

**NORTH BAY WATER REUSE AUTHORITY  
TECHNICAL ADVISORY COMMITTEE**

Thursday, February 6, 2024

Agenda

2:00 PM

Zoom Meeting: Microsoft Teams Meeting;

<https://esassoc.zoom.us/j/9256551082?pwd=cnU3M2h5aXg2a1BBeTBZb1BJY25BZz09&omn=83475053677&from=addon>

	1.		Call to Order and Self Introductions
	2.	Action	Approval of Agenda
	3.		Public Comments
<b>Pages 2-4</b>	4.	Action	TAC Meeting Minutes of December 5, 2024
<b>Page – 5</b>	5.	Discussion	Status of Phase 1 Reconciliation and Closeout Activities
<b>Pages 6-13</b>	6.	Discussion	Resilience Arena Status Reports
<b>Page 14</b>	7.	Discussion	Status of Consultant Agreements for FY2024/25
<b>Page 15</b>	8.	Discussion	Brainstorming Session – Funding Overview for NBWRA
<b>Page 16</b>	9.	Discussion	Schedule for 2025/2026 Budget Development: Next Board Meeting, April 28, 2025
	10.	Information	Next TAC Meeting, March 6, 2025
	11.		Adjournment

**North Bay Water Reuse Authority  
Technical Advisory Committee  
Zoom Meeting Minutes  
December 5, 2024  
DRAFT**

**Approved** \_\_\_\_\_

**1. Call to Order and Self Introductions**

Chair Kevin Booker called the Technical Advisory Committee (TAC) meeting to order at 2:03 p.m. on Thursday, December 5, 2024. The meeting was a Zoom meeting only and attendees participated via the following link: <https://us02web.zoom.us/j/89055428051>.

**Committee Members Present**

Kevin Booker, Chair	Sonoma Water
Judd Goodman	Marin County
Oriana Hart	City of Petaluma
Curtis Paxton	Las Gallinas Valley Sanitary District
Paul Sellier	Marin Water
Chelsea Thompson	City of Petaluma

**Consultant Team**

Chuck Weir, Program Manager	Weir Technical Services
Rene Guillen	Brown & Caldwell
Jim O'Toole	ESA
Mike Savage	Data Instincts
Dawn Taffler	Kennedy Jenks

**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 November 7, 2024**

A motion to approve the November 7, 2024 minutes was unanimously approved.

**5. Status of Phase 1 Reconciliation and Closeout Activities**

Chair Booker discussed the Final Report for the Phase 1 Reconciliation and Closeout. The report provides the final allocation of Phase 1 costs as well as the final grand administration costs for the Phase 1 participating agencies. In the summary table, values in parentheses are amounts due and values without parentheses are the amounts to be reimbursed to the agencies. The TAC

reviewed and acknowledged that the report would be presented to the Board at the December 16, 2024 meeting. Board approval of the final report would also authorize Sonoma Water to issue invoices and refunds to the Phase 1 member agencies.

## **6. Resilience Arena Status Reports**

Rene Guillen gave an update on the Recycled Water Resilience Arena. Discussions have been ongoing with USBR in an effort to add projects for Petaluma to allow them to receive additional federal funding. Other Phase 2 agencies could also add projects. Adding projects would require modifying the Feasibility Study (FS). Additional funding would be required to update the FS. The TAC discussed the possibility of a two step process to update the FS. The first would be to update Petaluma's projects to allow them to get funding sooner rather than later. The second step would be to add projects from other member agencies. Chelsea Thompson noted that Petaluma may be able to use funds for the FS update and the would be discussed later today. It is possible that Petaluma would contract directly with Brown & Caldwell for this effort.

Jim O'Toole provided an update on the NEPA process, including an update on the USFW biological opinion. A concurrence letter to the USFWS Biological Opinion has been issued by NOAA Fisheries. This is the last approval needed by Reclamation to complete their NEPA process and issue a FONSI, which is anticipated by the end of the calendar year.

