinas Valley Sanitary District
Paul Sellier	Marin Municipal Water District
Jake Spaulding	Sonoma Water
Tony Williams	North Marin Water District

Others Present

Member Agencies
None

Consultant Team

Chuck Weir, Program Manager	Weir Technical Services
Jim O'Toole	ESA
Mark Millan	Data Instincts

2. Approval of the Agenda

The Agenda was approved with no changes. For the benefit on new members, introductions were made.

3. Public Comments

There were no public comments.

4. TAC Meeting Minutes of June 2, 2022

The TAC Meeting Minutes of June 2, 2022 were unanimously approved.

5. Status of Consultant Agreements

The Brown & Caldwell agreement is scheduled to go to the Sonoma Water Board for approval on January 10, 2023.

6. Revised Scope of Work and Cost Sharing for Sea Level Rise Adaptation Plan

The Program Manager provided an overview of the actions previously taken by the Board on the resilience arenas. For the Sea Level Rise (SLR) project there are currently four agencies participating: Las Gallinas VSD, Sonoma Water, Sonoma Valley CSD, and Petaluma. Marin County has expressed interest, but wanted to see some revisions to the scope.

For the last several months, there have been several Zoom meetings and email discussions with staff from Marin County in an effort to gain their support and participation in the SLRAP. A revised version has been developed based upon discussions with LGVSD and Marin County, and reframes the scope of work to provide more flexibility for the individual agencies as noted below.

- 1) Use of objectives and sub-objectives to provide more flexibility for the participating agencies;
- 2) Focused agency collaboration to establish a common vision, which can then be articulated to other stakeholders.
- 3) Creation of an adaptation vision and roadmap, with individual projects identified as appropriate.

A redline version of the revised scope as compared to the originally approved scope was reviewed by the TAC, along with a clean version. The changes may need to be reviewed by Petaluma, Sonoma Water, and Sonoma Valley CSD to ensure they will still be participants. There is no change to the cost. The NBWRA Board and the Sonoma Water Board may also need to approve the revised scope and that will need to be determined by County Counsel. If it does need to be reapproved, the final approval of the scope may be delayed beyond January 10, 2023 as noted above.

A motion by Pam Jeane, seconded by Jake Spaulding to approve the revised scope subject to the following: 1) review by Sonoma Water, Sonoma Valley CSD, and City of Petaluma, and 2) a determination by County Counsel as to the need for the revised scope to be approved by the NBWRA and Sonoma Water Boards was unanimously approved.

7. Next Meeting

The next meeting is scheduled for December 1, 2022

8. Adjournment

There being no further business Chair Healy adjourned the meeting at 2:41 p.m.

Item No. 7.a.4

NORTH BAY WATER REUSE AUTHORITY TECHNICAL ADVISORY COMMITTEE

Thursday, February 2, 2023

Agenda

2:00 PM

Zoom Meeting: <https://us02web.zoom.us/j/81859156246>

	1.		Call to Order and Self Introductions
	2.	Action	Approval of Agenda
	3.		Public Comments
Pages 2 - 3	4.	Action	TAC Meeting Minutes of November 3, 2022
Pages 4 - 19	5.	Action	Revised Scope of Work and Cost Sharing for Sea Level Rise Adaptation Vision
	6.	Information	Next Meeting, March 2, 2023
	7.		Adjournment

**North Bay Water Reuse Authority
Technical Advisory Committee
Zoom Meeting Minutes
November 3, 2022
Approved _____**

1. Call to Order and Self Introductions

Chair Healy called the Technical Advisory Committee (TAC) meeting to order at 2:06 p.m. on Thursday, November 3, 2022. The meeting was a Zoom meeting only and attendees participated via the following link: <https://us02web.zoom.us/j/87698404530>.

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Pam Jeane, Vice Chair	Sonoma Valley County Sanitation District
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Brad Elliott	Sonoma Water
Curtis Paxton	Las Gallinas Valley Sanitary District
Paul Sellier	Marin Municipal Water District
Jake Spaulding	Sonoma Water
Tony Williams	North Marin Water District

Others Present

Member Agencies
None

Consultant Team

Chuck Weir, Program Manager	Weir Technical Services
Jim O'Toole	ESA
Mark Millan	Data Instincts

2. Approval of the Agenda

The Agenda was approved with no changes. For the benefit on new members, introductions were made.

3. Public Comments

There were no public comments.

4. TAC Meeting Minutes of June 2, 2022

The TAC Meeting Minutes of June 2, 2022 were unanimously approved.

5. Status of Consultant Agreements

The Brown & Caldwell agreement is scheduled to go to the Sonoma Water Board for approval on January 10, 2023.

6. Revised Scope of Work and Cost Sharing for Sea Level Rise Adaptation Plan

The Program Manager provided an overview of the actions previously taken by the Board on the resilience arenas. For the Sea Level Rise (SLR) project there are currently four agencies participating: Las Gallinas VSD, Sonoma Water, Sonoma Valley CSD, and Petaluma. Marin County has expressed interest, but wanted to see some revisions to the scope.

For the last several months, there have been several Zoom meetings and email discussions with staff from Marin County in an effort to gain their support and participation in the SLRAP. A revised version has been developed based upon discussions with LGVSD and Marin County, and reframes the scope of work to provide more flexibility for the individual agencies as noted below.

- 1) Use of objectives and sub-objectives to provide more flexibility for the participating agencies;
- 2) Focused agency collaboration to establish a common vision, which can then be articulated to other stakeholders.
- 3) Creation of an adaptation vision and roadmap, with individual projects identified as appropriate.

A redline version of the revised scope as compared to the originally approved scope was reviewed by the TAC, along with a clean version. The changes may need to be reviewed by Petaluma, Sonoma Water, and Sonoma Valley CSD to ensure they will still be participants. There is no change to the cost. The NBWRA Board and the Sonoma Water Board may also need to approve the revised scope and that will need to be determined by County Counsel. If it does need to be reapproved, the final approval of the scope may be delayed beyond January 10, 2023 as noted above.

A motion by Pam Jeane, seconded by Jake Spaulding to approve the revised scope subject to the following: 1) review by Sonoma Water, Sonoma Valley CSD, and City of Petaluma, and 2) a determination by County Counsel as to the need for the revised scope to be approved by the NBWRA and Sonoma Water Boards was unanimously approved.

7. Next Meeting

The next meeting is scheduled for December 1, 2022

8. Adjournment

There being no further business Chair Healy adjourned the meeting at 2:41 p.m.

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Page 1

Agenda Explanation
 North Bay Water Reuse Authority
 Technical Advisory Committee
 November 2, 2022

ITEM NO. 5 REVISED SCOPE OF WORK AND COST SHARING FOR SEA LEVEL RISE ADAPTATION PLAN

Action Requested

It is requested that the TAC review and approve the revised Scope of Work and Cost Sharing for the Sea Level Rise Adaptation Plan.

Summary

The NBWRA Board approved the Sea Level Rise Adaptation Plan (SLRAP), at the June 27, 2022 Board meeting. The draft minutes from that meeting included the following:

This item was reviewed and recommended by the TAC. The Program Manager provided a summary of the recommendations as described in the staff report. The FY2022/23

Budget will include the following projects:

Resilience Arena for Recycled Water = \$209,000

Resilience Arena for Drought Contingency Planning = \$56,000

Resilience Arena for Sea Level Rise Adaptation = \$125,000

Joint Use for Program Management and Sonoma Water Administration = \$105,500

Total Budget = \$495,500

The Program Manager also indicated which agencies will become Associate Members, which agencies are participating in each project, and the cost sharing among the agencies. There may be some minor modification to cost sharing depending on Marin County participation.

A motion by Director Gorin, seconded by Vice Chair Gibson, to approve a FY2022/23 Budget and Resilience Arena Projects unanimously approved by a roll call vote.

For the last several months, there have been several Zoom meetings and email discussions with staff from Marin County in an effort to gain their support and participation in the SLRAP. During the course of revising the scope, Plan had been changed to Vision (SLRAV). A revised version has been developed based upon discussions with LGVSD and Marin County, and reframes the scope of work to provide more flexibility for the individual agencies as noted below.

The amended scope of work is slightly modified to addresses these comments, and is intended to accomplish the following:

- 1) Development of Adaptation Vision
 - a. Identify overarching objectives that can apply to participating NBWRA facilities and study areas.
 - b. Identify Specific Sub-Objectives for each facility and their associated study area (Gallinas Watershed, Petaluma River).

Page 2

Agenda Explanation
 North Bay Water Reuse Authority
 Technical Advisory Committee
 November 2, 2022

- 2) Review and Integrate Work to Date
 - a. Articulation of a No-Adaptation Scenario
 - b. Vulnerabilities of each Facility
 - c. Identification of Adaptation Strategies
- 3) Provide Road Map for Adaptation
 - a. Identification of adaptation strategies, potential projects, next steps

A redline version of the revised scope as compared with the Board approved version is included as **Item No. 5.1**. The clean version of the revised scope of work is included as **Item No. 5.2**.

A separate meeting was held with City of Petaluma staff on January 31, 2023 and they have agreed to support the revised scope. The cost has not changed, and remains at \$125,000, which includes \$4,000 for Sonoma Water administration. As part of this scope revision process, Sonoma Valley CSD has elected to not participate in this project, citing overlap with the recently completed Sonoma Water Resiliency Program.

In summary, the number of participating agencies remains at four (Las Gallinas VSD, Sonoma Water, Petaluma, and Marin County). The cost share for each of the four agencies remains the same, \$31,250 per agency. A revised budget and cost sharing plan is included as **Item No. 5.3**. The only change from the previous version is the shifting of SLRAV costs from Sonoma Valley CSD to Marin County.

Since there is a change in scope, the TAC will need to review, concur with the revised scope, and recommend that the Board approve the revised scope and FY2022/23 Budget and Cost Sharing at its next meeting, scheduled for February 27, 2023. It can then be approved by the Sonoma Water Board.

Recommendation

It is recommended that the TAC review the revised scope of work for the Sea Level Rise Adaptation Vision and FY2022/23 Budget and Cost Sharing and determine if it should be presented to the Board for approval at the February 27, 2023 Board meeting.

Amended~~DRAFT~~ Scope of Work – Sea Level Rise Adaptation Vision

The Board Approved following scope describes proposed scope of work for the Option-4B identifies \$125,000 for a SLR Adaptation Plan, focused on specific agencies that were interested in participating, as opposed to the entire NBWRA service area. At the time of Board Approval, agencies that agreed to participate, include, LGVSD, which envisions a Marin County focused plan. SCWA, SVCSD and the City of Petaluma. At the time of Board Approval, Marin County was a potential participant.

Subsequent discussions held with LGVSD and Marin County (both Public Works and Parks) indicate interest in participation, but requested that the scope of work be amended for the Gallinas Watershed area to focus on establishing a collective vision for sea level rise adaptation, rather than focusing on identification of specific projects for implementation. In this way, the Adaptation Vision can provide a framework for member agencies in the area to develop and implement individual projects in the context of a common vision. To that end, we've adjusted our scope to focus on participating member agency collaboration to establish a common vision that can then be articulated to other stakeholders. As part of this scope revision process, SVCSD elected to not participate in this process, citing overlap with the recently completed Sonoma Water Resiliency Program.

The amended scope of work is slightly modified to addresses these comments, and is intended to accomplish the following:

- 1) Development of Adaptation Vision
 - a. Identify overarching objectives that can apply to participating NBWRA facilities and study areas.
 - b. Identify Specific Sub-Objectives for each facility and their associated study area (Gallinas Watershed, Petaluma River).
- 2) Review and Integrate Work to Date
 - a. Articulation of a No-Adaptation Scenario
 - b. Vulnerabilities of each Facility
 - c. Identification of Adaptation Strategies
- 3) Provide Road Map for Adaptation
 - a. Identification of adaptation strategies, potential projects, next steps

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Task 1 – Project Management

The Consultant will provide monthly progress reports via email to the Project Manager summarizing project status, identifying outstanding data needs, and noting challenges or risks that may impact budget or schedule. Include summaries of meetings conducted, including meeting attendees and key decisions and outcomes. Prepare monthly invoices and track schedule and progress of project.

Task 1 Deliverables

- Monthly progress reports and invoices.

Task 1 Assumptions

- Up to 2 months of PM services and monthly progress reports.
- It is assumed that any potential meetings will be held by videoconference.

Task 2. Participating Agency Outreach and Coordination

ESA will work with participating Member Agencies to review and present existing information regarding sea level rise vulnerability, create a common understanding among agencies as to vulnerability, identify individual and collaborative objectives, and identify potential strategies available. This discussion will begin to frame available adaptation strategies that can be integrated into an Adaptation Vision.

~~develop a strategic outreach plan aimed at validating sea level rise risks and vulnerabilities, and building stakeholder (landowner) support for an. ESA will implement some aspects of the outreach plan as described below.~~

~~1. **Strategic outreach/coordination plan.** ESA will develop a strategic outreach plan (draft and final) that identifies the goals of outreach, key stakeholders, the number of stakeholder outreach meetings, and the content and objectives of each outreach meeting.~~

~~2. **External stakeholder outreach meetings:** In partial implementation of the strategic outreach plan, ESA will meet twice with key stakeholders. The first meeting will likely explain risks and vulnerabilities to landowners identified in Task 2a to solicit input on adaptation strategies. This meeting will inform refinement of the screening criteria in Task 3 and development and evaluation of adaptation concepts in Task 4. In a second meeting, including both stakeholders and also select members of the broader community to be determined by the project team and potentially, the TAC. ESA will share the preliminary adaptation options developed in Task 4 and receive feedback. ESA will support facilitation of these meeting with the development of materials, presentation, and agendas for the meetings~~

~~3. **Stakeholder Public Meeting/Charette:** ESA will facilitate a public meeting to review adaptation strategies and garner input.~~

~~4. **Optional to be augmented with additional funds:** attend additional stakeholder meetings and/or City Council briefing mid-way, identified in Strategic Outreach plan and agreed upon by NBWRA.~~

Deliverables:

- ~~Memo: Draft and Final strategic outreach plan~~
- Up to 1 video conference with each participating agency, and 1 collective video conference (**Collaborative Meeting 1**). Our scope ~~3 meetings with~~

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~~external stakeholders including meeting attendance/facilitation, technical content development/presentation, and action items.~~

~~e. Two Public Meetings. Including meeting attendance/facilitation, presentations as appropriate, and action items follow up. It is also assumed that TAG meeting content, agendas, etc. will be identical to the content developed for external stakeholder meetings.~~

~~d. a. Optional deliverable: ESA attendance or support of additional individual or public stakeholder meetings.~~

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Task 3. ~~Framework Development: Decision-making framework.~~

This task ~~will develop~~ provides the framework in which the participating member agencies NBWRA ~~will review potential shoreline adaptation strategies and develop an adaptation vision and stakeholders will consider and decide about their shoreline adaptation. The goals/vision/and screening criteria that form part of the framework may need to be vetted with stakeholders at a future date in order to get buy-in. A vetting may be identified in the Strategic Outreach Plan.~~

a. Based on discussions in Task 2, and other successful SLR planning efforts,

ESA will draft a risk-informed decision-support framework that includes an initial vision, goals, and objectives of adaptation planning.

a.b. The framework will include recommended preliminary screening/and evaluation criteria that can be modified with participating agency input ~~city and stakeholder input~~ as appropriate. We will start with standard criteria often used in flood risk management (such as frequency of flooding, reduced damages, etc.), and we may add up to 8 participating agency identified criteria ~~NBWRA or stakeholder-driven criteria~~ such as i) the types of permits needed, ii) potential acquisition issues for various concepts, and/or iii) those criteria developed in the Adapting to Rising Tides program, to support decision-making and better reflect unique interests and value of NBWRA participating agencies.

b.c. ESA will facilitate a collective agency discussion (Collaborative Meeting 2) ~~meet with the NBWRA project manager~~ to discuss the framework and criteria ~~in the context of the memo~~, solicit input, and revise as necessary. ~~General feedback from external stakeholder meeting #1 in Task 2 may also inform the draft or revision of the decision framework.~~

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Deliverables: Draft and final Framework Decision-support TM memo. Assumes one ~~two~~ rounds of ESA revision and consolidated comments.

Task 4. Risk and Vulnerability TM. ~~Understand risks and vulnerabilities~~

ESA will leverage existing information to identify key risks and vulnerabilities to facilities managed by the participating member agencies. The key risks and vulnerabilities ~~priorities~~ identified in this task will directly inform the set of adaptation concepts and strategies ~~alternatives~~ developed in Task 5.

e.a. ESA will review existing studies and synthesize the primary concerns identified therein, studies include: Marin County Hazard Management Plan, BayWave vulnerability assessment; Sonoma Water Resiliency

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Plan ~~Burlingame General Plan update~~; LGVSD Vulnerability Study; Marin County Flood Control District planning efforts in the Gallinas Watershed, the latest FEMA FIRM mapping, BCDC Guidance; and other studies. *Our focus will be applying work completed to date to adaptation strategies that can inform a list of projects for funding. ESA will not generate any new analyses or data in this effort.*

~~d.b.~~ ESA will then identify key risks and vulnerabilities in the project area. This includes highlighting where risks may be the greatest or most urgent, and whether there any areas or risks which would be considered intolerable. They will use this information to identify key or priority areas.

~~e.~~ ~~ESA and staff will meet with County and City Floodplain Administrators to validate findings in terms of key vulnerabilities/risks, and to collect any additional critical information from those staff that may be discussed in the meeting.~~

~~c.~~ ~~Following the review,~~ ESA will identify critical information gaps that will be essential to more fully understanding risks. ~~They will make~~ Recommendations for filling those gaps will be provided in Task 67, Road Map and preliminary cost estimates associated with the recommendations.

~~f.d.~~ ESA will submit the Draft Vulnerability TM and convene a video conference (Collaborative Meeting 3) with participating agencies to review and solicit input and comment.

Deliverables:

~~a.e.~~ Draft and Final Risk and Vulnerability TM. ~~memo that summarizes key risks and vulnerabilities.~~ Assumes one round of review with one set of consolidated comments from NBWRA. Memo is intended for an educated lay-person audience, i.e., memo will assume readers understand what SLR is, its causes, etc. and will focus on highlighting key risks that will be addressed by adaptation concepts identified in subsequent tasks.

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Task 5. ~~Identify and screen adaptation options to~~ Develop Adaptation Vision ~~reduce risks and vulnerabilities~~

~~g.~~ ESA will identify no more than 3 concepts to reduce the risks and vulnerabilities identified in Task 4 above. ~~Adaptation concepts will include a range of structural and nonstructural options, and at least one nature-based or multi-benefit strategy.~~

a. ESA will then use a matrix to screen/evaluate the adaptation concepts with the screening criteria established in Task 3. This screening/evaluation will consider how well each of the concepts perform compared to the criteria and whether or how they work toward the established goals.

b. ESA will prepare a draft Adaptation Vision document, formatted as an executive summary. This include vision, objectives, background, participating agencies, and will be formatted for ease of uptake and understanding.

c. ESA will present draft adaptation vision to participating agencies (Collaborative Meeting 4)

~~h.~~ ~~As appropriate, ESA will develop 1 page project summary sheets and background information to support funding applications. We anticipate a CIP list of~~

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~~projects can be developed for articulation at both an individual project and overall program. Our scope of work assume development up of up ten project descriptions.~~

Deliverables:

~~a. Internal Preliminary Draft, Draft, and Final Adaptation Vision TM memo Draft and Final Adaptation Vision Executive Summary describing the adaptation concepts and the results of the evaluation process. This assumes that the preliminary draft is reviewed by the NBWA, that the draft will be presented to stakeholders at External Stakeholder meeting #2, and that the Final draft will incorporate feedback (as appropriate) from External Stakeholder meeting #2.~~

Task 6. Advance and illustrate concepts for further consideration

~~ESA and NBWRA will come to an agreement on the two highest scoring adaptation concepts to illustrate and advance for future consideration. Illustrating the concepts will give stakeholders and Member Agencies a better vision for what future adaptation concepts could look like on the ground with context which can offer clarity, generate enthusiasm for concepts, and dispel fears about the unknowns. It is assumed that illustrations will demonstrate concepts in context, but will not be detailed enough to support feasibility or engineering analyses.~~

~~j. ESA will work with NBWRA to select 2 top concepts for advancement that consider the results of the screening evaluation and stakeholder input received from Stakeholder Meeting #2.~~

~~Create graphic renderings of the 2 selected adaptation concepts. *note, this is the more labor intensive of these two sub-tasks—anticipated that 6a can be done rather efficiently. As appropriate, ESA will develop 1 page project summary sheets and background information to support funding applications. We anticipate a CIP list of projects can be developed for articulation at both an individual project and overall program. Our scope of work assume development up of up ten project descriptions.~~

~~k.~~

Deliverables: a. Draft and final illustrations of two selected adaptation concepts.

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Task 6.7. Next Steps Strategy and Road Map Final Presentation

ESA will develop a Road Map TM memo that identifies the next steps for the NBWRA to advance shoreline adaptation. The objective of both the Adaptation Vision Executive Summary and Road Map will be to provide a unifying framework for individual agencies to proceed with project development and funding steps with a common set of objectives for SLR Adaptation. Where appropriate, the Road Map will recommend sequencing, and may include items like:

- i.a. Key studies gaps that must be filled, and why
- ii.b. Hydraulic and hydrologic modeling that may be needed to better evaluate how adaptation concepts reduce flood risks.
- iii.c. Additional studies or analysis needed to refine the adaptation concepts evaluation, i.e., economics/benefit-cost analysis, cost estimates of adaptation concepts
- iv.d. Key Projects/Project List that Can be applied for funding programs

- ~~v.e.~~ Anticipated permitting, rights of way, policy challenges that may need to be addressed, as identified through screening in task 5b.
- ~~v.f.~~ Potential land use changes or zoning updates that may be required
- ~~vii.g.~~ List of additional agencies/stakeholders likely needed to advance the effort and/or fund, permit, construct, implement
- ~~viii.h.~~ Sequencing of the steps with rough time frame
- i. ESA will convene Collaborative Meeting 5 to review the draft Road Map TM with participating agencies.
- ~~m.i.~~ Final presentation to NBWRA Board/~~Stakeholders~~
ESA will develop a final summary presentation to identify the key messages for the NBWRA Member Agencies, ~~and stakeholders~~, likely including an overview of the project process, the key findings, and next steps. The powerpoint can be formatted for strategic outreach to key stakeholders as a next step.

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Deliverables:

- a. Draft and final ~~N~~ext ~~S~~teps Strategy and Road Map~~strategy TM~~~~memo~~
- b. Final summary presentation (draft and final)

Task 7. OPTIONAL TASK: Advance and illustrate concepts for further consideration

If appropriate based on agency input, up to two adaptation concepts will be identified to illustrate and advance for future consideration. Illustrating the adaptation concepts will give stakeholders and Member Agencies a better vision for what future adaptation concepts could look like on the ground with context which can offer clarity, generate enthusiasm for concepts, and dispel fears about the unknowns. It is assumed that illustrations will demonstrate concepts in context, but will not be detailed enough to support feasibility or engineering analyses.

- a. ESA will work with participating Member Agencies to select 2 top concepts for advancement that consider the results of the screening evaluation.
- b. Create graphic renderings of the 2 selected adaptation concepts. *note, this is the more labor intensive of these two sub-tasks—anticipated that 6a can be done rather efficiently. The number of renderings will be determined based on available resources and member agency interest.
- c. As appropriate, ESA will develop 1 page project summary sheets and background information to support funding applications. The number of project sheets will be determined based on available resources and member agency interest.

Deliverables: Draft and final illustrations of two selected adaptation concepts.

Budget.

NBWRA Focused SLR
ESA Labor Detail and Expense Summary

		2021 Employee Billing Rates																				
		Employee Names																				
		Labor Category															Project Technician III	Project Technician II	Project Technician I	Subtotal	Total Hours	Labor Price
Task #	Task Name/Description	Senior Director III	Senior Director II	Senior Director I	Director III	Director II	Director I	Manager Associate III	Manager Associate II	Manager Associate I	Senior Associate III	Senior Associate II	Senior Associate I	Associate III	Associate II	Associate I						
1.0	Project Management	\$ 325	\$ 300	\$ 275	\$ 260	\$ 245	\$ 225	\$ 220	\$ 205	\$ 190	\$ 185	\$ 170	\$ 160	\$ 145	\$ 135	\$ 115						
2.0	Strategic Outreach		10										32	0			\$ 5,960				24.00	\$ 5,960
3.0	Decision Making Framework		16										32	0			\$ 10,080				56.00	\$ 10,080
4.0	Visualizations		0		32								32	0			\$ 6,520				60.00	\$ 6,520
5.0	Adaptation Strategies		0		32								60	0			\$ 24,200				128.00	\$ 24,200
6.0	Advance Concepts		16		16								40	0			\$ 6,280				80.00	\$ 6,280
7.0	Next Steps Strategy		0											0			\$ 3,560				16.00	\$ 3,560
Total Hours		-	80	-	-	80	-	-	-	-	-	-	256	56	-	-	\$ 440	-	-	-	440	
Total Labor Costs		\$ -	\$ 26,400	\$ -	\$ -	\$ 19,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 34,560	\$ 8,120	\$ -	\$ -	\$ 66,640	\$ -	\$ -	\$ -	\$ -	\$ 89,680
Percent of Effort - Labor Hours Only		0.0%	20.0%	0.0%	0.0%	62.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	45.3%	12.7%	0.0%	0.0%	69.0%	0.0%	0.0%	0.0%	100.0%	
Percent of Effort - Total Project Cost		0.0%	22.9%	0.0%	0.0%	17.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.3%	7.0%	0.0%	0.0%	69.0%	0.0%	0.0%	0.0%	76.8%	
																	ESA Labor Cost					\$ 89,680
																	Labor Cost Communication Fee				3%	\$ 2,690
																	ESA Non-Labor Expenses					
																	Reimbursable Expenses (see Attachment A for detail)					\$ 9,134
																	ESA Equipment Usage (see Attachment A for detail)					\$ -
																	Subtotal ESA Non-Labor Expenses					\$ 9,134
																	Subconsultant Costs (see Attachment B for detail)					\$ 15,000
PROJECT TOTAL																						\$ 115,474

Amended Scope of Work – Sea Level Rise Adaptation Vision

The Board Approved scope of work identifies \$125,000 for a SLR Adaptation Plan, focused on specific agencies that were interested in participating, as opposed to the entire NBWRA service area. At the time of Board Approval, agencies that agreed to participate include, LGVSD, SCWA, SVCSD and the City of Petaluma. At the time of Board Approval, Marin County was a potential participant.

Subsequent discussions held with LGVSD and Marin County (both Public Works and Parks) indicate interest in participation, but requested that the scope of work be amended for the Gallinas Watershed area to focus on establishing a collective vision for sea level rise adaptation, rather than focusing on identification of specific projects for implementation. In this way, the Adaptation Vision can provide a framework for member agencies in the area to develop and implement individual projects in the context of a common vision. To that end, we've adjusted our scope to focus on participating member agency collaboration to establish a common vision that can then be articulated to other stakeholders. As part of this scope revision process, SVCSD elected to not participate in this process, citing overlap with the recently completed Sonoma Water Resiliency Program.

The amended scope of work is slightly modified to addresses these comments, and is intended to accomplish the following:

- 1) Development of Adaptation Vision
 - a. Identify overarching objectives that can apply to participating NBWRA facilities and study areas.
 - b. Identify Specific Sub-Objectives for each facility and their associated study area (Gallinas Watershed, Petaluma River).
- 2) Review and Integrate Work to Date
 - a. Articulation of a No-Adaptation Scenario
 - b. Vulnerabilities of each Facility
 - c. Identification of Adaptation Strategies
- 3) Provide Road Map for Adaptation
 - a. Identification of adaptation strategies, potential projects, next steps

Task 1 – Project Management

The Consultant will provide monthly progress reports via email to the Project Manager summarizing project status, identifying outstanding data needs, and noting challenges or risks that may impact budget or schedule. Include summaries of meetings conducted, including meeting attendees and key decisions and outcomes. Prepare monthly invoices and track schedule and progress of project.

Task 1 Deliverables

- Monthly progress reports and invoices.

Task 1 Assumptions

- Up to 2 months of PM services and monthly progress reports.
- It is assumed that any potential meetings will be held by videoconference.

Task 2. Participating Agency Outreach and Coordination

ESA will work with participating Member Agencies to review and present existing information regarding sea level rise vulnerability, create a common understanding among agencies as to vulnerability, identify individual and collaborative objectives, and identify potential strategies available. This discussion will begin to frame available adaptation strategies that can be integrated into an Adaptation Vision.

Deliverables:

- Up to 1 video conference with each participating agency, and 1 collective video conference (**Collaborative Meeting 1**). Our scope includes facilitation, technical content development/presentation, and action items.

Task 3. Framework Development:

This task will develop the framework in which the participating member agencies will review potential shoreline adaptation strategies and develop an adaptation vision.

- Based on discussions in Task 2, and other successful SLR planning efforts, ESA will draft a risk-informed decision-support framework that includes an initial vision, goals, and objectives of adaptation planning.
- The framework will include recommended preliminary screening/and evaluation criteria that can be modified with participating agency input as appropriate. We will start with standard criteria often used in flood risk management (such as frequency of flooding, reduced damages, etc.), and we may add up to 8 participating agency identified criteria such as i) the types of permits needed, ii) potential acquisition issues for various concepts, and/or iii) those criteria developed in the Adapting to Rising Tides program, to support decision-making and better reflect unique interests and value of NBWRA participating agencies.
- ESA will facilitate a collective agency discussion (**Collaborative Meeting 2**) to discuss the framework and criteria, solicit input, and revise as necessary.

Deliverables: Draft and final Framework TM. Assumes one rounds of ESA revision and consolidated comments.

Task 4. Risk and Vulnerability TM

ESA will leverage existing information to identify key risks and vulnerabilities to facilities managed by the participating member agencies. The key risks and vulnerabilities identified in this task will directly inform the set of adaptation concepts and strategies developed in Task 5.

- a. ESA will review existing studies and synthesize the primary concerns identified therein, studies include: Marin County Hazard Management Plan, BayWave vulnerability assessment; Sonoma Water Resiliency Plan; LGVSD Vulnerability Study, Marin County Flood Control District planning efforts in the Gallinas Watershed, the latest FEMA FIRM mapping, BCDC Guidance; and other studies. *Our focus will be applying work completed to date to adaptation strategies that can inform a list of projects for funding. ESA will not generate any new analyses or data in this effort.*
- b. ESA will then identify key risks and vulnerabilities in the project area. This includes highlighting where risks may be the greatest or most urgent, and whether there any areas or risks which would be considered intolerable. They will use this information to identify key or priority areas.
- c. ESA will identify critical information gaps that will be essential to more fully understanding risks. Recommendations for filling those gaps will be provided in Task 6, Road Map and preliminary cost estimates associated with the recommendations.
- d. ESA will submit the Draft Vulnerability TM and convene a video conference (**Collaborative Meeting 3**) with participating agencies to review and solicit input and comment.

Deliverables:

- e. Draft and Final Risk and Vulnerability TM. Assumes one round of review with one set of consolidated comments from NBWRA. Memo is intended for an educated lay-person audience, i.e., memo will assume readers understand what SLR is, its causes, etc. and will focus on highlighting key risks that will be addressed by adaptation concepts identified in subsequent tasks.

Task 5. Develop Adaptation Vision

ESA will identify no more than 3 concepts to reduce the risks and vulnerabilities identified in Task 4 above. Adaptation concepts will include a range of structural and nonstructural options, and at least one nature-based or multi-benefit strategy.

- a. ESA will then use a matrix to screen/evaluate the adaptation concepts with the screening criteria established in Task 3. This screening/evaluation will consider how well each of the concepts perform compared to the criteria and whether or how they work toward the established goals.
- b. ESA will prepare a draft Adaptation Vision document, formatted as an executive summary. This include vision, objectives, background, participating agencies, and will be formatted for ease of uptake and understanding.
- c. ESA will present draft adaptation vision to participating agencies (**Collaborative Meeting 4**)

Deliverables: Draft, and Final Adaptation Vision TM. Draft and Final Adaptation Vision Executive Summary describing the adaptation concepts and the results of the evaluation process.

Task 6. Next Steps Strategy and Road Map

ESA will develop a Road Map TM that identifies the next steps for the NBWRA to advance shoreline adaptation. The objective of both the Adaptation Vision Executive Summary and Road Map will be to provide a unifying framework for individual agencies to proceed with project development and funding steps with a common set of objectives for SLR Adaptation. Where appropriate, the Road Map will recommend sequencing, and may include items like:

- a. Key studies gaps that must be filled, and why
- b. Hydraulic and hydrologic modeling that may be needed to better evaluate how adaptation concepts reduce flood risks.
- c. Additional studies or analysis needed to refine the adaptation concepts evaluation, i.e., economics/benefit-cost analysis, cost estimates of adaptation concepts
- d. Key Projects/Project List for funding programs
- e. Anticipated permitting, rights of way, policy challenges that may need to be addressed, as identified through screening in task 5b.
- f. Potential land use changes or zoning updates that may be required
- g. List of additional agencies/stakeholders likely needed to advance the effort and/or fund, permit, construct, implement
- h. Sequencing of the steps with rough time frame
- i. ESA will convene **Collaborative Meeting 5** to review the draft Road Map TM with participating agencies.
- j. Final presentation to NBWRA Board

ESA will develop a final summary presentation to identify the key messages for the NBWRA Member Agencies, likely including an overview of the project process, the key findings, and next steps. The powerpoint can be formatted for strategic outreach to key stakeholders as a next step.

Deliverables:

- a.** Draft and final Next Steps Strategy and Road Map TM
- b.** Final summary presentation (draft and final)

Task 7. OPTIONAL TASK: Advance and illustrate concepts for further consideration

If appropriate based on agency input, up to two adaptation concepts will be identified to illustrate and advance for future consideration. Illustrating the adaptation concepts will give stakeholders and Member Agencies a better vision for what future adaptation concepts could look like on the ground with context which can offer clarity, generate enthusiasm for concepts, and dispel fears about the unknowns. It is assumed that illustrations will demonstrate concepts in context, but will not be detailed enough to support feasibility or engineering analyses.

- a. ESA will work with participating Member Agencies to select 2 top concepts for advancement that consider the results of the screening evaluation.

- b. Create graphic renderings of the 2 selected adaptation concepts. *note, this is the more labor intensive of these two sub-tasks—anticipated that 6a can be done rather efficiently. The number of renderings will be determined based on available resources and member agency interest.
- c. As appropriate, ESA will develop 1 page project summary sheets and background information to support funding applications. The number of project sheets will be determined based on available resources and member agency interest.

Deliverables: Draft and final illustrations of two selected adaptation concepts.

Budget.

NBWRA Focused SLR
ESA Labor Detail and Expense Summary

		2021 Employee Billing Rates																						
Employee Names																								
Labor Category		Senior Director III	Senior Director II	Senior Director I	Director III	Director II	Director I	Managing Associate III	Managing Associate II	Managing Associate I	Senior Associate III	Senior Associate II	Senior Associate I	Associate III	Associate II	Associate I	Subtotal	Project Technician III	Project Technician II	Project Technician I	Subtotal	Total Hours	Labor Price	
		\$ 325	\$ 300	\$ 275	\$ 260	\$ 245	\$ 225	\$ 220	\$ 205	\$ 190	\$ 185	\$ 170	\$ 160	\$ 145	\$ 135	\$ 115		\$ 130	\$ 110	\$ 90				
Task #	Task Name/Description																							
1.0	Project Management		16										32	8			\$ 5,960				\$ -	24.00	\$ 5,960	
2.0	Strategic Outreach		16										32	8			\$ 11,080				\$ -	56.00	\$ 11,080	
3.0	Decision Making Framework		16										32	8			\$ 11,080				\$ -	56.00	\$ 11,080	
4.0	Vulnerabilities		8			32							32	8			\$ 16,520				\$ -	80.00	\$ 16,520	
5.0	Adaptation Strategies		8			32							80	8			\$ 24,200				\$ -	128.00	\$ 24,200	
6.0	Advance Concepts		16			16							40	8			\$ 16,280				\$ -	80.00	\$ 16,280	
7.0	Next Steps Strategy		8										8				\$ 3,560				\$ -	16.00	\$ 3,560	
																	\$ -				\$ -	-	\$ -	
Total Hours		-	88	-	-	80	-	-	-	-	-	-	216	56	-	-	440	-	-	-	-	440		
Total Labor Costs		\$ -	\$ 26,400	\$ -	\$ -	\$ 19,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 34,560	\$ 8,120	\$ -	\$ -	\$ 88,680	\$ -	\$ -	\$ -	\$ -		\$ 88,680	
Percent of Effort - Labor Hours Only		0.0%	20.0%	0.0%	0.0%	18.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.1%	12.7%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%			
Percent of Effort - Total Project Cost		0.0%	22.9%	0.0%	0.0%	17.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.9%	7.0%	0.0%	0.0%		0.0%	0.0%	0.0%			76.8%	
																						ESA Labor Cost		\$ 88,680
																						Labor Cost Communication Fee		\$ 2,660
																						ESA Non-Labor Expenses		
																						Reimbursable Expenses (see Attachment A for detail)		\$ 9,134
																						ESA Equipment Usage (see Attachment A for detail)		\$ -
																						Subtotal ESA Non-Labor Expenses		\$ 9,134
																						Subconsultant Costs (see Attachment B for detail)		\$ 15,000
PROJECT TOTAL																								\$ 115,474

2022/23 Proposed Budget Allocations
February 1, 2023

Resilience Arena for Continued Recycled Water Support		Amount											
		LGVS	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County	
Prorated Percent from Feasibility Study after removing associate members		0.000%	11.925%	0.000%	10.832%	13.705%	0.000%	0.000%	32.596%	13.923%	17.020%	0.000%	
Brown & Caldwell	\$ 205,000	\$ -	\$ 24,446	\$ -	\$ 22,205	\$ 28,095	\$ -	\$ -	\$ 66,822	\$ 28,541	\$ 34,891	\$ -	
Sonoma Water	\$ 4,000	\$ -	\$ 477	\$ -	\$ 433	\$ 548	\$ -	\$ -	\$ 1,304	\$ 557	\$ 681	\$ -	
Total	\$ 209,000	\$ -	\$ 24,923	\$ -	\$ 22,638	\$ 28,643	\$ -	\$ -	\$ 68,126	\$ 29,098	\$ 35,572	\$ -	

Resilience Arena for Drought Contingency Plan													
		LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County	
Shared equally by participating agencies		16.667%	0.000%	0.000%	16.667%	16.667%	16.667%	0.000%	16.667%	0.000%	0.000%	16.667%	
Brown & Caldwell	\$ 52,000	\$ 8,667	\$ -	\$ -	\$ 8,667	\$ 8,667	\$ 8,667	\$ -	\$ 8,667	\$ -	\$ -	\$ 8,667	
Sonoma Water	\$ 4,000	\$ 667	\$ -	\$ -	\$ 667	\$ 667	\$ 667	\$ -	\$ 667	\$ -	\$ -	\$ 667	
Total	\$ 56,000	\$ 9,333	\$ -	\$ -	\$ 9,333	\$ 9,333	\$ 9,333	\$ -	\$ 9,333	\$ -	\$ -	\$ 9,333	

Resilience Arena for Sea Level Rise Adaptation												
		LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
Shared equally by participating agencies Marin County unknown at this time		25.000%				25.000%			25.000%			25.000%
Brown & Caldwell	\$ 121,000	\$ 30,250	\$ -	\$ -	\$ -	\$ 30,250	\$ -	\$ -	\$ 30,250	\$ -	\$ -	\$ 30,250
Sonoma Water	\$ 4,000	\$ 1,000	\$ -	\$ -	\$ -	\$ 1,000	\$ -	\$ -	\$ 1,000	\$ -	\$ -	\$ 1,000
Total	\$ 125,000	\$ 31,250	\$ -	\$ -	\$ -	\$ 31,250	\$ -	\$ -	\$ 31,250	\$ -	\$ -	\$ 31,250

Joint Use												
		LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
Shared equally by Phase 2 agencies with \$7,500 contribution from LGVSD, NMWD, and Marin		7.109%	13.112%		13.112%	13.112%	7.109%		13.112%	13.112%	13.112%	7.109%
Program Management - Weir (two year agreement)	\$ 40,000	\$ 2,844	\$ 5,245	\$ -	\$ 5,245	\$ 5,245	\$ 2,844	\$ -	\$ 5,245	\$ 5,245	\$ 5,245	\$ 2,844
SCWA Administration (likely over two fiscal years)	\$ 65,500	\$ 4,656	\$ 8,588	\$ -	\$ 8,588	\$ 8,588	\$ 4,656	\$ -	\$ 8,588	\$ 8,588	\$ 8,588	\$ 4,656
Total	\$ 105,500	\$ 7,500	\$ 13,833	\$ -	\$ 13,833	\$ 13,833	\$ 7,500	\$ -	\$ 13,833	\$ 13,833	\$ 13,833	\$ 7,500

Summary per Agency												
Agency		LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
Total	\$ 495,500	\$ 48,083	\$ 38,757	\$ -	\$ 45,805	\$ 83,060	\$ 16,833	\$ -	\$ 122,542	\$ 42,932	\$ 49,405	\$ 48,083
Percent of Total Projects		9.70%	7.82%	0.00%	9.24%	16.76%	3.40%	0.00%	24.73%	8.66%	9.97%	9.70%

Associate Members

Marin County. LGVS, Novato San, NMWD, Napa County @ \$5,000 each

\$25,000

Total Billable \$ 520,500

**North Bay Water Reuse Authority
Technical Advisory Committee
Zoom Meeting Minutes
February 2, 2023**

Draft

Approved _____

1. Call to Order and Self Introductions

Chair Healy called the Technical Advisory Committee (TAC) meeting to order at 2:04 p.m. on Thursday, February 2, 2023. The meeting was a Zoom meeting only and attendees participated via the following link: <https://us02web.zoom.us/j/81859156246>.