Dawn Taffler gave an update on the Financial Capability Report. Questions from USBR have been addressed. Final acceptance from USBR is expected soon.

Rene Guillen provided an update on the Drought Contingency resilience arena project. They will use the Sonoma Water report as a template. They expect to have an outline in the next 2-3 weeks.

Jim O'Toole discussed the Sea Level Rise Resilience Arena. They are working on the vision technical memo. There has been positive feedback on the FEMA BRIC application for funding. It could provide \$187,000 in federal funding with \$62,000 local funding. The Ocean Policy application will likely be submitted in March 2025. Consultant Team plans to hold one more workshop before going to the Board for possible action.

## **7. Status of Consultant Agreements for FY2024/25**

Chair Booker reported that the agreements with Brown and Caldwell (B&C) and ESA for Jim O'Toole's services as Program Manager should be signed in the next two weeks. The B&C agreement will likely go to Sonoma Water's Board in March 2025.

## **8. Status of Program Manager Replacement Process**

This item was discussed in the previous agenda item.

## **9. Brainstorming Session = Future Projects for NBWRA**

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Following up on the 2021 Survey, the TAC briefly discussed the following potential future projects:

- Additional recycled water projects
- Drought contingency projects
- Sea Level Rise projects
- Potable reuse
- Nutrient removal in response to the new watershed permit
- Stormwater management – flood control and water supply enhancement
- Projects to address PFAS/PFOS requirements
- Other Items

The item that received the most attention was a possible regional potable reuse pilot project, similar to efforts in Santa Clara and Alameda Counties. The TAC agreed to continue discussions prior to presenting it more formally to the Board.

The TAC also discussed the One Water approach as well as a possible summary of what funding opportunities exist that might fit within the NBWRA's existing structure.

### **9. Plans for Next Board Meeting**

A Board meeting is scheduled for September 30, 2024 at 9:30 a.m. via Zoom. The Board will be updated on the following:

1. Status of Phase 1 closeout and reconciliation.
2. Status of Phase 2 projects.
3. Status of the Resilience Area projects
4. Financial Report
5. Status of consultant agreements for FY2024/25
6. Status of Agreement with ESA for Jim O'Toole's services as Program Manager
7. Brief report on TAC Brainstorming
8. Other Items

### **10. Next Meeting**

The next meeting is scheduled for January 9, 2025. The TAC agreed to continue with the First Thursday of every month schedule at 2:00 p.m. in 2025. Jim O'Toole will set up the schedule and meetings via either Zoom or Teams.

### **11. Adjournment**

There being no further business, Chair Booker adjourned the meeting was adjourned at 3:05 p.m.

**ITEM NO. 5 STATUS OF PHASE 1 RECONCILIATION AND CLOSEOUT  
ACTIVITIES**

**Action Requested**

None at this time.

**Summary**

The Final Draft Phase I Reconciliation and Closeout Report was approved by the Board at the December 16, 2024 meeting. Sonoma Water will begin issuing invoices to agencies that owe, and when payment is received, will issue reimbursements to agencies. Closeout Process should be completed by Q2, contingent upon Member Agency payment.

**Recommendation**

None Required.

**Attachments**

None.

## **ITEM NO. 6 RESILIENCE ARENA STATUS REPORTS**

### **Action Requested**

None at this time.

### **Summary**

The Consultant Team will provide an update on the status of the Resilience Arena Projects.

### **Resiliency Arena 1: Recycled Water Support**

- **Grant Administration**
  - Based on several discussions with Reclamation, the project team decided not to move forward with revising the feasibility study for purposes of incorporating new/revised projects into the grant agreement. Instead, Petaluma determined that they would be able to utilize the grant funding for projects currently identified in the feasibility study. Draft grant agreement docs were submitted to USBR in January and we are currently in coordination with USBR to execute the grant agreement in the next few months.
  
- **NEPA Status: Complete**
  - Environmental Assessment/FONSI
    - FONSI has been Filed by Reclamation
  - Draft Biological Assessment – Biological Opinion
    - Biological Opinion has been issued by USFWS.
    - NOAA Fisheries Letter of Concurrence issued.
  - Cultural Resources Section 106 Addendum
    - SHPO Concurrence Letter Issued
  
- **Financial Capability Analysis Report Status**
  - The Financial Capability Analysis (FCA) Report has been submitted to Reclamation for review and approval on September 2, 2024.
  - Reclamation review is still ongoing – they reached out with questions about Sonoma Water’s bond rating on October 17, 2024 and we provided clarification.
  
- **Next Steps:**
  - Plan to respond to questions or comments Reclamation might have on the FCA Report.
  
- **Timeline:**
  - Reclamation is expected to provide a draft report summarizing their review and findings of the FCA Report before the end of the year.

### **Resiliency Arena 3: Drought Contingency Planning**

- **Project Status**

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- The Consultant team has continued to review the Drought Resiliency Analysis TM that was prepared as part of the Sonoma Water Regional Water Supply Resiliency Study (Study).
- The team developed a crosswalk that shows how the Drought Resiliency Analysis TM compares to the guidance included in Reclamation's Drought Response Framework.
- B&C will provide an update on some of the insights they have gathered as part of the gap analysis we are currently tasked with doing.
- **Next Steps:**
  - Gather any additional documents and/or analysis that were developed for the Study and are relevant to the DCP development.
  - Work on pulling together a drought contingency document summary that highlights how existing Resiliency Study meets Reclamation's Drought Response Framework. This document summary will also be used to help augment areas that may require a bit more content to satisfy Reclamation requirements.
- **Timeline:** Team would like to confirm approach on the drought contingency document summary with the participating agencies and begin work on pulling together an outline of the document over the next couple of weeks.

#### **Resiliency Arena 4: Sea Level Rise Adaptation**

- **Project Status**
  - City of Petaluma has requested expansion of study area to include areas upstream of US 101. ESA has generated scope modification of \$30,000 to include additional areas (scope of work attached).
  - Two Funding Opportunities/Applications:
    - FEMA BRIC Grant Notice of Intent (NOI) has been submitted for next phase of SLR planning.
      - Review of FEMA Requirements indicates COI issues.
    - Ocean Policy Council SB-1 Application
      - This is a rolling planning grant program for community based planning; Its next application round is due in April.
      - This funding program is focused on community outreach, a next logical step following our NBWRA SLR Visioning Process.
      - ESA will present SLR Vision Work to Las Gallinas Board on March 3.
- **Next Steps:**
  - Update TM2 and TM 3 to include revised PET Study Area.
  - Adaptation Strategy Memo: Adaptation Vision Document 1
- **Timeline:** The target completion date for the Draft Vision Document has been revised to April 2025.

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**Recommendation**

TAC Approve Modification of NBWRA SLR Vision Scope of Work to increase \$30,408 to include expanded Petaluma Study Area. Petaluma will be directly billed for this scope increase.

**Attachment**

Scope of Work Modification



# proposal

date January 31, 2025  
to NBWRA Technical Advisory Committee (TAC)  
Rene Guillen, Brown and Caldwell  
Oriana Hart, City of Petaluma  
cc  
from Eddie Davita, ESA  
subject

## Introduction

ESA has prepared this proposal to expand the City of Petaluma study area of the North Bay Water Reuse Authority's (NBWRA) Sea-level Rise (SLR) Vulnerability and Adaptation Visioning project currently in progress. The original scope of work evaluated SLR vulnerabilities and developed initial adaptation visions for two study areas: 1) The tidally-influenced portions of Miller Creek/Las Gallinas Creek within the Las Gallinas Valley Sanitary District service area in Marin County, and 2) The Petaluma River between the Ellis Creek Wastewater Treatment Plan and the Highway 101 bridge in Sonoma County.