Committee Members Present

Tim Healy, Chair	Napa Sanitation District
Pam Jeane, Vice Chair	Sonoma Valley County Sanitation District
Kevin Booker	Sonoma Water
Erik Brown	Novato Sanitary District
Grant Davis	Sonoma Water
Jasmine Diaz	City of Petaluma
Brad Elliott	Sonoma Water
Curtis Paxton	Las Gallinas Valley Sanitary District
Paul Sellier	Marin Municipal Water District
Jake Spaulding	Sonoma Water
Chelsea Thompson	City of Petaluma
Tony Williams	North Marin Water District

Others Present

Member Agencies
None

Consultant Team

Chuck Weir, Program Manager	Weir Technical Services
Rene Guillen	Brown & Caldwell
Jim O'Toole	ESA

2. Approval of the Agenda

The Agenda was approved with no changes. For the benefit on new members, introductions were made.

3. Public Comments

There were no public comments.

4. TAC Meeting Minutes of November 3, 2022

The TAC Meeting Minutes of November 3, 2022 were unanimously approved.

5. Amended Scope of Work and Cost Sharing for Sea Level Rise Adaptation Vision

Jim O'Toole summarized the changes that have been made in the scope of work for the Sea Level Rise Adaptation project. It is now being described as a Vision rather than a Plan. Meetings were held with Marin County and City of Petaluma, who are both now on board with the revised scope. Sonoma Valley County Sanitation District has opted out of the study. That means that one agency dropped out and one agency was added resulting in no change in the cost sharing that was approved by the Board back in June 2022. The total cost remains at \$125,000.

A redline version of the revised scope as compared to the originally approved scope was reviewed by the TAC, along with a clean version. The changes will need to be approved by the NBWRA Board as well as the Sonoma Water Board. The NBWRA Board is scheduled to review on March 27, 2023.

A motion by Pam Jeane, seconded by Curtis Paxton to approve the Amended Scope of Work for the Sea Level Rise Adaptation Vision and that it be recommended to the NBWRA Board for approval was unanimously approved.

7. Next Meeting

The next meeting is scheduled for March 3, 2023.

The TAC discussed the possibility of storm water capture as a future NBWRA project. There has been significant rainfall over the last two months and much of it just flows out to sea. Capturing some of the flow for groundwater recharge or storage in reservoirs could be a viable study for NBWRA. TAC members described the efforts of their agencies in this area. Rene Guillen stated that this will be a component of the drought contingency study.

Kevin Booker discussed the process for approval by the Sonoma Water Board. He requested the final scopes and budget from the Program Manager.

8. Adjournment

There being no further business Chair Healy adjourned the meeting at 2:34 p.m.

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Agenda Explanation
North Bay Water Reuse Authority
Board of Directors
March 27, 2023

ITEM NO. 7.b CONSULTANT PROGRESS REPORTS

Action Requested

None at this time.

Summary

The consultant progress reports for Brown & Caldwell and Weir Technical Services have been infrequent since the last Board meeting in June 2022. Once the full scopes of work and budget for FY2022/23 have been approved progress reports will be prepared on a more normal schedule. Attached are progress reports that are available since May 2022.

Recommendation

None at this time. This is an information item only.

Attachments

Consultant Progress Reports.



AGREEMENT FOR ENGINEERING, ENVIRONMENTAL, AND PUBLIC OUTREACH SERVICES FOR NORTH BAY WATER REUSE AUTHORITY

ACTIVITIES APRIL 29, 2022 THROUGH MAY 26, 2022

TASK 1 WORKSHOPS/PUBLIC OUTREACH/MGT

1.1 Workshops

- No Activity.

1.3 Public Involvement

- No Activity.

1.4 Administration

- No Activity.

TASK 2 TITLE XVI FEASIBILITY STUDY/REPORT

- No Activity.

TASK 3 ENVIRONMENTAL EVALUATION

- Review of projects for inclusion into updated environmental documents.
- Review of environmental documents for scope and budget development of fiscal year 2023.
- Project team discussions.

TASK 4 FINANCIAL CAPABILITIES DETERMINATION

- Reviewing status of Financial Capabilities Determination report for Fiscal Year 22/23 scope and budget development.

TASK 5 PHASE 2 GRANT APPLICATION AND MANAGEMENT

- No Activity.

TASK 6 PHASE 1 SERVICES

- No Activity.

TASK 7 ADDITIONAL SERVICES

- Meetings with the Project team and TAC.
- Participated in Board Meetings.
- Keep information current on project website.
- Prepared materials and presentation to be used at meetings with technical team.
- Project maintenance activities, including project invoicing and development of activities report.



AGREEMENT FOR ENGINEERING, ENVIRONMENTAL, AND PUBLIC OUTREACH SERVICES FOR NORTH BAY WATER REUSE AUTHORITY

ACTIVITIES MAY 27, 2022 THROUGH JUNE 30, 2022

TASK 1 WORKSHOPS/PUBLIC OUTREACH/MGT

1.1 Workshops

- No Activity.

1.3 Public Involvement

- No Activity.

1.4 Administration

- No Activity.

TASK 2 TITLE XVI FEASIBILITY STUDY/REPORT

- No Activity.

TASK 3 ENVIRONMENTAL EVALUATION

- Review of projects for inclusion into updated environmental documents.
- Review of environmental documents for scope and budget development of fiscal year 2023.
- Project team discussions.
- Participated in Board Meetings.
- Keep information current on project website.
- Process inquiries and requests for recycled water.

TASK 4 FINANCIAL CAPABILITIES DETERMINATION

- Reviewing status of Financial Capabilities Determination report to assess update needs.

TASK 5 PHASE 2 GRANT APPLICATION AND MANAGEMENT

- No Activity.

TASK 6 PHASE 1 SERVICES

- No Activity.

TASK 7 ADDITIONAL SERVICES

- Meetings with the Project team and TAC.
- Participated in Board Meetings.
- Prepared materials and presentation to be used at meetings with technical team.
- Project maintenance activities, including project invoicing and development of activities report.



AGREEMENT FOR ENGINEERING SUPPORT SERVICES FOR NORTH BAY WATER REUSE AUTHORITY

ACTIVITIES PROJECT INCEPTION THROUGH NOVEMBER 24, 2022

TASK 1 PROJECT SUPPORT

- Check in with Project team to assess needs and status of fiscal year 23 project scopes.
- Two (2) Web meetings between NBWA and NBWRA to find areas of common interest.
- Update information on project website.
- Process inquiries and requests for recycled water.
- Assisted Marin County in preparing a scope of service for projects addressing sea level rise (SLR).
- Meeting participation with Marin County and Las Gallinas Valley Sanitary District regarding potential projects addressing SLR.
- Develop comment response strategies.
- Reviewing project financials.

TASK 2 OPTIONAL: ADDITIONAL SERVICES

- TAC meeting materials review.
- Team coordination on status of Phase 2 action items including NEPA and the Financial Capability Determination.
- Reviewing project financials/



AGREEMENT FOR ENGINEERING SUPPORT SERVICES FOR NORTH BAY WATER REUSE AUTHORITY

ACTIVITIES PROJECT NOVEMBER 25, 2022 THROUGH DECEMBER 29, 2022

TASK 1 PROJECT SUPPORT

- Check in with Project team to assess needs and status of fiscal year 23 project scopes.
- Reviewing project financials.

TASK 2 OPTIONAL: ADDITIONAL SERVICES

- Team coordination on status of Phase 2 action items including National Environmental Policy Act (NEPA) and the Financial Capability Determination.
- Meeting with Reclamation to discuss next steps for NEPA and the Financial Capability Determination.
- Participated in a Technical Advisory Committee meeting regarding the Sea Level Rise Arena scope for Fiscal Year 23.
- Project maintenance activities.



AGREEMENT FOR ENGINEERING SUPPORT SERVICES FOR NORTH BAY WATER REUSE AUTHORITY

ACTIVITIES PROJECT DECEMBER 30, 2022 THROUGH JANUARY 26, 2023

TASK 1 PROJECT SUPPORT

- Connected with team on status of Sea Level Rise Arena scope for Fiscal Year 23.
- Coordinated with team on environmental questions to continue work on National Environmental Policy Act (NEPA) with Reclamation.
- Planning next NBWRA Board Meeting.
- Updated information on project website including: new dates, agendas and meeting minutes, and new Directors.
- Process inquiries and requests for recycled water.
- Reviewing project financials.

TASK 2 OPTIONAL: ADDITIONAL SERVICES

- No Activity.

Weir Technical Services
Program Management Services for North Bay Water Reuse Authority (FY21/22)
Sonoma County Water Agency Project-Activity Code N0001D034

June 2022
Progress Report

2.1 Task 1: Authority Board of Directors (Board) and Technical Advisory Committee (TAC) Meeting Management

- Email communication with member agencies, consultants, and Agency regarding status of budget questionnaire submittal and plans for June 2, 2022 TAC meeting.
- Summarized survey results, drew conclusions and recommendations, prepared and distributed June 2, 2022 TAC meeting agenda. Revised based on additional survey response. Hosted TAC meeting. Revised conclusions and recommendations based on TAC meeting. Forwarded same to consultants for review. Participated in Zoom meeting with consultants to provide input for revising scopes and costs for Board packet.
- Drafted April 14 and June 2, 2022 TAC meeting minutes and sent to TAC for review. Revised based on comments received.
- Scheduled Zoom Board meeting for June 27, 2022 and monitored Outlook responses.
- Email communication with Agency staff and member agencies regarding plans for Board meeting and resilience arena projects.
- Drafted June 27, 2022 Board agenda and sent to Chair for review. Drafted staff reports for Board meeting and sent to consultants and Agency staff for review. Revised based on comments received. Prepared and distributed packet for June 27, 2022 Board meeting. Email communication with Agency regarding attorney opinion on remote meetings. Hosted Zoom Board meeting. Drafted June 27, 2022 Board minutes and sent to consultants and Agency for review. Revised based on comments received.
- Made March 28 and June 27, 2022 Board packet ADA compliant and sent for website posting.
- Set up Zoom meetings and Outlook appointments for FY2022/23 Board meetings and monitored responses.
- Email communication with Agency and consultants regarding Marin county participation.
- Email communication with TAC Chair and Vice Chair regarding cancelling July meeting; sent cancellation for same.
- Reviewed news articles sent by outreach consultant.
- Updated distribution lists.

2.2 Task 2: Financial Management

- Updated consultant cost summary and reconciled with trust worksheet.

2.3 Task 3: Project Support and Review

- There was no activity for this task during the reporting period.

2.4 Task 4: Program Planning

- Prepared and submitted April and May 2022 invoices for program management services.
- Reviewed and commented on draft agreement for \$10,000. Email communication and telecon with Agency staff to clarify intent of agreement to be initial \$10,000 through June 30, 2022 and an amendment for an additional \$40,000 through June 30, 2040.

2.5 Task 5: Governance Issues

- There was no activity for this task during the reporting period.

Weir Technical Services
Program Management Services for North Bay Water Reuse Authority (FY21/22)
Sonoma County Water Agency Project-Activity Code N0001D034

July 2022
Progress Report

2.1 Task 1: Authority Board of Directors (Board) and Technical Advisory Committee (TAC) Meeting Management

- Sent draft minutes from June 26, 2022 meeting to Board for review.
- Reviewed Jacobs options summary to MMWD water supply.
- Reviewed and commented on PowerPoint presentation for BACWA Recycled Water Committee. Prepped for and participated in presentation to BACWA. Follow up telecon with SASM regarding their participation in Phase 2. Email communication with consulting team regarding same.
- Email review and response regarding cost allocations for FYE23.
- Email communication with consultant team regarding meeting with Marin County for Sea Level Rise project participation. Reviewed and commented on PowerPoint presentation for Marin County.
- Updated distribution lists.

2.2 Task 2: Financial Management

- There was no activity for this task during the reporting period.

2.3 Task 3: Project Support and Review

- There was no activity for this task during the reporting period.

2.4 Task 4: Program Planning

- Prepared and submitted June 2022 invoices for program management services. Provided comments on new agreement based on telecon with Agency.

2.5 Task 5: Governance Issues

- There was no activity for this task during the reporting period.

Weir Technical Services
Program Management Services for North Bay Water Reuse Authority (FY21/22)
Sonoma County Water Agency Project-Activity Code N0001D034

August 2022
Progress Report

2.1 Task 1: Authority Board of Directors (Board) and Technical Advisory Committee (TAC) Meeting Management

- Participated in Zoom meeting with member agency to discuss participation in sea level rise study. Participated in second meeting to discuss sea level rise project. Email communication at various times regarding same.
- Updated TAC Chair and Vice Chair on various issues. Cancelled August 4, 2022 TAC meeting. Sent email to TAC summarizing status of various issues.
- Updated TAC Chair and Vice Chair on various issues. Cancelled September 1, 2022 TAC meeting. Sent email to TAC summarizing status of various issues.
- Worked with member agency and Agency to provide Phase 1 true up status.
- Worked with consultant team and Agency to assist in consultant agreement preparation.
- Participated in meeting with consultant and NBWA to discuss joint efforts and to set up meeting with the Chairs of each group. Email communication with Chair regarding same.
- Updated distribution lists.

2.2 Task 2: Financial Management

- Teams meeting with Agency to discuss cost allocations for FYE23. Updated FYE22 Budget and sent to Agency for use in finalizing consultant agreements.

2.3 Task 3: Project Support and Review

- There was no activity for this task during the reporting period.

2.4 Task 4: Program Planning

- Prepared and submitted July 2022 invoices for program management services. Provided comments on new agreement based on telecon with Agency.

2.5 Task 5: Governance Issues

- There was no activity for this task during the reporting period.

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Agenda Explanation
North Bay Water Reuse Authority
Board of Directors
March 27, 2023

ITEM NO. 8 HISTORY OF NBWRA

Action Requested

None at this time.

Summary

The North Bay Water Reuse Program managed by NBWRA and its member agencies has been in operation since 2002. The attached presentation has been prepared to provide historical background for the new Board members and staff from NBWRA's member agencies.

Recommendation

None at this time.

Attachments

North Bay Water Reuse Program History for New NBWRA Board Members and Staff.

North Bay Water Reuse Program

History for new NBWRA Board Members and Staff
March 27, 2023



1



NORTH BAY WATER REUSE PROGRAM
Expanding Water Supplies with Regional Reuse

Topics for Review

- 💧 Part 1: Overview of North Bay Water Reuse Authority (NBWRA)
 - What is the NBWRA?
 - Overview and status of the North Bay Water Reuse Program (NBWRP)
 - Benefits of NBWRA
- 💧 Part 2: Future of NBWRA
 - Resiliency Arenas
 - Near term Focus
- 💧 Questions



Part 1: Overview of the North Bay Water Reuse Authority



NORTH BAY WATER REUSE PROGRAM
Water Supply Reliability through Regional Reuse

NBWRA - Working Together to Meet Common Goals

- 💧 North Bay Water Reuse Authority (NBWRA) is a “virtual” Authority - organized under a Memorandum of Understanding (MOU)
- 💧 In 2002, NBWRA agencies undertook the cooperative, watershed-based, regional planning effort that initiated the North Bay Water Reuse Program (NBWRP).
- 💧 **Purpose was to develop and distribute recycled water for urban, agricultural, and environmental uses**
- 💧 US Bureau of Reclamation has been a key partner to the success of the program



NBWRA Agencies, Leadership, and Support Team

Member Agencies

- 💧 **Wastewater Agencies**
 - Las Gallinas Valley Sanitary District
 - Novato Sanitary District
 - Napa Sanitation District
 - Sonoma Valley County Sanitation District
- 💧 **Water Agencies**
 - North Marin Water District
 - Marin Municipal Water District
 - Sonoma Water
- 💧 **Counties**
 - County of Marin
 - Napa County
- 💧 **Cities**
 - City of Petaluma
 - City of American Canyon

NBWRA Board Leadership

- 💧 David Rabbit, Chair
- 💧 Vice Chair - Open

Program Management

- 💧 Weir Technical Services

Consultant Team

- 💧 Brown and Caldwell (Prime)
- 💧 Kennedy Jenks
- 💧 Environmental Science Associates (ESA)
- 💧 Data Instincts



NBWRA Governance

- 💧 NBWRA operates under an MOU
 - First approved in 2005
 - Amended in 2008, 2010, 2013, and 2017
- 💧 Members and Associate Members (i.e., no projects)
- 💧 Budget and Cost Sharing takes two forms:
 - Feasibility Studies, EIR/EIS, other studies – shared on the basis of benefit (value of Phase 1 or Phase 2 projects)
 - Joint Use Costs for administration and program management (shared equally by all agencies with projects)



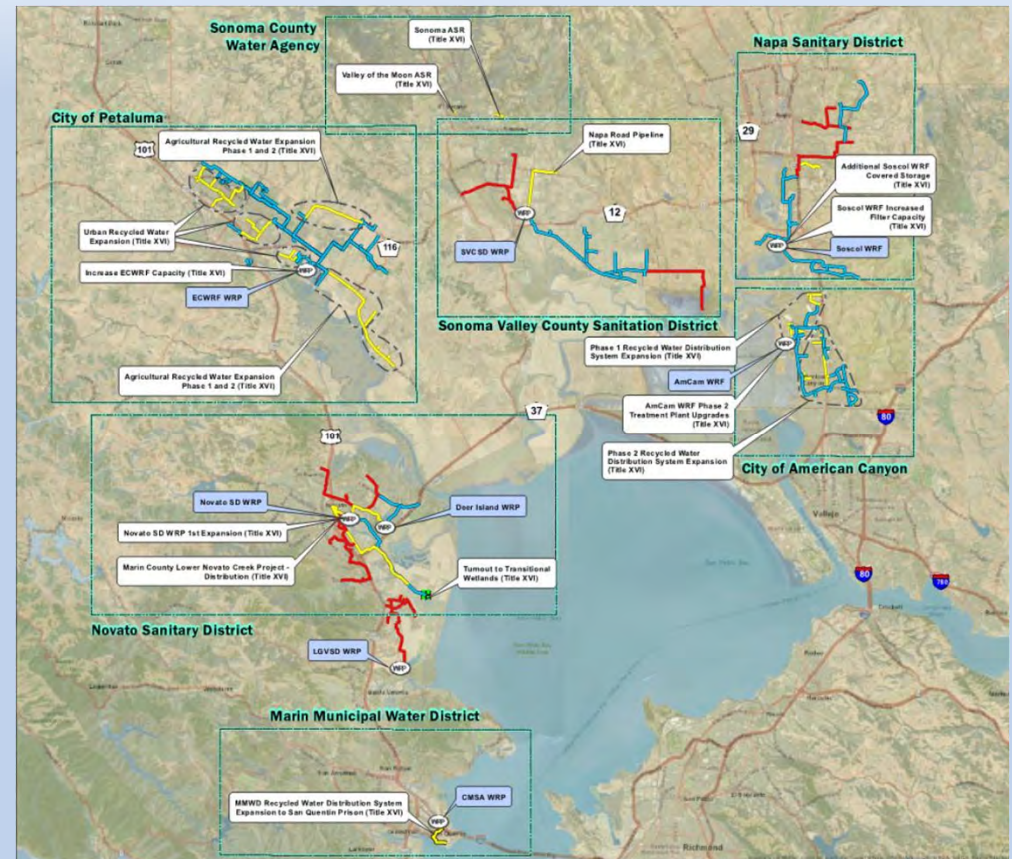
NBWRP – Summary of Phase 1

- 💧 The NBWRP was designed to be implemented in two phases
- 💧 Phase 1 primarily focused on the planning, design and construction of treatment and conveyance systems
- 💧 **Construction of the \$104 million program began back in 2009 and was just completed this year**
- 💧 The Phase 1 Program is providing more than 3,700 acre-feet per year (AFY) of water for urban and agricultural irrigation and approximately 1,700 AFY for environmental enhancement



NBWRP Phase 2 – Increasing Yield and Maximizing Infrastructure Investments

- Phase 2 builds upon Phase 1 investments to further develop recycled water
- Phase 2 Program's projects increase the ability to treat, store, and distribute recycled water**
 - o Treatment plant upgrades
 - o Distribution system expansions
 - o Seasonal recycled water storage
- Total Phase 2 Program cost is \$83 million and is projected to yield an additional 5,364 AFY of recycled water



NBWRP – Status of Phase 2 Program



- 💧 **Planning, engineering, and environmental analysis for Phase 2 has been completed**
 - Title XVI FS has been completed
 - CEQA has been completed
 - Need to work with Reclamation to complete NEPA
- 💧 **City of Petaluma and City of American Canyon have started implementing some of the distribution system expansion projects included as part of Phase 2 Program**
- 💧 **State funding for these projects has been procured**



Economic Benefits of NBWRA



- Provides 'economies of scale' where all agencies – regardless of size – have access to resources that support project implementation
- NBWRA has effectively secured substantial funding assistance for studies and implementation of regional projects**
- Funding Summary
 - From 2002-2022 member agencies have invested \$12.86M in supporting the NBWRP and studies
 - From 2002-2022 member agencies have received \$38.81M in State and Federal grant assistance



NBWRA – Benefits beyond Dollars

- Benefits to the region go beyond the dollar value of projects:
 - Regional identity
 - Forum to work together to address water supply issues
 - Contributions toward a stable water supply = strong economy, vibrant communities
 - Urban potable offsets
 - Irrigation supplies for agriculture
 - Relief from surface diversions, pumping groundwater and associated saltwater intrusion
 - Slew of environmental benefits



Part 2: Future of the North Bay Water Reuse Authority



NORTH BAY WATER REUSE PROGRAM
Water Supply Reliability through Regional Reuse

Exploring new opportunities for NBWRA

- ◆ **NBWRA agencies expressed interest in expanding the focus of this Authority to provide value to the North Bay beyond recycled water**
- ◆ North Bay agencies all face common resiliency threats
 - Water supply/ drought, saline intrusion, sea level rise, changing regulations
- ◆ Through recycled water, NBWRA has successfully implemented a program for a more resilient local water supply
- ◆ Beyond recycled water, there is no framework for sub-regional resilience planning and implementation in the North Bay
- ◆ **Expanding the focus of NBWRA to a broader resilience planning approach increases funding source opportunities for the identified areas of interest**



Resilience Planning Approach – Identified Resilience Arenas



- 💧 **Resilience can be an organizing principle across all these areas of interest**
- 💧 Based on feedback, the following **Resilience Arenas** were identified:
 - **Recycled Water** – continue to support ongoing efforts to implement recycled water projects in the region
 - **Potable Reuse** – explore conjunctive use opportunities through the implementation of indirect and direct potable reuse
 - **Coordinated Drought Response Planning** – consider development of regional based drought response
 - **Sea Level Rise Adaptation** – identify strategies to mitigate the adverse effects of sea level rise to critical infrastructure in the region



Near Term Focus

- NBWRA will continue to investigate options that add both resilience and reliability to the North Bay's water supply portfolio
- **Recycled Water** – Continue to support implementation of Phase 2 Program
- **Drought Contingency Planning** – Work with the NBWRA agencies to develop a Sonoma/Marin based DCP like the study developed for the Napa Valley; include stormwater capture
- **Sea Level Rise Adaptation** – Develop a Marin County based sea level rise adaptation plan





Questions?