Under this proposal the Petaluma River study area would be expanded to include the tidally-influenced segments of the Petaluma River upstream (north/west) of the Highway 101 bridge, extending to the head of tide located near the confluence with Lynch Creek.

This proposal expands the scope of several tasks under the existing contract, as described below:

## Scope of Work

(Note that task numbers align with task numbering from base scope of work).

### Task 1 – Project Management

The Task 1 scope will be expanded as follows:

ESA will perform additional regular project management activities to accommodate the management of this expanded scope of work, including: contract administration, budget tracking, and monthly-invoicing.

This scope of work also includes an allowance for up to two additional meetings with City of Petaluma Staff to share work in progress and to receive feedback.

### **Assumptions**

- The task budget assumes that the project duration will be extended for approximately 2 months to allow for the analysis of the expanded study area.
- Up to two ESA staff will participate in up to two meetings with City of Petaluma Staff. It is assumed that the meetings will be 1-hour long, and will be held in a online/webinar format.

### **Deliverables**

- *(none)*

### **Task 2**

*No changes are proposed to the Task 2 scope.*

### **Task 3**

*No changes are proposed to the Task 3 scope.*

### **Task 4 – Risk and Vulnerability Technical Memorandum**

The Task 4 scope will be expanded as follows:

#### *Task 4.1 – Data Synthesis*

ESA will compile GIS datasets including topography, existing building footprints, and linear transportation infrastructure within the expanded study area.

### **Assumptions**

- This scope of work does not include detailed review of the source datasets for accuracy or completeness. It is assumed that the source data sets are sufficiently accurate to inform the proposed analysis. ESA will document of any readily apparent errors or omissions that are identified by ESA or City Staff during this analysis to the extent achievable within the task budget.

#### *Task 4.2 – SLR Vulnerability Analysis*

ESA will conduct a SLR vulnerability analysis within the expanded study area.

### **Assumptions**

- This analysis will apply the same methods as used for the original study.
- This study is limited to the evaluation of anticipated vulnerabilities associated with tidally’ influenced flooding under the three sea-level rise flood inundation scenarios recently modeled by

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West Consultants for the City of Petaluma. Additional flood vulnerabilities exist within the expanded study area but will not be mapped or evaluated under this scope of work including: vulnerabilities associated stormwater runoff, river and creek flows, and groundwater effects.

### **Deliverables**

- ESA will revise TM2 to include the results of the SLR vulnerability analysis in the expanded study area.

### **Task 5 – Develop Adaptation Vision**

#### *Task 5.1 – Develop Concepts*

ESA will develop three adaptation concepts for the expanded study area based on the three strategies identified under the base scope (“Hold the Line”, “Managed Retreat”, and “Restore / Retreat”. ESA will prepare maps identifying the approximate location of new or improved coastal flood protection infrastructure, managed retreat, and tidal/riparian habitat restoration proposed under each strategy.

ESA will identify rough order of magnitude potential cost for construction for each of the three strategies.

### **Assumptions**

- The adaptation concepts developed under this study will be prepared a highly schematic “visioning” level of detail to provide a general illustrations of potential alignments and locations where various SLR adaptation measures might be applied within the expanded study area, and to provide an initial indication of the potential costs and other implications for such concepts. The concepts and costs developed under this task are intended to serve as an initial starting point to inform subsequent SLR planning and visioning discussions.
- This scope of work does not include analysis to evaluate the potential feasibility or effectiveness of the identified SLR adaptation measures and strategies. ESA staff will apply their professional experience and judgement to develop vision concepts that are potentially compatible with readily apparent site constraints and that are potentially appropriate given the identified SLR flooding vulnerabilities, to the extent that can be accomplished within the task budget. ESA will incorporate feedback from City staff to accommodate staff’s understanding of known or potential site constraints.
- The potential construction costs will be calculated based on the linear or areal extent of each flood protection, retreat, and restoration action, and using the archetypal unit costs for SLR adaptation measures compiled in MTC’s Sea Level Rise Adaptation Funding and Investment Framework Final Report (2023), or similar guidance documents.