Project Information:
Website: nbwra.org
Email: info@nbwra.org



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Agenda Explanation
North Bay Water Reuse Authority
Board of Directors
March 27, 2023

**ITEM NO. 9 FINANCIAL REPORTS FOR FISCAL YEARS ENDING JUNE 30, 2022
AND JUNE 30, 2023**

Action Requested

None at this time.

Summary

The following items are attached for the Board's information for Fiscal Year ending June 30, 2022:

- a. NBWRA Trust Worksheet through June 30, 2022
- b. Consultant Cost Tracking for FY21/22 through June 30, 2022
- c. NBWRA Trust Worksheet through February 28, 2023
- d. Consultant Cost Tracking for FY22/23

In the Consultant Cost Tracking spreadsheet costs by month are shown by column across the top. The data for FY22/23 is based on the approved costs for the resilience arenas. Note that not all the consultant cost data is available at this time.

Recommendation

None at this time.

Attachments

Item Nos. 9a – b as described above.

**North Bay Water Reuse Authority
Project Cost Summary
as of June 30, 2022**

TOTAL FY 21/22 PROJECT COSTS											
Project	Consultant	Carryover Budget	2021/22 Additional Budget	Total Budget	Original Contract	Amend	Total Contract	Uncommitted	Total Expenses in FY 21/22	Remaining	% Avail.
Planning, Engineering and Funding Management	Brown & Caldwell	82,761.47	99,000.00	181,761.47					113,544.25	68,217.22	37.53%
Program Development and Federal/State Advocacy	TBD	54,238.10	-	54,238.10					-	54,238.10	100.00%
Program Management	Weir Technical Services	8,722.45	20,000.00	28,722.45					27,040.00	1,682.45	5.86%
SCWA Administration	SCWA	(8,704.77)	75,000.00	66,295.23					62,097.01	4,198.22	6.33%
TOTAL BUDGET		\$ 137,017.25	\$ 194,000.00	\$ 331,017.25	\$ -	\$ -	\$ -	\$ -	202,681.26	\$ 128,335.99	38.77%
Phase 1											
Project	Consultant	Carryover Budget	2021/22 Additional Budget	Total Budget	Original Contract	Amend	Total Contract	Uncommitted	Total Expenses in FY 21/22	Remaining	% Avail.
Prior Phase 1 Carryover		108,604.21		108,604.21					-	108,604.21	100.00%
Grant Applications and Management	Brown & Caldwell	26,908.26	-	26,908.26					5,387.26	21,521.00	79.98%
TOTAL BUDGET		\$ 135,512.47	\$ -	\$ 135,512.47	\$ -	\$ -	\$ -	\$ -	\$ 5,387.26	\$ 130,125.21	96.02%
Phase 2 - Support											
Project	Consultant	Carryover Budget	2021/22 Additional Budget	Total Budget	Original Contract	Amend	Total Contract	Uncommitted	Total Expenses in FY 21/22	Remaining	% Avail.
Prior Phase 2 Carryover		7,987.11		7,987.11					-	7,987.11	100.00%
Program Development	TBD	18,920.55	-	18,920.55					-	18,920.55	100.00%
Federal Advocacy	TBD	17,817.55	-	17,817.55					-	17,817.55	100.00%
State Advocacy	TBD	17,500.00	-	17,500.00					-	17,500.00	100.00%
TOTAL BUDGET		\$ 62,225.21	\$ -	\$ 62,225.21	\$ -	\$ -	\$ -	\$ -	-	\$ 62,225.21	100.00%
*Contract amendment for extension through end of FY 18/19											
Phase 2 - Feasibility Study											
Project	Consultant	Carryover Budget	2021/22 Additional Budget	Total Budget	Original Contract	Amend	Total Contract	Uncommitted	Total Expenses in FY 21/22	Remaining	% Avail.
Engineering Tasks 1 & 5: Mtgs, Admin, Grant Admin and Outreach	Brown & Caldwell	31,313.80	-	31,313.80					30,372.45	941.35	3.01%
Engineering: Task 2 Feasibility Study	Brown & Caldwell	2,659.96	-	2,659.96					2,519.47	140.49	5.28%
Engineering Tasks 3 & 4 : Environmental and Financial Capability	Brown & Caldwell	21,879.45	-	21,879.45					15,344.68	6,534.77	29.87%
Administration - Grants and EIR/EIS	SCWA	19,183.76	-	19,183.76					14,877.25	4,306.51	22.45%
TOTAL BUDGET		\$ 75,036.97	\$ -	\$ 75,036.97	\$ -	\$ -	\$ -	\$ -	\$ 63,113.85	\$ 11,923.12	15.89%
Joint Use											
Project	Consultant	Carryover Budget	2021/22 Additional Budget	Total Budget	Original Contract	Amend	Total Contract	Uncommitted	Total Expenses in FY 21/22	Remaining	% Avail.
Program Management	Weir Technical Services	8,722.45	20,000.00	28,722.45					27,040.00	1,682.45	5.86%
Engineering Task 7: Additional Services	Brown & Caldwell	-	99,000.00	99,000.00					59,920.39	39,079.61	39.47%
Administration	SCWA	(27,888.53)	75,000.00	47,111.47					47,219.76	(108.29)	-0.23%
TOTAL BUDGET		\$ (19,166.08)	\$ 194,000.00	\$ 174,833.92	\$ -	\$ -	\$ -	\$ -	134,180.15	\$ 40,653.77	23.25%

North Bay Water Reuse Authority
July 1, 2021 to Date Transaction Summary
as of June 30, 2022
PHASE 1

Item No. 9.a

<u>Date</u>	<u>Description</u>	<u>Amount</u>				<u>Las Gallinas</u>	<u>Napa</u>	<u>Novato</u>	<u>SVCSD</u>	<u>SCWA</u>	<u>North Marin Water Dist.</u>	<u>Napa County</u>
7/1/2021	Beginning Balance	135,512.47	b			14,559.24	47,567.60	12,708.46	21,214.19	4,837.38	29,788.03	4,837.57
12/3/2021	Brown & Caldwell - 11419797	(2,008.13)	p	bc3		(145.37)	(640.47)	(172.92)	(551.69)	(71.74)	(354.23)	(71.71)
12/3/2021	Brown & Caldwell - 11422754	(3,379.13)	p	bc3		(244.62)	(1,077.74)	(290.98)	(928.35)	(120.69)	(596.08)	(120.67)
						-	-	-	-	-	-	-
						-	-	-	-	-	-	-
Current NBWRA Balance \$						14,169.25	45,849.39	12,244.56	19,734.15	4,644.95	28,837.72	4,645.19
PENDING												
Projected Balance \$						14,169.25	45,849.39	12,244.56	19,734.15	4,644.95	28,837.72	4,645.19
						10.89%	35.23%	9.41%	15.17%	3.57%	22.16%	3.57%

Current NBWRA Reconciliation					Current NBWRA Phase 1 Support Reconciliation by Entity						
Beginning Balance	135,512.47	b			14,559.24	47,567.60	12,708.46	21,214.19	4,837.38	29,788.03	4,837.57
Deposits	-	d			-	-	-	-	-	-	-
Interest Earnings	-	i			-	-	-	-	-	-	-
Payments	(5,387.26)	p			(389.99)	(1,718.21)	(463.90)	(1,480.04)	(192.43)	(950.31)	(192.38)
Total:	130,125.21				14,169.25	45,849.39	12,244.56	19,734.15	4,644.95	28,837.72	4,645.19

Current NBWRA Obligations							
<u>Vendor</u>	<u>Encumbrances</u>		<u>Paid to date</u>	<u>Adjustments</u>	<u>Balance</u>	<u>Expires</u>	<u>% Spent</u>
Grant Applications and Management - (B&C: FY 17/18 - 21/22)	26,908.26	bc3	5,387.26		21,521.00		20.02%
Total	26,908.26		10,774.52	-	43,042.00		40.04%

Carryover from Last FY

North Bay Water Reuse Authority
July 1, 2021 to Date Transaction Summary
as of June 30, 2022
PHASE 1

Item No. 9.a

Date	Description	Amount	Las Galinas	Napa	Novato	SVCS	SCWA	City of Petaluma	Marin Muni Water Dist.	American Canyon
Phase 2 - Support										
7/1/2021	Beginning Balance	62,225.21 b	647.63	8,835.96	8,834.96	8,835.96	8,839.85	8,835.96	9,021.26	8,373.63
Current NBWRA Phase 2 - Support Balance \$ 62,225.21			\$ 647.63	\$ 8,835.96	\$ 8,834.96	\$ 8,835.96	\$ 8,839.85	\$ 8,835.96	\$ 9,021.26	\$ 8,373.63
PENDING										
Projected NBWRA Phase 2 - Support Balance \$ 62,225.21			\$ 647.63	\$ 8,835.96	\$ 8,834.96	\$ 8,835.96	\$ 8,839.85	\$ 8,835.96	\$ 9,021.26	\$ 8,373.63
			1.04%	14.20%	14.20%	14.20%	14.21%	14.20%	14.50%	13.46%
Current NBWRA Phase 2 - Support Reconciliation Totals			Current NBWRA Phase 2 - Support Reconciliation by Entity							
Beginning Balance	62,225.21	b	647.63	8,835.96	8,834.96	8,835.96	8,839.85	8,835.96	9,021.26	8,373.63
Deposits	-	d	-	-	-	-	-	-	-	-
Interest Earnings	-	i	-	-	-	-	-	-	-	-
Payments	-	p	-	-	-	-	-	-	-	-
Total	\$ 62,225.21		\$ 647.63	\$ 8,835.96	\$ 8,834.96	\$ 8,835.96	\$ 8,839.85	\$ 8,835.96	\$ 9,021.26	\$ 8,373.63
Current NBWRA Phase 2 - Support Obligations										
Vendor		Encumbrances	Paid to date	Adjustments	Balance	Expires	% Spent			
Phase 2 - Support										
Program Development - (TBD FY 19/20 - 21/22)		18,920.55	ba2-pd	-	18,920.55		0.00%			
Federal Advocacy (TFG sub) - (TBD FY 19/20 - 21/22)		17,817.55	ba2-fa	-	17,817.55		0.00%			
State Advocacy (TFG sub) - (TBD FY 19/20 - 21/22)		17,500.00	ba2-sa	-	17,500.00		0.00%			
Subtotal		\$ 54,238.10	-	-	\$ 54,238.10		0.00%			

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Date	Description	Amount	Las Galinas	Napa	Novato	SVCSD	SCWA	City of Petaluma	Marin Muni Water Dist.	American Canyon										
Phase 2 - Feasibility Study																				
Engineering Tasks 1 & 5: Mtgs, Admin, Grant Admin and Outreach																				
7/1/2021	Beginning Balance	31,313.80 b	-	4,475.19	4,474.19	4,474.19	4,468.18	4,473.19	4,474.43	4,474.43										
12/3/2022	Brown & Caldwell - 11416652	(1,085.71) p bc5	-	(155.10)	(155.10)	(155.10)	(155.11)	(155.10)	(155.10)	(155.10)										
3/4/2022	Brown & Caldwell - 11416468	(665.50) p bc5	-	(95.07)	(95.07)	(95.07)	(95.08)	(95.07)	(95.07)	(95.07)										
3/4/2022	Brown & Caldwell - 11432987	(2,007.86) p bc5	-	(286.84)	(286.84)	(286.84)	(286.82)	(286.84)	(286.84)	(286.84)										
3/16/2022	Brown & Caldwell - 11417791	(1,546.13) p bc5	-	(220.88)	(220.88)	(220.88)	(220.85)	(220.88)	(220.88)	(220.88)										
5/3/2022	Brown & Caldwell - 11435227	10,916.26 p bc5	-	1,559.47	1,559.47	1,559.47	1,559.44	1,559.47	1,559.47	1,559.47										
5/4/2022	Brown & Caldwell - 11439302	(8,782.13) p bc5	-	(1,254.59)	(1,254.59)	(1,254.59)	(1,254.59)	(1,254.59)	(1,254.59)	(1,254.59)										
6/14/2022	Brown & Caldwell - 11443424	(16.75) p bc5	-	(2.39)	(2.39)	(2.39)	(2.41)	(2.39)	(2.39)	(2.39)										
6/15/2022	Brown & Caldwell - 11442309	(11,239.50) p bc5	-	(1,605.64)	(1,605.64)	(1,605.64)	(1,605.66)	(1,605.64)	(1,605.64)	(1,605.64)										
	Brown & Caldwell - 11449470	(354.38) p bc5	-	(50.63)	(50.63)	(50.63)	(50.60)	(50.63)	(50.63)	(50.63)										
10/25/2022	Brown & Caldwell - 11416652-CORRECTION	(3,018.50) p bc5	-	(431.21)	(431.21)	(431.21)	(431.24)	(431.21)	(431.21)	(431.21)										
10/25/2022	Brown & Caldwell - 11419797-CORRECTION	(6,049.75) p bc5	-	(864.25)	(864.25)	(864.25)	(864.25)	(864.25)	(864.25)	(864.25)										
10/25/2022	Brown & Caldwell - 11422754-CORRECTION	(6,522.50) p bc5	-	(931.79)	(931.79)	(931.79)	(931.76)	(931.79)	(931.79)	(931.79)										
Current NBWRA Phase 2 - Engineering Tasks 1 & 5: Mtgs, Admin, Grant Admin and Outreach Balance			\$	941.35	\$	-	\$	136.27	\$	135.27	\$	135.27	\$	129.25	\$	134.27	\$	135.51	\$	135.51
PENDING																				
Projected NBWRA Phase 2 - Engineering Tasks 1 & 5: Mtgs, Admin, Grant Admin and Outreach Balance			\$	941.35	\$	-	\$	136.27	\$	135.27	\$	135.27	\$	129.25	\$	134.27	\$	135.51	\$	135.51
			0.00%14.48%14.37%14.37%13.73%14.26%14.40%14.40%																	
Current NBWRA Phase 2 Feasibility Study Eng Tasks 1 & 5 Reconciliation Totals			Current NBWRA Phase 2 Feasibility Study Eng Tasks 1 & 5 Reconciliation by Entity																	
Beginning Balance		31,313.80 b	-	4,475.19	4,474.19	4,474.19	4,468.18	4,473.19	4,474.43	4,474.43										
Deposits		- d	-	-	-	-	-	-	-	-										
Interest Earnings		- i	-	-	-	-	-	-	-	-										
Payments		(30,372.45) p	-	(4,338.92)	(4,338.92)	(4,338.92)	(4,338.93)	(4,338.92)	(4,338.92)	(4,338.92)										
Total			\$	941.35	\$	-	\$	136.27	\$	135.27	\$	135.27	\$	129.25	\$	134.27	\$	135.51	\$	135.51
Current NBWRA Phase 2 - Feasibility Study: Engineering Tasks 1 & 5 Obligations																				
Vendor		Encumbrances		Paid to date		Adjustments		Balance		Expires		% Spent								
Phase 2 - Feasibility Study																				
Engineering Tasks 1 & 5: Mtgs, Admin, Grant Admin and Outreach:																				
Brown & Caldwell: (FY 18/19 - 21/22)		31,313.80	bc5	30,372.45		941.35		96.99%	Carryover from Last FY											
Subtotal		\$	31,313.80	\$	30,372.45	\$	-	\$	941.35		96.99%									

Carryover from Last FY

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Phase 2 - Feasibility Study										
Engineering: Task 2 Feasibility Study										
7/1/2021	Beginning Balance	2,659.96 b	-	806.07	564.45	241.63	160.69	564.45	81.04	241.63
12/3/2021	Brown & Caldwell - 11416652	(1,181.25) p bc4	-	(357.95)	(250.57)	(107.39)	(71.59)	(250.57)	(35.79)	(107.39)
12/3/2021	Brown & Caldwell - 11422754	(725.81) p bc4	-	(219.94)	(153.96)	(65.98)	(44.00)	(153.96)	(21.99)	(65.98)
3/16/2022	Brown & Caldwell - 11417791	(354.38) p bc4	-	(107.39)	(75.17)	(32.22)	(21.47)	(75.17)	(10.74)	(32.22)
5/3/2022	Brown & Caldwell - 11435227	(1,602.56) p bc4	-	(485.62)	(339.94)	(145.69)	(97.12)	(339.94)	(48.56)	(145.69)
5/4/2022	Brown & Caldwell - 11439302	(139.91) p bc4	-	(42.40)	(29.68)	(12.72)	(8.47)	(29.68)	(4.24)	(12.72)
	Brown & Caldwell - 11449470	1,484.44 p bc4	-	449.83	314.88	134.95	89.97	314.88	44.98	134.95
Current NBWRA Phase 2 - Engineering Task 2 Feasibility Study Balance \$			\$ -	\$ 42.60	\$ 30.01	\$ 12.58	\$ 8.01	\$ 30.01	\$ 4.70	\$ 12.58
PENDING										
Projected NBWRA Phase 2 - Engineering Task 2 Feasibility Study Balance \$			\$ -	\$ 42.60	\$ 30.01	\$ 12.58	\$ 8.01	\$ 30.01	\$ 4.70	\$ 12.58
			0.00%	30.32%	21.36%	8.95%	5.70%	21.36%	3.35%	8.95%
Current NBWRA Phase 2 Feasibility Study Eng Task 2 Reconciliation Totals										
Beginning Balance		2,659.96 b	-	806.07	564.45	241.63	160.69	564.45	81.04	241.63
Deposits		- d	-	-	-	-	-	-	-	-
Interest Earnings		- i	-	-	-	-	-	-	-	-
Payments		(2,519.47) p	-	(763.47)	(534.44)	(229.05)	(152.68)	(534.44)	(76.34)	(229.05)
Total \$			\$ -	\$ 42.60	\$ 30.01	\$ 12.58	\$ 8.01	\$ 30.01	\$ 4.70	\$ 12.58
Current NBWRA Phase 2 - Feasibility Study: Engineering Task 2 Obligations										
Phase 2 - Feasibility Study										
Engineering: Task 2 Feasibility Study:										
Brown & Caldwell: (FY 19/20 - 21/22)										
		2,659.96 bc4	2,519.47		140.49		94.72%	Carryover from Last FY		
Subtotal \$			\$ 2,659.96	\$ 2,519.47	\$ -	\$ 140.49	94.72%			

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Phase 2 - Feasibility Study												
Engineering: Tasks 3 & 4 Environmental and Financial Capability												
7/1/2021	Beginning Balance	21,879.45	b	-	1,476.82	1,794.47	1,051.68	2,173.33	9,624.95	2,267.17	3,491.03	
12/3/2021	Brown & Caldwell - 11419797	(2,905.88)	p	bc6	(196.29)	(238.22)	(139.02)	(289.52)	(1,278.85)	(300.90)	(463.08)	
3/16/2022	Brown & Caldwell - 11417791	(1,417.50)	p	bc6	(95.75)	(116.21)	(67.81)	(141.23)	(623.83)	(146.78)	(225.89)	
5/3/2022	Brown & Caldwell - 11435227	(236.25)	p	bc6	(15.96)	(19.37)	(11.30)	(23.54)	(103.97)	(24.46)	(37.65)	
5/4/2022	Brown & Caldwell - 11439302	(828.71)	p	bc6	(55.98)	(67.94)	(39.65)	(82.56)	(364.71)	(85.81)	(132.06)	
6/14/2022	Brown & Caldwell - 11443424	(2,786.00)	p	bc6	(188.19)	(228.40)	(133.28)	(277.57)	(1,226.09)	(288.49)	(443.98)	
6/30/2022	Brown & Caldwell - 11447944	(2,182.63)	p	bc6	(147.44)	(178.93)	(104.42)	(217.46)	(960.55)	(226.01)	(347.82)	
	Brown & Caldwell - 11449470	(4,987.71)	p	bc6	(336.92)	(408.89)	(238.61)	(496.93)	(2,195.04)	(516.48)	(794.84)	
Current NBWRA Phase 2 - Engineering Tasks 3 & 4 Environmental and Financial Capability Balance		\$ 6,534.77			\$ -	\$ 440.29	\$ 536.51	\$ 317.59	\$ 644.52	\$ 2,871.91	\$ 678.24	\$ 1,045.71
PENDING												
Projected NBWRA Phase 2 - Engineering Tasks 3 & 4 Environmental and Financial Capability Balance		\$ 6,534.77			\$ -	\$ 440.29	\$ 536.51	\$ 317.59	\$ 644.52	\$ 2,871.91	\$ 678.24	\$ 1,045.71
					0.00%	6.74%	8.21%	4.86%	9.86%	43.95%	10.38%	16.00%
Current NBWRA Phase 2 Feasibility Study Eng Tasks 3 & 4 Reconciliation Totals												
Beginning Balance		21,879.45	b	-	1,476.82	1,794.47	1,051.68	2,173.33	9,624.95	2,267.17	3,491.03	
Deposits		-	d	-	-	-	-	-	-	-	-	
Interest Earnings		-	i	-	-	-	-	-	-	-	-	
Payments		(15,344.68)	p	-	(1,036.53)	(1,257.96)	(734.09)	(1,528.81)	(6,753.04)	(1,588.93)	(2,445.32)	
Total		\$ 6,534.77			\$ -	\$ 440.29	\$ 536.51	\$ 317.59	\$ 644.52	\$ 2,871.91	\$ 678.24	\$ 1,045.71
Current NBWRA Phase 2 - Feasibility Study: Engineering Tasks 3 & 4 Obligations												
Vendor		Encumbrances		Paid to date		Adjustments	Balance	Expires	% Spent			
Phase 2 - Feasibility Study												
Engineering: Tasks 3 & 4: Environmental and Financial Capability:												
Brown & Caldwell: (FY 20/21 - 21/22)		21,879.45	bc6	15,344.68		6,534.77		70.13%	Carryover from Last FY			
Subtotal		\$ 21,879.45		\$ 15,344.68	\$ -	\$ 6,534.77		70.13%				

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Phase 2 - Feasibility Study													
SCWA Administration - Grants and EIR/EIS:													
7/1/2021	Beginning Balance	19,183.76	b	-	(647.78)	1.22	(1,534.78)	796.16	16,116.22	970.36	3,482.36		
8/4/2021	Salary/Assn Chgs Applied - N5	(231.97)	p	a8	(33.14)	(33.14)	(33.14)	(33.13)	(33.14)	(33.14)	(33.14)		
9/15/2021	Salary/Assn Chgs Applied - N2	(610.17)	p	a8	(87.17)	(87.17)	(87.17)	(87.15)	(87.17)	(87.17)	(87.17)		
3/18/2022	Salary/Assn Chgs Applied - N2	(1,760.49)	p	a8	(251.50)	(251.50)	(251.50)	(251.49)	(251.50)	(251.50)	(251.50)		
3/30/2022	Salary/Assn Chgs Applied - N2	(1,814.29)	p	a8	(259.19)	(259.19)	(259.19)	(259.15)	(259.19)	(259.19)	(259.19)		
4/14/2022	Salary/Assn Chgs Applied - N2	(2,305.95)	p	a8	(329.43)	(329.43)	(329.43)	(329.37)	(329.43)	(329.43)	(329.43)		
4/14/2022	Salary/Assn Chgs Applied - N2	(1,248.34)	p	a8	(178.34)	(178.34)	(178.34)	(178.30)	(178.34)	(178.34)	(178.34)		
4/28/2022	Salary/Assn Chgs Applied - N2	(2,459.56)	p	a8	(351.37)	(351.37)	(351.37)	(351.34)	(351.37)	(351.37)	(351.37)		
5/12/2022	Salary/Assn Chgs Applied - N2	(1,076.02)	p	a8	(153.72)	(153.72)	(153.72)	(153.70)	(153.72)	(153.72)	(153.72)		
6/1/2022	Salary/Assn Chgs Applied - N2	(1,844.57)	p	a8	(263.52)	(263.52)	(263.52)	(263.45)	(263.52)	(263.52)	(263.52)		
6/15/2022	Salary/Assn Chgs Applied - N2	(1,384.89)	p	a8	(197.85)	(197.85)	(197.85)	(197.79)	(197.85)	(197.85)	(197.85)		
6/30/2022	County Counsel - N2	(141.00)	p	a8	(20.14)	(20.14)	(20.14)	(20.16)	(20.14)	(20.14)	(20.14)		
Current NBWRA Phase 2 - SCWA Administration and EIR/EIS			\$	4,306.51	\$	-	\$ (2,773.15)	\$ (2,124.15)	\$ (3,660.15)	\$ (1,328.87)	\$ 13,990.85	\$ (1,155.01)	\$ 1,356.99
PENDING													
Projected NBWRA Phase 2 - SCWA Administration and EIR/EIS			\$	4,306.51	\$	-	\$ (2,773.15)	\$ (2,124.15)	\$ (3,660.15)	\$ (1,328.87)	\$ 13,990.85	\$ (1,155.01)	\$ 1,356.99
					0.00%	-64.39%	-49.32%	-84.99%	-30.86%	324.88%	-26.82%	31.51%	
Current NBWRA Phase 2 Feasibility Study SCWA Administration - Grants and EIR/EIS Reconciliation Totals					Current NBWRA Phase 2 Feasibility Study SCWA Administration - Grants and EIR/EIS Reconciliation by Entity								
Beginning Balance	19,183.76	b	-	(647.78)	1.22	(1,534.78)	796.16	16,116.22	970.36	3,482.36			
Deposits	-	d	-	-	-	-	-	-	-	-			
Interest Earnings	-	i	-	-	-	-	-	-	-	-			
Payments	(14,877.25)	p	-	(2,125.37)	(2,125.37)	(2,125.37)	(2,125.03)	(2,125.37)	(2,125.37)	(2,125.37)			
Total	\$ 4,306.51		\$ -	\$ (2,773.15)	\$ (2,124.15)	\$ (3,660.15)	\$ (1,328.87)	\$ 13,990.85	\$ (1,155.01)	\$ 1,356.99			
Current NBWRA Phase 2 - Feasibility Study: SCWA Administration - Grants and EIR/EIS Obligations													
Vendor	Encumbrances	Paid to date	Adjustments	Balance	Expires	% Spent							
Phase 2 - Feasibility Study													
SCWA Administration - Grants and EIR/EIS:													
SCWA: (FY 21/22)													
	19,183.76	a8	14,877.25	4,306.51	77.55%								
Subtotal	\$ 19,183.76	\$ 14,877.25	\$ -	\$ 4,306.51	77.55%								
Phase 2 Feasibility Study Balance Totals													
Current NBWRA Phase 2 - Feasibility Study Balance		11,923.12	-	(2,153.99)	(1,422.36)	(3,194.71)	(547.09)	17,027.04	(336.56)	2,550.79			
Projected NBWRA Phase 2 - Feasibility Study Balance		11,923.12	-	(2,153.99)	(1,422.36)	(3,194.71)	(547.09)	17,027.04	(336.56)	2,550.79			
*Projected Balance includes all pending transactions													

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			Las Galinas	Napa	Novato	SVCS	SCWA	City of Petaluma	Marin Muni Water Dist.	American Canyon	
Phase 2 Support & Feasibility Study Balance Totals											
Current NBWRA Phase 2 Balance			74,148.33	647.63	6,681.97	7,412.60	5,641.25	8,292.76	25,863.00	8,684.70	10,924.42
Projected NBWRA Phase 2 Balance			74,148.33	647.63	6,681.97	7,412.60	5,641.25	8,292.76	25,863.00	8,684.70	10,924.42
Current NBWRA Phase 2 - Support & Feasibility Study Reconciliation Totals											
Beginning Balance		137,262.18	b d i p	Current NBWRA Phase 2 - Support & Feasibility Study Reconciliation by Entity							
Deposits		-		647.63	14,946.26	15,669.29	13,068.68	16,438.21	39,614.77	16,814.26	20,063.08
Interest Earnings		-		-	-	-	-	-	-	-	-
Payments		(63,113.85)		-	(8,264.29)	(8,256.69)	(7,427.43)	(8,145.45)	(13,751.77)	(8,129.56)	(9,138.66)
Totals			74,148.33	647.63	6,681.97	7,412.60	5,641.25	8,292.76	25,863.00	8,684.70	10,924.42
NBWRA Phase 2 - Support & Feasibility Study Total Obligations											
Vendor		Encumbrances		Paid to date	Adjustments	Balance	Expires	% Spent			
Phase 2 - Support & Feasibility Study Totals											
Program Development - (TBD FY 19/20 - 21/22)		18,920.55	ba2-pd	-		18,920.55		0.00%			
Federal Advocacy (TFG sub) - (TBD FY 19/20 - 21/22)		17,817.55	ba2-fa	-		17,817.55		0.00%			
State Advocacy (TFG sub) - (TBD FY 19/20 - 21/22)		17,500.00	ba2-sa	-		17,500.00		0.00%			
Brown & Caldwell: (FY 18/19 - 21/22)		55,853.21	bc5	48,236.60		7,616.61		86.36%			
SCWA: (FY 21/22)		19,183.76	a8	14,877.25		4,306.51		77.55%			
Subtotal		\$ 129,275.07		\$ 63,113.85	\$ -	\$ 66,161.22		48.82%			
*Projected Balance includes all pending transactions											

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7/1/2021	Beginning Balance	(11,583.79)	b	(1,852.24)	1,397.76	1,397.76	1,397.76	1,397.78	1,397.76	1,397.76	(2,312.11)	(7,903.01)	(7,903.01)
7/29/2021	Salary/Assn Chgs Applied	(1,121.69)	p	(112.17)	(112.17)	(112.17)	(112.17)	(112.16)	(112.17)	(112.17)	(112.17)	(112.17)	(112.17)
8/4/2021	Salary/Assn Chgs Applied	(6,127.73)	p	(612.77)	(612.77)	(612.77)	(612.77)	(612.80)	(612.77)	(612.77)	(612.77)	(612.77)	(612.77)
8/19/2021	Salary/Assn Chgs Applied	(1,674.08)	p	(167.41)	(167.41)	(167.41)	(167.41)	(167.39)	(167.41)	(167.41)	(167.41)	(167.41)	(167.41)
8/23/2021	Weir Technical Services SCWA_7-21	(2,680.00)	p	(268.00)	(268.00)	(268.00)	(268.00)	(268.00)	(268.00)	(268.00)	(268.00)	(268.00)	(268.00)
9/1/2021	Salary/Assn Chgs Applied	(1,855.10)	p	(185.51)	(185.51)	(185.51)	(185.51)	(185.51)	(185.51)	(185.51)	(185.51)	(185.51)	(185.51)
9/15/2021	Salary/Assn Chgs Applied	(1,828.13)	p	(182.81)	(182.81)	(182.81)	(182.81)	(182.84)	(182.81)	(182.81)	(182.81)	(182.81)	(182.81)
9/27/2021	Weir Technical Services SCWA_8-21	(1,080.00)	p	(108.00)	(108.00)	(108.00)	(108.00)	(108.00)	(108.00)	(108.00)	(108.00)	(108.00)	(108.00)
9/29/2021	Salary/Assn Chgs Applied	(3,260.58)	p	(326.06)	(326.06)	(326.06)	(326.06)	(326.04)	(326.06)	(326.06)	(326.06)	(326.06)	(326.06)
10/15/2021	Salary/Assn Chgs Applied	(4,249.29)	p	(424.93)	(424.93)	(424.93)	(424.93)	(424.92)	(424.93)	(424.93)	(424.93)	(424.93)	(424.93)
10/28/2021	Salary/Assn Chgs Applied	(701.95)	p	(70.20)	(70.20)	(70.20)	(70.20)	(70.15)	(70.20)	(70.20)	(70.20)	(70.20)	(70.20)
10/29/2021	North Marin Water District Deposit	10,000.00	d						10,000.00				
11/10/2021	Weir Technical Services SCWA_9-21	(2,000.00)	p	(200.00)	(200.00)	(200.00)	(200.00)	(200.00)	(200.00)	(200.00)	(200.00)	(200.00)	(200.00)
11/10/2021	American Canyon Deposit	10,000.00	d										10,000.00
11/10/2021	Novato Sani Deposit	10,000.00	d			10,000.00							
11/10/2021	Napa Sani Deposit	10,000.00	d		10,000.00								
11/10/2021	Salary/Assn Chgs Applied	(1,976.79)	p	(197.68)	(197.68)	(197.68)	(197.68)	(197.67)	(197.68)	(197.68)	(197.68)	(197.68)	(197.68)
11/17/2021	City of Petaluma Deposit	10,000.00	d							10,000.00			
12/1/2021	Weir Technical Services SCWA_10-21	(1,760.00)	p	(176.00)	(176.00)	(176.00)	(176.00)	(176.00)	(176.00)	(176.00)	(176.00)	(176.00)	(176.00)
12/6/2021	Salary/Assn Chgs Applied	(715.72)	p	(71.57)	(71.57)	(71.57)	(71.57)	(71.59)	(71.57)	(71.57)	(71.57)	(71.57)	(71.57)
12/3/2021	Brown & Caldwell - 11416652	(3,018.50)	p	(301.85)	(301.85)	(301.85)	(301.85)	(301.85)	(301.85)	(301.85)	(301.85)	(301.85)	(301.85)
12/1/2021	LGVSD Deposit	10,000.00	d	10,000.00	-	-	-	-	-	-	-	-	-
12/3/2021	Brown & Caldwell - 11419797	(6,049.75)	p	(604.98)	(604.98)	(604.98)	(604.98)	(604.93)	(604.98)	(604.98)	(604.98)	(604.98)	(604.98)
12/3/2021	Brown & Caldwell - 11422754	(6,522.50)	p	(652.25)	(652.25)	(652.25)	(652.25)	(652.25)	(652.25)	(652.25)	(652.25)	(652.25)	(652.25)
12/8/2021	Salary/Assn Chgs Applied	(2,830.58)	p	(283.06)	(283.06)	(283.06)	(283.06)	(283.04)	(283.06)	(283.06)	(283.06)	(283.06)	(283.06)
12/9/2021	SVCSD Deposit	10,000.00	d	-	-	-	10,000.00	-	-	-	-	-	-
12/9/2021	SCWA Deposit	10,000.00	d	-	-	-	-	10,000.00	-	-	-	-	-
12/27/2021	Salary/Assn Chgs Applied	(895.08)	p	(89.51)	(89.51)	(89.51)	(89.51)	(89.49)	(89.51)	(89.51)	(89.51)	(89.51)	(89.51)
12/21/2021	Weir Technical Services SCWA_11-21	(1,202.45)	p	(120.25)	(120.25)	(120.25)	(120.25)	(120.25)	(120.25)	(120.25)	(120.25)	(120.25)	(120.25)
12/21/2021	Weir Technical Services SCWA_11-21	(1,477.55)	p	(147.76)	(147.76)	(147.76)	(147.76)	(147.71)	(147.76)	(147.76)	(147.76)	(147.76)	(147.76)
2/9/2022	Weir Technical Services SCWA_01-22	(3,120.00)	p	(312.00)	(312.00)	(312.00)	(312.00)	(312.00)	(312.00)	(312.00)	(312.00)	(312.00)	(312.00)
2/9/2022	Weir Technical Services SCWA_12-21	(320.00)	p	(32.00)	(32.00)	(32.00)	(32.00)	(32.00)	(32.00)	(32.00)	(32.00)	(32.00)	(32.00)
2/17/2022	Salary/Assn Chgs Applied	(1,980.35)	p	(198.04)	(198.04)	(198.04)	(198.04)	(197.99)	(198.04)	(198.04)	(198.04)	(198.04)	(198.04)
3/4/2022	Salary/Assn Chgs Applied	(791.28)	p	(79.13)	(79.13)	(79.13)	(79.13)	(79.11)	(79.13)	(79.13)	(79.13)	(79.13)	(79.13)
3/4/2022	Brown & Caldwell - 11416468	(4,079.50)	p	(407.95)	(407.95)	(407.95)	(407.95)	(407.95)	(407.95)	(407.95)	(407.95)	(407.95)	(407.95)
3/4/2022	Brown & Caldwell - 11432987	(1,944.25)	p	(194.43)	(194.43)	(194.43)	(194.43)	(194.38)	(194.43)	(194.43)	(194.43)	(194.43)	(194.43)
3/5/2022	Interest Transfer	35,000.00	i	3,500.00	3,500.00	3,500.00	3,500.00	3,500.00	3,500.00	3,500.00	3,500.00	3,500.00	3,500.00
3/5/2022	Interest Transfer	10,000.00	i	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
3/16/2022	Brown & Caldwell - 11417791	(7,953.63)	p	(795.36)	(795.36)	(795.36)	(795.36)	(795.39)	(795.36)	(795.36)	(795.36)	(795.36)	(795.36)
3/18/2022	Salary/Assn Chgs Applied	(3,233.78)	p	(323.38)	(323.38)	(323.38)	(323.38)	(323.36)	(323.38)	(323.38)	(323.38)	(323.38)	(323.38)
3/21/2022	Weir Technical Services SCWA_2-22	(3,240.00)	p	(324.00)	(324.00)	(324.00)	(324.00)	(324.00)	(324.00)	(324.00)	(324.00)	(324.00)	(324.00)
3/28/2022	Interest Transfer	14,200.00	i	1,420.00	1,420.00	1,420.00	1,420.00	1,420.00	1,420.00	1,420.00	1,420.00	1,420.00	1,420.00
3/28/2022	Discretionary Funds Transfer	35,500.00	d	3,550.00	3,550.00	3,550.00	3,550.00	3,550.00	3,550.00	3,550.00	3,550.00	3,550.00	3,550.00
3/30/2022	Salary/Assn Chgs Applied	(1,137.75)	p	(113.78)	(113.78)	(113.78)	(113.78)	(113.73)	(113.78)	(113.78)	(113.78)	(113.78)	(113.78)
4/14/2022	Salary/Assn Chgs Applied	(837.89)	p	(83.79)	(83.79)	(83.79)	(83.79)	(83.78)	(83.79)	(83.79)	(83.79)	(83.79)	(83.79)
4/28/2022	Salary/Assn Chgs Applied	(2,282.10)	p	(228.21)	(228.21)	(228.21)	(228.21)	(228.21)	(228.21)	(228.21)	(228.21)	(228.21)	(228.21)
5/3/2022	Brown & Caldwell - 11435227	(17,377.19)	p	(1,737.72)	(1,737.72)	(1,737.72)	(1,737.72)	(1,737.71)	(1,737.72)	(1,737.72)	(1,737.72)	(1,737.72)	(1,737.72)
5/4/2022	Brown & Caldwell - 11439302	(6,126.75)	p	(612.68)	(612.68)	(612.68)	(612.68)	(612.63)	(612.68)	(612.68)	(612.68)	(612.68)	(612.68)
5/12/2022	Salary/Assn Chgs Applied	(714.79)	p	(71.48)	(71.48)	(71.48)	(71.48)	(71.47)	(71.48)	(71.48)	(71.48)	(71.48)	(71.48)
6/1/2022	Salary/Assn Chgs Applied	(3,178.67)	p	(317.87)	(317.87)	(317.87)	(317.87)	(317.84)	(317.87)	(317.87)	(317.87)	(317.87)	(317.87)
6/14/2022	Brown & Caldwell - 11443424	(2,190.75)	p	(219.08)	(219.08)	(219.08)	(219.08)	(219.03)	(219.08)	(219.08)	(219.08)	(219.08)	(219.08)
6/15/2022	Brown & Caldwell - 11442309	(15,832.50)	p	(1,583.25)	(1,583.25)	(1,583.25)	(1,583.25)	(1,583.25)	(1,583.25)	(1,583.25)	(1,583.25)	(1,583.25)	(1,583.25)
6/24/2022	Salary/Assn Chgs Applied	(3,169.44)	p	(316.94)	(316.94)	(316.94)	(316.94)	(316.98)	(316.94)	(316.94)	(316.94)	(316.94)	(316.94)
6/30/2022	Salary/Assn Chgs Applied	(1,559.39)	p	(155.94)	(155.94)	(155.94)	(155.94)	(155.93)	(155.94)	(155.94)	(155.94)	(155.94)	(155.94)
6/30/2022	Brown & Caldwell - 11447944	(2,839.69)	p	(283.97)	(283.97)	(283.97)	(283.97)	(283.96)	(283.97)	(283.97)	(283.97)	(283.97)	(283.97)
6/30/2022	Salary/Assn Chgs Applied	(815.60)	p	(81.56)	(81.56)	(81.56)	(81.56)	(81.56)	(81.56)	(81.56)	(81.56)	(81.56)	(81.56)
6/30/2022	County Counsel	(282.00)	p	(28.20)	(28.20)	(28.20)	(28.20)	(28.20)	(28.20)	(28.20)	(28.20)	(28.20)	(28.20)
7/21/2022	Weir Technical Services SCWA_3-22	(3,160.00)	p	(316.00)	(316.00)	(316.00)	(316.00)	(316.00)	(316.00)	(316.00)	(316.00)	(316.00)	(316.00)
7/21/2022	Weir Technical Services SCWA_4-22	(2,760.00)	p	(276.00)	(276.00)	(276.00)	(276.00)	(276.00)	(276.00)	(276.00)	(276.00)	(276.00)	(276.00)
7/21/2022	Weir Technical Services SCWA_5-22	(960.00)	p	(96.00)	(96.00)	(96.00)	(96.00)	(96.00)	(96.00)	(96.00)	(96.00)	(96.00)	(96.00)
7/21/2022	Weir Technical Services SCWA_6-22	(3,280.00)	p	(328.00)	(328.00)	(328.00)	(328.00)	(328.00)	(328.00)	(328.00)	(328.00)	(328.00)	(328.00)
	Brown & Caldwell - 11449470	(1,576.13)	p	(157.61)	(157.61)	(157.61)	(157.61)	(157.64)	(157.61)	(157.61)	(157.61)	(157.61)	(157.61)
10/25/2022	Brown & Caldwell - 11416652-CORRECTION	3,018.50	p	301.85	301.85	301.85	301.85	301.85	301.85	301.85	301.85	301.85	301.85
10/25/2022	Brown & Caldwell - 11419797-CORRECTION	6,049.75	p	604.98	604.98	604.98	604.98	604.98	604.98	604.98	604.98	604.98	604.98
10/25/2022	Brown & Caldwell - 11422754-CORRECTION	6,522.50	p	652.25	652.25	652.25	652.25	652.25	652.25	652.25	652.25	652.25	652.25
Current NBWRA Balance \$				\$ 4,199.70	\$ 7,449.70	\$ 7,449.70	\$ 7,449.70	\$ 7,450.17	\$ 7,449.70	\$ (2,550.30)	\$ 3,739.83	\$ (11,851.07)	\$ (1,851.07)
PENDING				-	-	-	-	-	-	-	-	-	-
Projected Balance \$				\$ 4,199.70	\$ 7,449.70	\$ 7,449.70	\$ 7,449.70	\$ 7,450.17	\$ 7,449.70	\$ (2,550.30)	\$ 3,739.83	\$ (11,851.07)	\$ (1,851.07)
				14.51%	25.75%	25.75%	25.75%	25.75%	25.75%	-8.81%	12.92%	-40.96%	-6.40%