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- The potential construction costs calculated under this study are for general information purposes only. The calculated costs will not be an engineer's cost estimate and they are not intended to meet any specific standard of accuracy or uncertainty.
- The visioning-level concepts identified under this study would require substantial refinement and modification during subsequent design phases, supported by appropriate planning and engineering analysis, to verify feasibility and effectiveness of the proposed measures, and to produce cost estimates at a level of accuracy suitable for budgeting and capital improvements planning.

*Task 5.2 – Draft Adaptation Vision Document*

ESA will incorporate the results of the Task 5.1 concept development for the expanded study area into the Adaptation Vision technical memorandum (TM3).

**Deliverables**

- ESA will revise TM3 to include the results of the Adaptation Vision task for the expanded study area.

**Budget**

The budget for this proposed contract modification is **\$30,480**.

**Schedule**

ESA assumes that this proposed scope of work will be completed within 3 months of receipt of a signed contract

**ITEM NO. 7 STATUS OF CONSULTANT AGREEMENTS FOR FY2024/25**

**Action Requested**

None at this time.

**Summary**

The FY2024/25 Budget was approved by the Board on June 24, 2025. The budget included the following:

<b>Contract</b>	<b>Amount</b>	<b>Project</b>
Brown & Caldwell	\$150,000	Continued Recycled Water Support
Brown & Caldwell	\$87,488	Sea Level Rise Adaptation
Weir Technical Services	\$0	Program Management (using carryover funds)
Sonoma Water	\$92,537	Administration
<b>Total</b>	<b>\$330,025</b>	

Sonoma Water will report on the status of the Brown & Caldwell agreement, scheduled to be on the Sonoma County Board of Supervisors Agenda for April 15. The agreement also includes funds for ESA and Data Instincts.

**Recommendation**

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

**Attachment**

None.

## **ITEM NO. 8 BRAINSTORMING SESSION – FUTURE PROJECTS FOR NBWRA**

### **Action Requested**

None at this time. It is requested that the TAC continue to discuss potential future projects for NBWRA.

### **Summary**

In 2021 a comprehensive survey was conducted with all participating agencies to identify potential future projects for NBWRA. The results of the survey led to the current resilience arena projects: recycled water support, drought contingency planning, and sea level rise adaptation. The TAC held a brainstorming session in December regarding potential future issues for NBWRA to take advantage of the institutional infrastructure that has been so successful for more than twenty years. Below is a list of possible issues areas.

- Additional recycled water projects
- Drought contingency projects
- Sea Level Rise projects
- Potable reuse: Educational or pilot project.
- Nutrient removal in response to the new watershed permit
- Stormwater management – flood control and water supply enhancement
- Projects to address PFAS/PFOS requirements
- Funding Opportunity Overview

### **Recommendation**

That the TAC consider an additional meeting in February (Feb 20) for a presentation on Funding Opportunities.

### **Attachment**

None.

## **ITEM NO. 9 PLANS FOR NEXT BOARD MEETING**

### **Action Requested**

The next Board meeting is scheduled for Monday, April 28, 2025 at 9:30 a.m. via Zoom.

### **Summary**

The Board should be updated on the following:

9. Status of Phase 1 closeout and reconciliation.
10. Status of Phase 2 projects.
11. Status of the Resilience Area projects
12. Financial Report
13. Draft Budget for 2025/26
14. Status of consultant agreements for FY2025/26
15. Results of TAC Brainstorming Sessions
16. Other Items

The TAC has meetings scheduled on March 6 and April 3. Sonoma Water and the Consultant Team will prepare a draft budget for FY 24/25 to be reviewed with the TAC at the March 6 meeting; comments received will be addressed and TAC will be asked to approve the draft budget on April 3 for inclusion in the Board package for the April 28 meeting.

### **Recommendation**

Discuss plans for the Board meeting scheduled for April 28, 2025 at 9:30 a.m. via Zoom.

### **Attachment**

None.