North Bay Water Reuse Authority
July 1, 2021 to Date Transaction Summary
as of June 30, 2022
PHASE 1

Item No. 9.a

<u>Date</u>	<u>Description</u>	<u>Amount</u>		<u>Las Gallinas</u>	<u>Napa</u>	<u>Novato</u>	<u>SVCSD</u>	<u>SCWA</u>	<u>North Marin Water Dist.</u>	<u>Napa County</u>	<u>City of Petaluma</u>	<u>Marin Muni Water Dist.</u>	<u>American Canyon</u>
Current NBWRA Reconciliation				Current NBWRA Joint Use Reconciliation by Entity									
Beginning Balance	(11,583.79)	b		(1,852.24)	1,397.76	1,397.76	1,397.76	1,397.78	1,397.76	1,397.76	(2,312.11)	(7,903.01)	(7,903.01)
Deposits	115,500.00	d		13,550.00	13,550.00	13,550.00	13,550.00	13,550.00	13,550.00	3,550.00	13,550.00	3,550.00	13,550.00
Interest Earnings	59,200.00	i		5,920.00	5,920.00	5,920.00	5,920.00	5,920.00	5,920.00	5,920.00	5,920.00	5,920.00	5,920.00
Payments	(134,180.15)	p		(13,418.06)	(13,418.06)	(13,418.06)	(13,418.06)	(13,417.61)	(13,418.06)	(13,418.06)	(13,418.06)	(13,418.06)	(13,418.06)
Total:	28,936.06			4,199.70	7,449.70	7,449.70	7,449.70	7,450.17	7,449.70	(2,550.30)	3,739.83	(11,851.07)	(1,851.07)

Current NBWRA Obligations								
<u>Vendor</u>	<u>Encumbrances</u>		<u>Paid to date</u>	<u>Adjustments</u>	<u>Balance</u>	<u>Expires</u>	<u>% Spent</u>	
Program Management - (Weir : FY 17/18 - 20/21)	8,722.45	w4	8,722.45		-		100.00%	Carryover from Last FY
Program Management - (Weir : FY 21/22)	20,000.00	w5	18,317.55		1,682.45		91.59%	
SCWA Administration - (SCWA : FY 21/22)	47,111.47	a8	47,219.76		(108.29)		100.23%	
Additional Services - (Brown & Caldwell: FY 21/22)	60,000.00	bc1	59,920.39		79.61		99.87%	
Additional Services - (Brown & Caldwell: FY 21/22)	39,000.00	bc2	-		39,000.00		0.00%	
Total	174,833.92		134,180.15	-	40,653.77		76.75%	

North Bay Water Reuse Authority
July 1, 2021 to Date Transaction Summary
as of June 30, 2022
PHASE 1

Item No. 9.a

<u>Date</u>	<u>Description</u>	<u>Amount</u>	
7/1/2021	Beginning Balance	66,639.50	b
3/28/2022	Transfer to JU	(35,500.00)	i
6/15/2022	Software	(399.00)	p
Current NBWRA Balance		30,740.50	
PENDING			

Projected Balance	30,740.50
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Current NBWRA Reconciliation	
Beginning Balance	66,639.50
Deposits	-
Interest Earnings	(35,500.00)
Payments	(399.00)
Balance	30,740.50

<u>Combined</u>	<u>Marin Muni Water Dist.</u>	<u>Marin County</u>	<u>City of American Canyon</u>
66,639.50	21,884.62	20,000.00	15,000.00
(35,500.00)		15,000.00	
(399.00)			
30,740.50	-	35,000.00	15,000.00
-	-		
30,740.50	-	35,000.00	15,000.00
MMWD Marin County AM			

Current NBWRA Joint Use Reconciliation by Entity				
66,639.50	-	21,884.62	20,000.00	15,000.00
(35,500.00)	-	-	-	-
(399.00)	-	-	-	-
30,740.50	-	21,884.62	20,000.00	15,000.00

NBWRA Obligations						
<u>Vendor</u>	<u>Encumbrances</u>	<u>Paid to date</u>	<u>Adjustments</u>	<u>Balance</u>	<u>Expires</u>	<u>% Spent</u>
N/A						
Total	-	-	-	-		
<u>Project</u>	<u>Unencumbered</u>	<u>Spent</u>	<u>Misc.</u>	<u>Balance</u>		<u>% Spent</u>
Admin Agency Services (Unallocated)	-	399.00	-	(399.00)		0%
Admin Agency Services (Room Rental)	-	-	-	-		0%
Federal Congressional Tour	-	-	-	-		0%
State Congressional Tour	-	-	-	-		0%
Total	-	399.00	-	(399.00)		
Miscellaneous Expenses		-				
	<u>Scheduled costs</u>	<u>Expenses</u>	<u>Adjustments</u>	<u>Balance</u>		<u>% Spent</u>
Total	-	399.00	-	(399.00)		0%

Interest
North Bay Water Reuse Authority
as of June 30, 2022

FY2013/2014

Period	Date Posted	Amount
1st Quarter	10/15/2013	\$ 1,335.43
2nd Quarter	1/15/2014	\$ 1,445.77
3rd Quarter	4/16/2014	\$ 1,034.70
4th Quarter	7/16/2014	\$ 590.63
Total		\$ 4,406.53

FY2014/2015

Period	Date Posted	Amount
1st Quarter	10/15/2014	\$ 1,849.53
2nd Quarter	1/15/2015	\$ 2,430.25
3rd Quarter	4/16/2015	\$ 2,256.57
4th Quarter	7/15/2015	\$ 1,682.38
Total		\$ 8,218.73

FY2015/2016

Period	Date Posted	Amount
1st Quarter	10/15/2015	\$ 1,631.68
2nd Quarter	1/15/2016	\$ 3,371.28
3rd Quarter	4/15/2016	\$ 3,509.54
4th Quarter	7/15/2016	\$ 3,407.03
Total		\$ 11,919.53

FY2016/2017

Period	Date Posted	Amount
1st Quarter	10/14/2016	\$ 4,111.97
2nd Quarter	1/13/2017	\$ 5,277.04
3rd Quarter	4/14/2017	\$ 5,383.46
4th Quarter	7/14/2017	\$ 5,766.27
Total		\$ 20,538.74

FY2017/2018

Period	Date Posted	Amount
1st Quarter	10/17/2017	\$ 5,909.98
2nd Quarter	1/12/2018	\$ 7,669.67
3rd Quarter	4/13/2018	\$ 6,628.28
4th Quarter	7/13/2018	\$ 6,146.03
Total		\$ 26,353.96

Interest
North Bay Water Reuse Authority
as of June 30, 2022
FY2018/2019

Period	Date Posted	Amount
1st Quarter	10/15/2018	\$ 5,512.88
2nd Quarter	1/15/2019	\$ 6,454.76
3rd Quarter	4/12/2019	\$ 7,728.98
4th Quarter	7/12/2019	\$ 7,205.96
Total		\$ 26,902.58

FY2019/2020

Period	Date Posted	Amount
1st Quarter	10/11/2019	\$ 6,387.63
2nd Quarter	1/10/2020	\$ 5,694.80
3rd Quarter	4/9/2020	\$ 5,477.49
4th Quarter	7/15/2020	\$ 4,828.69
Total		\$ 22,388.61

FY2020/2021

Period	Date Posted	Amount
1st Quarter	10/13/2020	\$ 3,246.60
2nd Quarter	1/15/2021	\$ 2,101.72
3rd Quarter	4/13/2021	\$ 1,746.08
4th Quarter	6/30/2021	\$ 1,335.66
Total		\$ 8,430.06

FY2021/2022

Period	Date Posted	Amount
1st Quarter	10/12/2021	\$ 1,278.75
2nd Quarter	1/13/2022	\$ 1,227.50
3rd Quarter	4/13/2022	\$ 1,309.16
4th Quarter	6/30/2022	\$ 1,782.99
Total		\$ 5,598.40

Balance

	Amount
	\$ 134,757.14
Transfer to JU	\$ (60,000.00)
Transfer to JU FY21/22	\$ (10,000.00)
Transfer to JU FY21/22	\$ (35,000.00)
Transfer to JU FY21/22	\$ (14,200.00)
Total	\$ 15,557.14

North Bay Water Reuse Authority

March 24, 2023

Consultant Cost Tracking

Fiscal Year 2021/22

	Apr-22	May-22	Jun-22	FY2020/21 Total	Approved FY2020/21	FY2021/22 YTD	Approved FY2021/22	Prior FY Carryover	Total Available	Amount Remaining
Phase 1 Support										
Grant Applications & Management - B&C	-	-	-	3,534	-	5,387	-	26,909	26,909	21,522
Total Costs for Phase 1 Support	-	-	-	3,534	-	5,387	-	26,909	26,909	21,522

Phase 2 Support										
Program Development	-	-	-	-	-	-	-	18,921	18,921	18,921
Federal Advocacy	-	-	-	-	-	-	-	17,818	17,818	17,818
State Advocacy	-	-	-	-	-	-	-	17,500	17,500	17,500
Total Costs for Phase 2 Support	-	-	-	-	-	-	-	54,238	54,238	54,238

Phase 2 Feasibility Study										
Engineering Tasks 1 & 5: Mtgs, Admin, Grant Admin, Outreach - B&C	17	-	354	31,193	-	30,372	-	31,314	31,314	941
Engineering Task 2 Feasibility Study - B&C	-	-	(1,484)	19,366	-	2,519	-	2,660	2,660	140
Engineering Tasks 3 & 4, Environmental & Financial Capability - B&C	2,786	2,183	4,988	19,133	-	15,345	-	21,879	21,879	6,535
SCWA Administration - Grants and EIR/EIS - SCWA	6,014	1,076	3,370	7,335	-	14,877	-	19,184	19,184	4,307
Total Costs for Study	8,817	3,259	7,228	77,027	-	63,114	-	75,037	75,037	11,923
Total Costs for Phase 2	8,817	3,259	7,228	87,332	-	63,114	-			66,161

Joint Use										
Program Management - Weir	2,760	960	3,280	16,200	-	27,040	10,000	8,723	18,723	(8,317)
Engineering Task 7, Additional Services - B&C (Note recoded from Phase 2)	2,191	2,840	1,576	-	-	59,920	60,000	-	60,000	80
SCWA Administration (\$35,000 added by Board on February 28, 2022)	3,120	715	9,005	64,628	-	47,220	75,000	(27,889)	47,111	(108)
Total Costs for Joint Use	8,071	4,514	13,861	80,828	-	74,260	145,000	(19,166)	125,834	(8,346)

Total Costs										
Planning, Engineering, and Funding Management - B&C	4,994	5,022	5,434	73,226	-	113,544	60,000	82,762	142,762	29,218
Program Development and Federal/State Advocacy	-	-	-	-	-	-	-	54,238	54,238	54,238
Program Management - Weir	2,760	960	3,280	16,200	-	27,040	10,000	8,723	18,723	(8,317)
SCWA Administration	9,134	1,791	12,376	71,963	-	62,097	-	45,533	45,533	(16,564)
Total Costs for NBWRA	16,887	7,773	21,089	161,389	-	202,681	70,000	191,256	261,256	58,575

**North Bay Water Reuse Authority
Project Cost Summary
as of February 28, 2023**

<u>TOTAL FY 22/23 PROJECT COSTS</u>							
Phase 1							
Project	Consultant	Prior Year Balance Carryover	FY 22/23 Budget	Total	Total Expenses in FY 22/23	Remaining Funds	Percent Remaining
Prior Phase 1 Carryover		130,125.21	-	130,125.21	-	130,125.21	100.00%
TOTAL BUDGET		\$ 130,125.21	\$ -	\$ 130,125.21	\$ -	\$ 130,125.21	0.00%
<u>Continued Recycled Water Support</u>							
Project	Consultant	Prior Year Balance Carryover	FY 22/23 Budget	Total	Total Expenses in FY 22/23	Remaining Funds	Percent Remaining
Prior Phase 2 Carryover		74,148.34	-	74,148.34			
Program Development & Support	Brown & Caldwell	-	205,000.00	205,000.00	-	205,000.00	100.00%
SCWA Administration	SCWA	-	4,000.00	4,000.00	2,494.34	1,505.66	0.00%
TOTAL BUDGET		\$ 74,148.34	\$ 209,000.00	\$ 283,148.34	\$ 2,494.34	\$ 206,505.66	0.00%
<u>Drought Contingency Plan</u>							
Project	Consultant	Prior Year Balance Carryover	FY 22/23 Budget	Total	Total Expenses in FY 22/23	Remaining Funds	Percent Remaining
Program Development	Brown & Caldwell		52,000.00	52,000.00	-	52,000.00	100.00%
SCWA Administration	SCWA		4,000.00	4,000.00	2,494.33	1,505.67	37.64%
TOTAL BUDGET		\$ -	\$ 56,000.00	\$ 56,000.00	\$ 2,494.33	\$ 53,505.67	95.55%
<u>Sea Level Rise Adaptation</u>							
Project	Consultant	Prior Year Balance Carryover	FY 22/23 Budget	Total	Total Expenses in FY 22/23	Remaining Funds	Percent Remaining
Program Development	Brown & Caldwell	-	121,000.00	121,000.00	-	121,000.00	100.00%
SCWA Administration	SCWA	-	4,000.00	4,000.00	2,494.33	1,505.67	37.64%
TOTAL BUDGET		\$ -	\$ 125,000.00	\$ 125,000.00	\$ 2,494.33	\$ 122,505.67	98.00%
<u>Joint Use</u>							
Project	Consultant	Prior Year Balance Carryover	FY 22/23 Budget	Total	Total Expenses in FY 22/23	Remaining Funds	Percent Remaining
Program Management (two year agreement)	Weir Technical Services	1,682.45	40,000.00	41,682.45	2,720.00	38,962.45	93.47%
Additional Services - BC	Brown & Caldwell	39,000.00	-	39,000.00	9,057.63	29,942.37	76.78%
SCWA Administration	SCWA	(108.29)	65,500.00	65,391.71	32,546.65	32,845.06	50.23%
TOTAL BUDGET		\$ 40,574.16	\$ 105,500.00	\$ 146,074.16	\$ 44,324.28	\$ 101,749.88	69.66%
TOTALS							
		\$ 244,847.71	\$ 495,500.00	\$ 740,347.71	\$ 51,807.28	\$ 614,392.09	

North Bay Water Reuse Authority
July 1, 2022 to Date Transaction Summary
as of February 28, 2023
PHASE 1

Item No. 9.c

<u>Date</u>	<u>Description</u>	<u>Amount</u>	<u>Las Gallinas</u>	<u>Napa</u>	<u>Novato</u>	<u>SVCSD</u>	<u>SCWA</u>	<u>North Marin Water Dist.</u>	<u>Napa County</u>
7/1/2022	Beginning Balance	130,125.21 b	14,169.25	45,849.39	12,244.56	19,734.15	4,644.95	28,837.72	4,645.19
			-	-	-	-	-	-	-
	Current NBWRA Balance \$	130,125.21	\$ 14,169.25	\$ 45,849.39	\$ 12,244.56	\$ 19,734.15	\$ 4,644.95	\$ 28,837.72	\$ 4,645.19
	PENDING								
	Projected Balance \$	130,125.21	\$ 14,169.25	\$ 45,849.39	\$ 12,244.56	\$ 19,734.15	\$ 4,644.95	\$ 28,837.72	\$ 4,645.19
			10.89%	35.23%	9.41%	15.17%	3.57%	22.16%	3.57%

Current NBWRA Reconciliation			Current NBWRA Phase 1 Support Reconciliation by Entity						
Beginning Balance	130,125.21	b	14,169.25	45,849.39	12,244.56	19,734.15	4,644.95	28,837.72	4,645.19
Deposits	-	d	-	-	-	-	-	-	-
Interest Earnings	-	i	-	-	-	-	-	-	-
Payments	-	p	-	-	-	-	-	-	-
Total:	130,125.21		14,169.25	45,849.39	12,244.56	19,734.15	4,644.95	28,837.72	4,645.19

Current NBWRA Obligations						
<u>Vendor</u>	<u>Encumbrances</u>	<u>Paid to date</u>	<u>Adjustments</u>	<u>Balance</u>	<u>Expires</u>	<u>% Spent</u>
Total	-	-	-	-		

North Bay Water Reuse Authority
July 1, 2022 to Date Transaction Summary
as of February 28, 2023
RECYCLED WATER SUPPORT

Item No. 9.c

Date	Description	Amount		LGUSD	Napa SD	Novato SD	SVCS	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
7/1/2022	Ending Balance Carry Over - Prior Phase 2 Carryover	74,148.34	b	647.63	6,681.97	7,412.60	5,641.25	8,292.77	-	-	25,863.00	8,684.70	10,924.42	-
8/3/2022	Salary/Assn Chgs Applied	(646.18)	p a1	-	(77.06)	-	(69.99)	(88.56)	-	-	(210.63)	(89.96)	(109.98)	-
8/31/2022	Salary/Assn Chgs Applied	(314.53)	p a1	-	(37.51)	-	(34.07)	(43.11)	-	-	(102.52)	(43.79)	(53.53)	-
9/16/2022	Salary/Assn Chgs Applied	(327.17)	p a1	-	(39.02)	-	(35.44)	(44.84)	-	-	(106.64)	(45.55)	(55.68)	-
9/27/2022	County Counsel	(47.00)	p a1	-	(5.60)	-	(5.09)	(6.45)	-	-	(15.32)	(6.54)	(8.00)	-
9/30/2022	Salary/Assn Chgs Applied	(324.31)	p a1	-	(38.67)	-	(35.13)	(44.45)	-	-	(105.71)	(45.15)	(55.20)	-
10/17/2022	Salary/Assn Chgs Applied	(372.19)	p a1	-	(44.38)	-	(40.31)	(51.01)	-	-	(121.32)	(51.82)	(63.35)	-
12/23/2022	Salary/Assn Chgs Applied	(97.53)	p a1	-	(11.63)	-	(10.56)	(13.37)	-	-	(31.79)	(13.58)	(16.60)	-
1/5/2023	Salary/Assn Chgs Applied	(102.17)	p a1	-	(12.18)	-	(11.07)	(14.01)	-	-	(33.30)	(14.22)	(17.39)	-
1/19/2023	Salary/Assn Chgs Applied	(58.88)	p a1	-	(7.02)	-	(6.38)	(8.07)	-	-	(19.19)	(8.20)	(10.02)	-
2/16/2023	Salary/Assn Chgs Applied	(204.38)	p a1	-	(24.37)	-	(22.14)	(28.01)	-	-	(66.62)	(28.45)	(34.79)	-
Current NBWRA Balance \$ 71,654.00				\$ 647.63	\$ 6,384.53	\$ 7,412.60	\$ 5,371.07	\$ 7,950.89	\$ -	\$ -	\$ 25,049.96	\$ 8,337.44	\$ 10,499.88	\$ -
PENDING														
Projected Balance \$ 71,654.00				\$ 647.63	\$ 6,384.53	\$ 7,412.60	\$ 5,371.07	\$ 7,950.89	\$ -	\$ -	\$ 25,049.96	\$ 8,337.44	\$ 10,499.88	\$ -
Current NBWRA Reconciliation				Current NBWRA Phase 1 Support Reconciliation by Entity										
Beginning Balance	74,148.34	b		647.63	6,681.97	7,412.60	5,641.25	8,292.77	-	-	25,863.00	8,684.70	10,924.42	-
Deposits	-	d		-	-	-	-	-	-	-	-	-	-	-
Interest Earnings	-	i		-	-	-	-	-	-	-	-	-	-	-
Payments	(2,494.34)	p		-	(297.44)	-	(270.18)	(341.88)	-	-	(813.04)	(347.26)	(424.54)	-
Total:	71,654.00			647.63	6,384.53	7,412.60	5,371.07	7,950.89	-	-	25,049.96	8,337.44	10,499.88	-
Current NBWRA Obligations														
Vendor	Encumbrances			Paid to date	Adjustments	Balance	Expires	% Spent						
Program Development - (B&C: FY 22/23)	205,000.00	bc1		-		205,000.00		0.00%						
SCWA Administration - FY22/23	4,000.00	a1		2,494.34		1,505.66		62.36%						
Total	209,000.00			2,494.34	-	206,505.66		1.19%						

North Bay Water Reuse Authority
July 1, 2022 to Date Transaction Summary
as of February 28, 2023
DROUGHT CONTINGENCY PLAN

Item No. 9.c

Date	Description	Amount		LGUSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
8/3/2022	Salary/Assn Chgs Applied	(646.19) p a1		(107.70)	-	-	(107.70)	(107.69)	(107.70)	-	(107.70)	-	-	(107.70)
8/31/2022	Salary/Assn Chgs Applied	(314.54) p a1		(52.42)	-	-	(52.42)	(52.44)	(52.42)	-	(52.42)	-	-	(52.42)
9/16/2022	Salary/Assn Chgs Applied	(327.18) p a1		(54.53)	-	-	(54.53)	(54.53)	(54.53)	-	(54.53)	-	-	(54.53)
9/27/2022	County Counsel	(47.00) p a1		(7.83)	-	-	(7.83)	(7.85)	(7.83)	-	(7.83)	-	-	(7.83)
9/30/2022	Salary/Assn Chgs Applied	(324.30) p a1		(54.05)	-	-	(54.05)	(54.05)	(54.05)	-	(54.05)	-	-	(54.05)
10/17/2022	Salary/Assn Chgs Applied	(372.18) p a1		(62.03)	-	-	(62.03)	(62.03)	(62.03)	-	(62.03)	-	-	(62.03)
12/23/2022	Salary/Assn Chgs Applied	(97.53) p a1		(16.26)	-	-	(16.26)	(16.23)	(16.26)	-	(16.26)	-	-	(16.26)
1/5/2023	Salary/Assn Chgs Applied	(102.16) p a1		(17.03)	-	-	(17.03)	(17.01)	(17.03)	-	(17.03)	-	-	(17.03)
1/19/2023	Salary/Assn Chgs Applied	(58.88) p a1		(9.81)	-	-	(9.81)	(9.83)	(9.81)	-	(9.81)	-	-	(9.81)
2/16/2023	Salary/Assn Chgs Applied	(204.37) p a1		(34.06)	-	-	(34.06)	(34.07)	(34.06)	-	(34.06)	-	-	(34.06)
Current NBWRA Balance \$ (2,494.33)				\$ (415.72)	\$ -	\$ -	\$ (415.72)	\$ (415.73)	\$ (415.72)	\$ -	\$ (415.72)	\$ -	\$ -	\$ (415.72)
PENDING														
Projected Balance \$ (2,494.33)				\$ (415.72)	\$ -	\$ -	\$ (415.72)	\$ (415.73)	\$ (415.72)	\$ -	\$ (415.72)	\$ -	\$ -	\$ (415.72)
Current NBWRA Reconciliation				Current NBWRA Phase 1 Support Reconciliation by Entity										
Beginning Balance	-	b		-	-	-	-	-	-	-	-	-	-	-
Deposits	-	d		-	-	-	-	-	-	-	-	-	-	-
Interest Earnings	-	i		-	-	-	-	-	-	-	-	-	-	-
Payments	(2,494.33)	p		(415.72)	-	-	(415.72)	(415.73)	(415.72)	-	(415.72)	-	-	(415.72)
Total:	(2,494.33)			(415.72)	-	-	(415.72)	(415.73)	(415.72)	-	(415.72)	-	-	(415.72)
Current NBWRA Obligations														
Vendor	Encumbrances			Paid to date	Adjustments	Balance	Expires	% Spent						
Program Development - (B&C: FY 22/23)	52,000.00	bc1		-		52,000.00		0.00%						
SCWA Administration	4,000.00	a1		2,494.33		1,505.67		62.36%						
Total	56,000.00			2,494.33	-	53,505.67		4.45%						

North Bay Water Reuse Authority
July 1, 2022 to Date Transaction Summary
as of February 28, 2023
SEA LEVEL RISE

Item No. 9.c

Date	Description	Amount	LGUSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
8/3/2022	Salary/Assn Chgs Applied	(646.19) p a1	(161.55)	-	-	(161.55)	(161.54)	-	-	(161.55)	-	-	-
8/31/2022	Salary/Assn Chgs Applied	(314.54) p a1	(78.64)	-	-	(78.64)	(78.62)	-	-	(78.64)	-	-	-
9/16/2022	Salary/Assn Chgs Applied	(327.18) p a1	(81.80)	-	-	(81.80)	(81.78)	-	-	(81.80)	-	-	-
9/27/2022	County Counsel	(47.00) p a1	(11.75)	-	-	(11.75)	(11.75)	-	-	(11.75)	-	-	-
9/30/2022	Salary/Assn Chgs Applied	(324.30) p a1	(81.08)	-	-	(81.08)	(81.06)	-	-	(81.08)	-	-	-
10/17/2022	Salary/Assn Chgs Applied	(372.18) p a1	(93.05)	-	-	(93.05)	(93.03)	-	-	(93.05)	-	-	-
12/23/2022	Salary/Assn Chgs Applied	(97.53) p a1	(24.38)	-	-	(24.38)	(24.39)	-	-	(24.38)	-	-	-
1/5/2023	Salary/Assn Chgs Applied	(102.16) p a1	(25.54)	-	-	(25.54)	(25.54)	-	-	(25.54)	-	-	-
1/19/2023	Salary/Assn Chgs Applied	(58.88) p a1	(14.72)	-	-	(14.72)	(14.72)	-	-	(14.72)	-	-	-
2/16/2023	Salary/Assn Chgs Applied	(204.37) p a1	(51.09)	-	-	(51.09)	(51.10)	-	-	(51.09)	-	-	-
			-	-	-	-	-	-	-	-	-	-	-
Current NBWRA Balance \$ (2,494.33)			\$ (623.60)	\$ -	\$ -	\$ (623.60)	\$ (623.53)	\$ -	\$ -	\$ (623.60)	\$ -	\$ -	\$ -
PENDING													
Projected Balance \$ (2,494.33)			\$ (623.60)	\$ -	\$ -	\$ (623.60)	\$ (623.53)	\$ -	\$ -	\$ (623.60)	\$ -	\$ -	\$ -
			25.00%	0.00%	0.00%	25.00%	25.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%

Current NBWRA Reconciliation		
Beginning Balance	-	b
Deposits	-	d
Interest Earnings	-	i
Payments	(2,494.33)	p
Total:	(2,494.33)	

Current NBWRA Phase 1 Support Reconciliation by Entity											
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
(623.60)	-	-	(623.60)	(623.53)	-	-	(623.60)	-	-	-	-
(623.60)	-	-	(623.60)	(623.53)	-	-	(623.60)	-	-	-	-

Current NBWRA Obligations						
Vendor	Encumbrances		Paid to date	Adjustments	Balance	% Spent
Program Development - (B&C: FY 22/23)	121,000.00	bc3	-		121,000.00	0.00%
SCWA Administration	4,000.00	a1	2,494.33		1,505.67	62.36%
	-					
Total	125,000.00		2,494.33	-	122,505.67	2.00%

Carryover from Last FY

North Bay Water Reuse Authority
July 1, 2022 to Date Transaction Summary
as of February 28, 2023
JOINT USE

Item No. 9.c

<u>Date</u>	<u>Description</u>	<u>Amount</u>		<u>Las Gallinas</u>	<u>Napa</u>	<u>Novato</u>	<u>SVCSD</u>	<u>SCWA</u>	<u>North Marin Water Dist.</u>	<u>Napa County</u>	<u>City of Petaluma</u>	<u>Marin Muni Water Dist.</u>	<u>American Canyon</u>	<u>Marin County</u>
7/1/2022	Beginning Balance	28,936.06	b	4,199.70	7,449.70	7,449.70	7,449.70	7,450.17	7,449.70	(2,550.30)	3,739.83	(11,851.07)	(1,851.07)	-
7/27/2022	Salary/Assn Chgs Applied	(173.71)	p a9	-	-	-	-	0.02	-	-	-	-	-	-
7/27/2022	Salary/Assn Chgs Applied	(345.92)	p a9	(24.59)	(45.36)	-	(45.36)	(45.35)	(24.59)	-	(45.36)	(45.36)	(45.36)	(24.59)
8/3/2022	Salary/Assn Chgs Applied	(1,227.85)	p a9	(87.29)	(161.00)	-	(161.00)	(160.98)	(87.29)	-	(161.00)	(161.00)	(161.00)	(87.29)
8/18/2022	Salary/Assn Chgs Applied	(6,081.87)	p a9	(432.36)	(797.46)	-	(797.46)	(797.49)	(432.36)	-	(797.46)	(797.46)	(797.46)	(432.36)
8/22/2022	Weir Technical Services SCWA_7-22	(1,040.00)	p w5	(73.93)	(136.37)	-	(136.37)	(136.36)	(73.93)	-	(136.37)	(136.37)	(136.37)	(73.93)
8/31/2022	Salary/Assn Chgs Applied	(2,726.18)	p a9	(193.80)	(357.46)	-	(357.46)	(357.48)	(193.80)	-	(357.46)	(357.46)	(357.46)	(193.80)
9/16/2023	Salary/Assn Chgs Applied	(1,834.98)	p a9	(130.45)	(240.61)	-	(240.61)	(240.58)	(130.45)	-	(240.61)	(240.61)	(240.61)	(130.45)
9/26/2022	Las Gallinas Deposit - Prior Year Payment	3,250.00	d	3,250.00	-	-	-	-	-	-	-	-	-	-
9/26/2022	Napa County Deposit - Prior Year Payment	10,000.00	d	-	-	-	-	-	-	10,000.00	-	-	-	-
9/26/2022	Marin Muni Water District - Prior Year Payment	10,000.00	d	-	-	-	-	-	-	-	-	10,000.00	-	-
9/30/2022	Salary/Assn Chgs Applied	(7,536.21)	p a9	(535.75)	(988.16)	-	(988.16)	(988.16)	(535.75)	-	(988.16)	(988.16)	(988.16)	(535.75)
10/14/2022	Weir Technical Services SCWA_8-22	(642.45)	p w5	(45.67)	(84.24)	-	(84.24)	(84.24)	(45.67)	-	(84.24)	(84.24)	(84.24)	(45.67)
10/14/2022	Weir Technical Services SCWA_8-22	(1,037.55)	p w6	(73.76)	(136.05)	-	(136.05)	(136.02)	(73.76)	-	(136.05)	(136.05)	(136.05)	(73.76)
10/17/2022	Salary/Assn Chgs Applied	(3,548.33)	p a9	(252.25)	(465.26)	-	(465.26)	(465.28)	(252.25)	-	(465.26)	(465.26)	(465.26)	(252.25)
10/26/2022	Salary/Assn Chgs Applied	(568.97)	p a9	(40.45)	(74.60)	-	(74.60)	(74.62)	(40.45)	-	(74.60)	(74.60)	(74.60)	(40.45)
11/10/2022	Salary/Assn Chgs Applied	(94.87)	p a9	(6.74)	(12.44)	-	(12.44)	(12.45)	(6.74)	-	(12.44)	(12.44)	(12.44)	(6.74)
11/23/2022	Salary/Assn Chgs Applied	(3,440.01)	p a9	(244.55)	(451.06)	-	(451.06)	(451.06)	(244.55)	-	(451.06)	(451.06)	(451.06)	(244.55)
11/28/2022	County Counsel	(423.00)	p a9	(30.07)	(55.46)	-	(55.46)	(55.49)	(30.07)	-	(55.46)	(55.46)	(55.46)	(30.07)
12/8/2022	Salary/Assn Chgs Applied	(1,162.73)	p a9	(82.66)	(152.46)	-	(152.46)	(152.45)	(82.66)	-	(152.46)	(152.46)	(152.46)	(82.66)
12/23/2022	Salary/Assn Chgs Applied	(1,061.03)	p a9	(75.43)	(139.12)	-	(139.12)	(139.14)	(75.43)	-	(139.12)	(139.12)	(139.12)	(75.43)
1/5/2023	Salary/Assn Chgs Applied	(161.09)	p a9	(11.45)	(21.12)	-	(21.12)	(21.14)	(11.45)	-	(21.12)	(21.12)	(21.12)	(11.45)
1/9/2023	Brown & Caldwell - 11466766	(9,057.63)	p bc2	-	-	-	-	-	-	-	-	-	-	-
1/19/2023	Salary/Assn Chgs Applied	(80.57)	p a9	(5.73)	(10.56)	-	(10.56)	(10.58)	(5.73)	-	(10.56)	(10.56)	(10.56)	(5.73)
2/2/2023	Salary/Assn Chgs Applied	(1,605.16)	p a9	(114.11)	(210.47)	-	(210.47)	(210.48)	(114.11)	-	(210.47)	(210.47)	(210.47)	(114.11)
2/16/2023	Salary/Assn Chgs Applied	(474.17)	p a9	(33.71)	(62.17)	-	(62.17)	(62.19)	(33.71)	-	(62.17)	(62.17)	(62.17)	(33.71)
				-	-	-	-	-	-	-	-	-	-	-
Current NBWRA Balance \$ 7,861.78				\$ 4,954.95	\$ 2,848.27	\$ 7,449.70	\$ 2,848.27	\$ 2,848.65	\$ 4,954.95	\$ 7,449.70	\$ (861.60)	\$ (6,452.50)	\$ (6,452.50)	\$ (2,494.75)
PENDING				-	-	-	-	-	-	-	-	-	-	-
Projected Balance \$ 7,861.78				\$ 4,954.95	\$ 2,848.27	\$ 7,449.70	\$ 2,848.27	\$ 2,848.65	\$ 4,954.95	\$ 7,449.70	\$ (861.60)	\$ (6,452.50)	\$ (6,452.50)	\$ (2,494.75)
Current NBWRA Reconciliation				Current NBWRA Joint Use Reconciliation by Entity										
Beginning Balance	28,936.06	b		4,199.70	7,449.70	7,449.70	7,449.70	7,450.17	7,449.70	(2,550.30)	3,739.83	(11,851.07)	(1,851.07)	-
Deposits	23,250.00	d		3,250.00	-	-	-	-	-	10,000.00	-	10,000.00	-	-
Interest Earnings	-	i		-	-	-	-	-	-	-	-	-	-	-
Payments	(44,324.28)	p		(2,494.75)	(4,601.43)	-	(4,601.43)	(4,601.52)	(2,494.75)	-	(4,601.43)	(4,601.43)	(4,601.43)	(2,494.75)
Total:	7,861.78			4,954.95	2,848.27	7,449.70	2,848.27	2,848.65	4,954.95	7,449.70	(861.60)	(6,452.50)	(6,452.50)	(2,494.75)

Current NBWRA Obligations						
<u>Vendor</u>	<u>Encumbrances</u>		<u>Paid to date</u>	<u>Adjustments</u>	<u>Balance</u>	<u>% Spent</u>
Program Mangement - (Weir : FY 21/22)	1,682.45	w5	1,682.45	-	-	100.00%
Program Mangement - (Weir : FY 22/23)	40,000.00	w6	1,037.55	-	38,962.45	
SCWA Administration - (SCWA : FY 22/23)	65,391.71	a9	32,546.65	-	32,845.06	49.77%
Additional Services - (Brown & Caldwell: FY 21/22)	39,000.00	bc2	9,057.63	-	29,942.37	23.22%
Total	146,247.87		43,286.73	-	62,961.14	29.60%

Item No. 9.c

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Interest
North Bay Water Reuse Authority
as of February 28, 2023

FY2013/2014

Period	Date Posted	Amount
Total		\$ 4,406.53

FY2014/2015

Period	Date Posted	Amount
Total		\$ 8,218.73

FY2015/2016

Period	Date Posted	Amount
Total		\$ 11,919.53

FY2016/2017

Period	Date Posted	Amount
Total		\$ 20,538.74

FY2017/2018

Period	Date Posted	Amount
Total		\$ 26,353.96

FY2018/2019

Period	Date Posted	Amount
Total		\$ 26,902.58

FY2019/2020

Period	Date Posted	Amount
Total		\$ 22,388.61

FY2020/2021

Period	Date Posted	Amount
Total		\$ 8,430.06

FY2021/2022

Period	Date Posted	Amount
Total		\$ 5,598.40

FY2022/2023

Period	Date Posted	Amount
1st Quarter	10/12/2022	\$ 2,153.11
2nd Quarter	1/11/2023	\$ 3,151.31
3rd Quarter		
4th Quarter		
Total		\$ 5,304.42

Balance

	Amount
	\$ 140,061.56
Transfer to JU	\$ (60,000.00)
Transfer to JU FY21/22	\$ (10,000.00)
Transfer to JU FY21/22	\$ (35,000.00)
Transfer to JU FY21/22	\$ (14,200.00)
Total	\$ 20,861.56

North Bay Water Reuse Authority
 Consultant Cost Tracking
 Fiscal Year 2022/23

March 24, 2023

	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	FY2022/23 Total	Approved FY2022/23	Prior FY Carryover	Total Available	Amount Remaining
Resilience Arena for Continued Recycled Water Support													
Brown & Caldwell	-			-	-	-	-	-	-	205,000		205,000	205,000
Sonoma Water		961	698	372		98	161	204	2,494	4,000	74,148	78,148	75,654
Total	-	961	698	372	-	98	161	204	2,494	209,000	-	205,000	205,000

Resilience Arena for Drought Contingency Plan													
Brown & Caldwell							-	-	-	52,000		52,000	52,000
Sonoma Water		961	698	372		98	161	204	2,494	4,000	-	4,000	1,506
Total	-	961	698	372	-	98	161	204		56,000	-	56,000	53,506

Resilience Arena for Sea Level Rise Adaptation													
Brown & Caldwell									-	121,000		121,000	121,000
Sonoma Water		961	698	372		98	161	204	2,494	4,000		4,000	1,506
Total	-	961	698	372	-	98	161	204	2,494	125,000	-	125,000	122,506

Joint Use													
Program Management - Weir (two-year agreement) (-\$8,317 carryover)	1,040	1,680							2,720	40,000		40,000	37,280
Brown & Caldwell									-	39,000		39,000	39,000
SCWA Administration (likely over two fiscal years)									-	65,500		65,500	65,500
Total										144,500		144,500	141,780

Total Costs													
Brown & Caldwell					9,058	3,080	2,713		14,850	417,000	-	417,000	402,150
SCWA Administration	-	961	698	372	-	98	161	204	2,494	77,500	74,148	151,648	149,154
Program Management - Weir	1,040	1,680	-	-	-	-	-	-	2,720	40,000	-	40,000	28,963
Total Costs for NBWRA	1,040	2,641	698	372	9,058	3,178	2,874	204	20,065	534,500	74,148	608,648	506,118

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Agenda Explanation
North Bay Water Reuse Authority
Board of Directors
March 27, 2023

ITEM NO. 10 APPROVAL OF THE AMENDED SCOPE OF WORK FOR THE SEA LEVEL RISE ADAPTATION VISION

Action Requested

As recommended by the TAC, it is recommended that the Board adopt the Amended Scope of Work for the Sea Level Rise Adaptation Vision with no change in the original cost of \$125,000.

Summary

Please refer to Agenda Item Nos. 7.a.4 and 7.a.5 for the background, discussion, and recommendation from the TAC on this item. The final amended scope for the Sea Level Rise Adaptation Vision is attached for the Board's information. The redline version is included in Item No. 7.a.4. Also attached is the proposed FY2022/23 Budget and Cost Allocation, which has already been approved by the Board.

Attachments

1. Amended Scope of Work – Sea Level Rise Adaptation Vision
2. FY2022/23 Proposed Budget and Cost Allocations.

Amended Scope of Work – Sea Level Rise Adaptation Vision

The Board Approved scope of work identifies \$125,000 for a SLR Adaptation Plan, focused on specific agencies that were interested in participating, as opposed to the entire NBWRA service area. At the time of Board Approval, agencies that agreed to participate include, LGVSD, SCWA, SVCSD and the City of Petaluma. At the time of Board Approval, Marin County was a potential participant.

Subsequent discussions held with LGVSD and Marin County (both Public Works and Parks) indicate interest in participation, but requested that the scope of work be amended for the Gallinas Watershed area to focus on establishing a collective vision for sea level rise adaptation, rather than focusing on identification of specific projects for implementation. In this way, the Adaptation Vision can provide a framework for member agencies in the area to develop and implement individual projects in the context of a common vision. To that end, we've adjusted our scope to focus on participating member agency collaboration to establish a common vision that can then be articulated to other stakeholders. As part of this scope revision process, SVCSD elected to not participate in this process, citing overlap with the recently completed Sonoma Water Resiliency Program.

The amended scope of work is slightly modified to addresses these comments, and is intended to accomplish the following:

- 1) Development of Adaptation Vision
 - a. Identify overarching objectives that can apply to participating NBWRA facilities and study areas.
 - b. Identify Specific Sub-Objectives for each facility and their associated study area (Gallinas Watershed, Petaluma River).
- 2) Review and Integrate Work to Date
 - a. Articulation of a No-Adaptation Scenario
 - b. Vulnerabilities of each Facility
 - c. Identification of Adaptation Strategies
- 3) Provide Road Map for Adaptation
 - a. Identification of adaptation strategies, potential projects, next steps

Task 1 – Project Management

The Consultant will provide monthly progress reports via email to the Project Manager summarizing project status, identifying outstanding data needs, and noting challenges or risks that may impact budget or schedule. Include summaries of meetings conducted, including meeting attendees and key decisions and outcomes. Prepare monthly invoices and track schedule and progress of project.

Task 1 Deliverables

- Monthly progress reports and invoices.

Task 1 Assumptions

- Up to 2 months of PM services and monthly progress reports.
- It is assumed that any potential meetings will be held by videoconference.

Task 2. Participating Agency Outreach and Coordination

ESA will work with participating Member Agencies to review and present existing information regarding sea level rise vulnerability, create a common understanding among agencies as to vulnerability, identify individual and collaborative objectives, and identify potential strategies available. This discussion will begin to frame available adaptation strategies that can be integrated into an Adaptation Vision.

Deliverables:

- Up to 1 video conference with each participating agency, and 1 collective video conference (**Collaborative Meeting 1**). Our scope includes facilitation, technical content development/presentation, and action items.

Task 3. Framework Development:

This task will develop the framework in which the participating member agencies will review potential shoreline adaptation strategies and develop an adaptation vision.

- Based on discussions in Task 2, and other successful SLR planning efforts, ESA will draft a risk-informed decision-support framework that includes an initial vision, goals, and objectives of adaptation planning.
- The framework will include recommended preliminary screening/and evaluation criteria that can be modified with participating agency input as appropriate. We will start with standard criteria often used in flood risk management (such as frequency of flooding, reduced damages, etc.), and we may add up to 8 participating agency identified criteria such as i) the types of permits needed, ii) potential acquisition issues for various concepts, and/or iii) those criteria developed in the Adapting to Rising Tides program, to support decision-making and better reflect unique interests and value of NBWRA participating agencies.
- ESA will facilitate a collective agency discussion (**Collaborative Meeting 2**) to discuss the framework and criteria, solicit input, and revise as necessary.

Deliverables: Draft and final Framework TM. Assumes one rounds of ESA revision and consolidated comments.

Task 4. Risk and Vulnerability TM

ESA will leverage existing information to identify key risks and vulnerabilities to facilities managed by the participating member agencies. The key risks and vulnerabilities identified in this task will directly inform the set of adaptation concepts and strategies developed in Task 5.

- a. ESA will review existing studies and synthesize the primary concerns identified therein, studies include: Marin County Hazard Management Plan, BayWave vulnerability assessment; Sonoma Water Resiliency Plan; LGVSD Vulnerability Study, Marin County Flood Control District planning efforts in the Gallinas Watershed, the latest FEMA FIRM mapping, BCDC Guidance; and other studies. *Our focus will be applying work completed to date to adaptation strategies that can inform a list of projects for funding. ESA will not generate any new analyses or data in this effort.*
- b. ESA will then identify key risks and vulnerabilities in the project area. This includes highlighting where risks may be the greatest or most urgent, and whether there any areas or risks which would be considered intolerable. They will use this information to identify key or priority areas.
- c. ESA will identify critical information gaps that will be essential to more fully understanding risks. Recommendations for filling those gaps will be provided in Task 6, Road Map and preliminary cost estimates associated with the recommendations.
- d. ESA will submit the Draft Vulnerability TM and convene a video conference (**Collaborative Meeting 3**) with participating agencies to review and solicit input and comment.

Deliverables:

- e. Draft and Final Risk and Vulnerability TM. Assumes one round of review with one set of consolidated comments from NBWRA. Memo is intended for an educated lay-person audience, i.e., memo will assume readers understand what SLR is, its causes, etc. and will focus on highlighting key risks that will be addressed by adaptation concepts identified in subsequent tasks.

Task 5. Develop Adaptation Vision

ESA will identify no more than 3 concepts to reduce the risks and vulnerabilities identified in Task 4 above. Adaptation concepts will include a range of structural and nonstructural options, and at least one nature-based or multi-benefit strategy.

- a. ESA will then use a matrix to screen/evaluate the adaptation concepts with the screening criteria established in Task 3. This screening/evaluation will consider how well each of the concepts perform compared to the criteria and whether or how they work toward the established goals.
- b. ESA will prepare a draft Adaptation Vision document, formatted as an executive summary. This include vision, objectives, background, participating agencies, and will be formatted for ease of uptake and understanding.
- c. ESA will present draft adaptation vision to participating agencies (**Collaborative Meeting 4**)

Deliverables: Draft, and Final Adaptation Vision TM. Draft and Final Adaptation Vision Executive Summary describing the adaptation concepts and the results of the evaluation process.

Task 6. Next Steps Strategy and Road Map

ESA will develop a Road Map TM that identifies the next steps for the NBWRA to advance shoreline adaptation. The objective of both the Adaptation Vision Executive Summary and Road Map will be to provide a unifying framework for individual agencies to proceed with project development and funding steps with a common set of objectives for SLR Adaptation. Where appropriate, the Road Map will recommend sequencing, and may include items like:

- a. Key studies gaps that must be filled, and why
 - b. Hydraulic and hydrologic modeling that may be needed to better evaluate how adaptation concepts reduce flood risks.
 - c. Additional studies or analysis needed to refine the adaptation concepts evaluation, i.e., economics/benefit-cost analysis, cost estimates of adaptation concepts
 - d. Key Projects/Project List for funding programs
 - e. Anticipated permitting, rights of way, policy challenges that may need to be addressed, as identified through screening in task 5b.
 - f. Potential land use changes or zoning updates that may be required
 - g. List of additional agencies/stakeholders likely needed to advance the effort and/or fund, permit, construct, implement
 - h. Sequencing of the steps with rough time frame
 - i. ESA will convene **Collaborative Meeting 5** to review the draft Road Map TM with participating agencies.
 - j. Final presentation to NBWRA Board
- ESA will develop a final summary presentation to identify the key messages for the NBWRA Member Agencies, likely including an overview of the project process, the key findings, and next steps. The powerpoint can be formatted for strategic outreach to key stakeholders as a next step.

Deliverables:

- a.** Draft and final Next Steps Strategy and Road Map TM
- b.** Final summary presentation (draft and final)

Task 7. OPTIONAL TASK: Advance and illustrate concepts for further consideration

If appropriate based on agency input, up to two adaptation concepts will be identified to illustrate and advance for future consideration. Illustrating the adaptation concepts will give stakeholders and Member Agencies a better vision for what future adaptation concepts could look like on the ground with context which can offer clarity, generate enthusiasm for concepts, and dispel fears about the unknowns. It is assumed that illustrations will demonstrate concepts in context, but will not be detailed enough to support feasibility or engineering analyses.

- a. ESA will work with participating Member Agencies to select 2 top concepts for advancement that consider the results of the screening evaluation.

Item No. 10.1

- b. Create graphic renderings of the 2 selected adaptation concepts. *note, this is the more labor intensive of these two sub-tasks—anticipated that 6a can be done rather efficiently. The number of renderings will be determined based on available resources and member agency interest.
- c. As appropriate, ESA will develop 1 page project summary sheets and background information to support funding applications. The number of project sheets will be determined based on available resources and member agency interest.

Deliverables: Draft and final illustrations of two selected adaptation concepts.

Budget.

NBWRA Focused SLR ESA Labor Detail and Expense Summary																										
Employee Names		2021 Employee Billing Rates																								
Labor Category		Senior Director III	Senior Director II	Senior Director I	Director III	Director II	Director I	Managing Associate III	Managing Associate II	Managing Associate I	Senior Associate III	Senior Associate II	Senior Associate I	Associate III	Associate II	Associate I	Subtotal	Project Technician III	Project Technician II	Project Technician I	Subtotal	Total Hours	Labor Price			
		Task #	Task Name/Description	\$ 325	\$ 300	\$ 275	\$ 260	\$ 245	\$ 225	\$ 220	\$ 205	\$ 190	\$ 185	\$ 170	\$ 160	\$ 145	\$ 135	\$ 115		\$ 130	\$ 110	\$ 90				
1.0	Project Management		16											32	8			\$ 5,960				\$ -	24.00	\$ 5,960		
2.0	Strategic Outreach		16											32	8			\$ 11,080				\$ -	56.00	\$ 11,080		
3.0	Decision Making Framework		16											32	8			\$ 11,080				\$ -	56.00	\$ 11,080		
4.0	Vulnerability		8			32								32	8			\$ 16,520				\$ -	80.00	\$ 16,520		
5.0	Adaptation Strategies		8			32								80	8			\$ 34,300				\$ -	128.00	\$ 24,200		
6.0	Advance Concepts		16			16								40	8			\$ 16,280				\$ -	80.00	\$ 16,280		
7.0	Next Steps Strategy		8											8	8			\$ 3,560				\$ -	16.00	\$ 3,560		
	Total Hours		-	88	-	-	80	-	-	-	-	-	-	216	56	-	-	449	-	-	-	0	440			
Total Labor Costs		\$ -	\$ 26,400	\$ -	\$ -	\$ 19,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 34,560	\$ 8,120	\$ -	\$ -	\$ 88,640	\$ -	\$ -	\$ -	\$ -		\$ 88,680		
Percent of Effort - Labor Hours Only		0.0%	20.0%	0.0%	0.0%	18.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.1%	12.7%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	0.0%	100.0%			
Percent of Effort - Total Project Cost		0.0%	22.9%	0.0%	0.0%	17.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.9%	7.0%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%		76.8%			
																						ESA Labor Cost				\$ 88,680
																						Labor Cost Communication Fee		3%		\$ 2,660
																						ESA Non-Labor Expenses				
																						Reimbursable Expenses (see Attachment A for detail)				\$ 9,134
																						ESA Equipment Usage (see Attachment A for detail)				\$ -
																						Subtotal ESA Non-Labor Expenses				\$ 9,134
																						Subconsultant Costs (see Attachment B for detail)				\$ 15,000
PROJECT TOTAL																							\$ 115,474			

2022/23 Proposed Budget Allocations
February 2, 2023

Resilience Arena for Continued Recycled Water Support		Amount											
			LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
Prorated Percent from Feasibility Study after removing associate members			0.000%	11.925%	0.000%	10.832%	13.705%	0.000%	0.000%	32.596%	13.923%	17.020%	0.000%
Brown & Caldwell	\$ 205,000	\$ -	\$ 24,446	\$ -	\$ 22,205	\$ 28,095	\$ -	\$ -	\$ -	\$ 66,822	\$ 28,541	\$ 34,891	\$ -
Sonoma Water	\$ 4,000	\$ -	\$ 477	\$ -	\$ 433	\$ 548	\$ -	\$ -	\$ -	\$ 1,304	\$ 557	\$ 681	\$ -
Total	\$ 209,000	\$ -	\$ 24,923	\$ -	\$ 22,638	\$ 28,643	\$ -	\$ -	\$ -	\$ 68,126	\$ 29,098	\$ 35,572	\$ -

Resilience Arena for Drought Contingency Plan													
		LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County	
Shared equally by participating agencies		16.667%	0.000%	0.000%	16.667%	16.667%	16.667%	0.000%	16.667%	0.000%	0.000%	16.667%	
Brown & Caldwell	\$ 52,000	\$ 8,667	\$ -	\$ -	\$ 8,667	\$ 8,667	\$ 8,667	\$ -	\$ 8,667	\$ -	\$ -	\$ 8,667	
Sonoma Water	\$ 4,000	\$ 667	\$ -	\$ -	\$ 667	\$ 667	\$ 667	\$ -	\$ 667	\$ -	\$ -	\$ 667	
Total	\$ 56,000	\$ 9,333	\$ -	\$ -	\$ 9,333	\$ 9,333	\$ 9,333	\$ -	\$ 9,333	\$ -	\$ -	\$ 9,333	

Resilience Arena for Sea Level Rise Adaptation												
		LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
Shared equally by participating agencies Marin County unknown at this time		25.000%				25.000%			25.000%			25.000%
Brown & Caldwell	\$ 121,000	\$ 30,250	\$ -	\$ -	\$ -	\$ 30,250	\$ -	\$ -	\$ 30,250	\$ -	\$ -	\$ 30,250
Sonoma Water	\$ 4,000	\$ 1,000	\$ -	\$ -	\$ -	\$ 1,000	\$ -	\$ -	\$ 1,000	\$ -	\$ -	\$ 1,000
Total	\$ 125,000	\$ 31,250	\$ -	\$ -	\$ -	\$ 31,250	\$ -	\$ -	\$ 31,250	\$ -	\$ -	\$ 31,250

Joint Use												
		LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
Shared equally by Phase 2 agencies with \$7,500 contribution from LGVSD, NMWD, and Marin		7.109%	13.112%		13.112%	13.112%	7.109%		13.112%	13.112%	13.112%	7.109%
Program Management - Weir (two year agreement)	\$ 40,000	\$ 2,844	\$ 5,245	\$ -	\$ 5,245	\$ 5,245	\$ 2,844	\$ -	\$ 5,245	\$ 5,245	\$ 5,245	\$ 2,844
SCWA Administration (likely over two fiscal years)	\$ 65,500	\$ 4,656	\$ 8,588	\$ -	\$ 8,588	\$ 8,588	\$ 4,656	\$ -	\$ 8,588	\$ 8,588	\$ 8,588	\$ 4,656
Total	\$ 105,500	\$ 7,500	\$ 13,833	\$ -	\$ 13,833	\$ 13,833	\$ 7,500	\$ -	\$ 13,833	\$ 13,833	\$ 13,833	\$ 7,500

Summary per Agency												
Agency		LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
Total	\$ 495,500	\$ 48,083	\$ 38,757	\$ -	\$ 45,805	\$ 83,060	\$ 16,833	\$ -	\$ 122,542	\$ 42,932	\$ 49,405	\$ 48,083
Percent of Total Projects		9.70%	7.82%	0.00%	9.24%	16.76%	3.40%	0.00%	24.73%	8.66%	9.97%	9.70%

Associate Members

Marin County. LGVS, Novato San, NMWD, Napa County @ \$5,000 each

\$25,000

Total Billable \$ 520,500

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Agenda Explanation
 North Bay Water Reuse Authority
 Board of Directors
 March 27, 2023

ITEM NO. 11 STATUS OF PHASE 1 RECONCILIATION AND CLOSEOUT ACTIVITIES

Action Requested

None at this time

Summary

Phase 1 projects received a \$25 million federal authorization by Congress in March 2009. USBR awarded the funds to NBWRA via two federal programs.

The first \$7.3M via the American Recovery and Reinvestment Act (ARRA). The ARRA projects and funding agreement were completed and closed out in 2012.

The remaining funds under the authorization were awarded to NBWRA via the Title XVI program between 2010 and 2021. A final closeout package was submitted to USBR on February 16, 2022. This package included a final reimbursement request, Federal Financial Report, Final Project Report, Project Descriptions, and Maps and Photos for the 12 sub-projects that received funding which are listed below:

1. Novato South Service Area Recycled Water Project and Treatment Plant Expansion
(Las Gallinas Valley Sanitary District/Marin Municipal Water District)
2. Novato South Service Area Hamilton Field (Novato South) Phase 1a
(North Marin Water District/Las Gallinas Valley Sanitary District)
3. Novato South Service Area Hamilton Field (Novato South) Phase 1b
(North Marin Water District/Las Gallinas Valley Sanitary District)
4. Novato South Service Area Hamilton Field (Novato South) Phase 2
(North Marin Water District/Las Gallinas Valley Sanitary District)
5. Novato Central Service Area Pipeline Distribution Project and Norman Tank Project
(North Marin Water District)
6. Novato Central Service Area Recycled Water Facility Expansion
(Novato Sanitary District)
7. Novato North Service Area Recycled Water Treatment Facility Tertiary Upgrade, Pipelines, Booster Pump and Storage Tank
(North Marin Water District and Novato Sanitary District)

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8. Milliken-Sarco-Tulocay (MST) Recycled Water Pipeline Expansion, Treatment Capacity Increase, and Pump Station Modifications Project
(Napa Sanitation District)
9. Sonoma Valley Wastewater Treatment Plant Improvement Project (Pumping and Piping Upgrades)
(Sonoma Valley County Sanitation District)
10. Sonoma Valley 5th Street East Recycled Water Pipeline Project
(Sonoma Valley County Sanitation District)
11. Sonoma Valley McGill Recycled Water Pipeline Project
(Sonoma Valley County Sanitation District)
12. Napa Salt Marsh Restoration Pipeline Project
(Sonoma Valley County Sanitation District)

The final reimbursement request, which was a part of the final closeout package, was approved by USBR on March 14, 2022. Sonoma Water issued checks to partners who had eligible expenses on our final reimbursement request shortly thereafter.

In February 2023, Sonoma Water was notified by USBR that our Phase 1 project was officially closed. Sonoma Water is working on final Phase 1 administrative reconciliation and will provide a final accounting of costs by the end of this fiscal year

Additional updates will be provided at the Board meeting.

Recommendation

None at this time.

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**ITEM NO. 12 STATUS OF PHASE 2 AND FINANCIAL CAPABILITY ANALYSIS
REPORT UPDATE**

Action Requested

None at this time.

Summary

Rene Guillen, Brown & Caldwell, will provide an update on the status of Phase 2 and its associated projects.

Financial Capability Analysis Report (FCR) Update

Kennedy Jenks performed a financial capability analysis following the completion of the NBWRP Phase 2 Feasibility Study in June 2017. The purpose of the Financial Capability Analysis is to demonstrate to the US Bureau of Reclamation that the Member Agencies participating in Phase 2, as project sponsors, have the financial capability to fund the non-Federal portion of construction costs and all necessary project operation, maintenance and replacement costs for the Phase 2 projects. This FCR provides the information necessary to analyze financial capability, as outlined in Reclamation Standards and Directive WTR 11-02 (revised August 2015).

The 2019 Draft FCR was not submitted to USBR due to challenges procuring Title XVI funding. Since that time, the NBWRP Phase 2 project list was updated and a revised Phase 2 Feasibility Study was completed in May 2021. Kennedy Jenks will be updating the 2019 Draft Phase 2 FCR to reflect the updated project list from the May 2021 NBWRP Phase 2 Feasibility Study and the updated financial statements for all NBWRP agencies with a Phase 2 project. This agenda item and the attached presentation will provide an overview of the financial capability analysis approach and the next steps to request information from the agencies.

We plan to send out a Request for Information to the Phase 2 participating agencies after this meeting.

Recommendation

None at this time. This is an information item only.

Attachment

Financial Capability Analysis Report Update.

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Financial Capability Analysis Report (FCR) Update

Purpose – To demonstrate to the USBR that each participating agency has the financial capability to fund the non-Federal portion of construction costs and all necessary project operation, maintenance, and replacement costs for the NBWRP Phase 2 Title XVI Feasibility Study Project

- 💧 **Phase 1 FCR** – submitted in 2009; covered all Phase 1 Projects
- 💧 **Phase 2 FCR** – updated to follow latest USBR guidance (WTR 11-02) and include all NBWRP agencies with Phase 2 Projects
 - NBWRP Phase 2 Feasibility Study completed in Jun 2017
 - Draft FCR completed in 2019 but not submitted to USBR due to challenges procuring Title XVI.
- 💧 **Phase 2 FCR Update** – 2023 effort is being initiated
 - NBWRP Phase 2 Feasibility Study was revised in May 2021 (updated project list)
 - Update the 2019 Draft FCR to reflect the updated Phase 2 project list
 - Update financial analysis based on updated financial statements for all NBWRP agencies with a Phase 2 project
- 💧 **Grant Applications**
 - Once sponsor is assessed as financially capable, the FCR will be used for the basis for all Phase 2 project grant applications

Financial Capability Analysis Approach

Two-step Approach

Primary Analysis

- Bond Rating/Issuer Credit Rating
- Debt Service Coverage Ratio

Secondary Analysis

- Socio-economic Indicators of Project Region
- Water Service Affordability
- Rate Comparison
- Rate Shock

Financial Capability Report

Current Status

- 2019 Draft FCR is based on old project list and 2015 - 2017 Financial Statements

Next Steps

- Follow up with a Request for Information to all NBWRP Agencies with a Phase 2 project
- RFI is based on a standard list of items that the USBR requires to be include for their review (e.g. financial statements, credit/bond ratings, cost of water, source of revenues for funding, willingness to pay)

Anticipated Schedule for Completion (TBD)

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ITEM NO. 13 ITEMS FOR THE NEXT AGENDA

Action Requested

None at this time.

Summary

Items for the next Agenda include regular reports, Report and Recommendations from the TAC, Phase 1 Status Report and Closeout, Phase 2 Status Report, progress reports on the FY2022/23 Resilience Arena Projects, and a proposed budget for FY2023/24. The next meeting is scheduled for April 24, 2023.

Recommendation

None at this time.