

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

Thursday, August 7, 2025

Agenda

2:00 PM

Zoom Meeting: Microsoft Teams Meeting;

<https://esassoc.zoom.us/j/9256551082?pwd=cnU3M2h5aXg2a1BBcTBZb1BJY25BZz09&omn=83475053677&from=addon>

	1.		Call to Order and Self Introductions
	2.	Action	Approval of Agenda
	3.		Public Comments
Pages 3-5	4.	Action	TAC Meeting Minutes of July 10, 2025
Pages 6-7	5.	Discussion	Resilience Arena Status Reports
Page 8	6.	Discussion	Status of Consultant Agreements for FY2025/26
Page 9-39	7.	Discussion	Planning for NBWRA FY26/27
Page 40	8.	Discussion	Planning for September NBWRA Board Meeting
Page 41	9.	Action	American Canyon Participation in Arena 4: NBWRA SLR Vision Process
	10.		Adjournment

ITEM 4. APPROVAL OF MINUTES: JULY 10th TAC MEETING

Action Requested
Approval

**North Bay Water Reuse Authority
Technical Advisory Committee
Zoom Meeting Minutes
July 10, 2025
Draft**

Approved _____

1. Call to Order and Self Introductions

Vice Chair Andrew Damron called the Technical Advisory Committee (TAC) meeting to order at 2:00 p.m. on Thursday July 10, 2025. The meeting was a Zoom meeting only and attendees participated via the following link: <https://us02web.zoom.us/j/89055428051>.

Committee Members Present

Andrew Damron, Vice Chair	Napa Sanitation
Brad Elliot	Sonoma Water
Grant Davis	Sonoma Water
Judd Goodman	Marin County FCD
Curtis Paxton	Las Gallinas Valley Sanitary District
Oriana Hart	City of Petaluma
Gina Benedetti-Petnic	City of Petaluma
Tony Williams	North Marin Water District
Paul Sellier	Marin Water

Consultant Team

Jim O'Toole, Program Manager	ESA
Rene Guillen	Brown & Caldwell
Mark Millan	Data Instincts

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 June 5, 2025

The minutes of the June 5, 2025 TAC Meeting were approved.

5. Resilience Arena Status Reports

The consultant team provided updates on several projects. Rene Guillen reported progress on the Grant Administration side, with all signatures collected and funds allocated for the City of Petaluma. Relating to the Drought Contingency Plan (DCP), the team is finalizing a technical memorandum comparing regional water supply resiliency studies to drought response frameworks. Jim O'Toole discussed the Resiliency Arena for sea level rise adaptation, including ongoing work with the City of Petaluma and potential inclusion of American Canyon. Jim also mentioned that ESA is working on cost estimation updates for LGVSD and the City of Petaluma.

6. Status of Consultant Agreements for FY2024/25

Jim O'Toole presented updates on consultant agreements, noting that Sonoma Water is preparing a contract for ESA for program management services at \$50,000 for FY25/26, while Brown and Caldwell's contract carries over at \$267,000 and is in place.

7. North Bay Watershed Association (NBWA) and Debrief

Jim O'Toole provided a briefing on a lunch meeting between NBWRA representatives Jim O'Toole and Mark Millan with NBWA Executive Director Andy Rogers to discuss the differences and potential overlap between the North Bay Watershed Association (NBWA) and the North Bay Water Reclamation Authority (NBWRA). They clarified that while both organizations operate in the North Bay region and share similar goals like resiliency and climate change, their objectives and operational approaches differ. Jim highlighted that NBWRA focuses on implementing projects, such as the federally funded \$120 million Phase 1 Program, while NBWA emphasizes education, outreach, and collaboration. The consulting team, in particular, provides a distinction, allowing the planning, engineering and implementation of projects. The TAC agreed that maintaining the distinction between the two organizations is valuable, and Jim suggested that NBWRA should present at the NBWA conference in April to demonstrate its work and value. Slides providing a comparison between the two organizations were included in the TAC Agenda.

The team discussed the differentiation between NBWRA and NBWA, emphasizing the need to clarify their distinct roles and value statements, especially for new board members. Jim O'Toole and Grant Davis shared the origin, history and success of NBWRA, highlighting its ability to move forward large-scale projects and acquire federal and state funding. They also considered ways to engage board members more effectively, with suggestions for presentations at future board meetings.

The TAC also identified the need to discuss the use of Read.AI agents attending the TAC meeting; the TAC identified the preference for all TAC members to rely on meeting minutes, rather than AI notetaking agents, in order to encourage free discussion.

8. Proposition 4 Summary Guide

The team discussed Proposition 4 funding opportunities; Jim O'Toole presented an overview of \$2.7 billion in state funding through eight programs, including \$386 million for recycled water projects and \$85 million for San Francisco Bay sea level rise projects. Gina Benedetti-Petnic expressed interest in reviewing dam-related projects, though Tony Williams clarified that dam funding has been postponed until 2026, with only small spillway repairs eligible in the meantime. The team agreed to further investigate specific funding opportunities that align with their projects and criteria, with Jim offering the Consultant Team's support for grant applications.

9. Planning for NBWRA FY 26/27

The group discussed planning for the 2026-2027 budget, focusing on reviewing feasibility studies and project priorities with member agencies. Jim explained they want to have individual conversations with each agency to fine-tune priorities and align with their objectives, particularly regarding resilience projects. The team also discussed potential engagement with SMART, with Gina Benedetti-Petnic offering support for future discussions about their route through Petaluma and the possibility of SMART becoming an associate member of NBWRA.

10. Planning for September NBWRA Board Meeting

The TAC discussed scheduling an in-person meeting, with Tony Williams offering NMWD's boardroom for September 29th. Mark Millan recommended this date over December 15th due to better attendance prospects, and Grant Davis supported the in-person format to improve communication among board members. Tony Williams confirmed the NMWD Boardroom could accommodate 6-10 board members, with good Wi-Fi and presentation capabilities. The meeting was scheduled for 9:30-11:00 AM, with setup beginning at 9:00 AM.

10. Adjournment

There being no further business, Vice Chair Damron adjourned the meeting was adjourned at 3:01 p.m.

ITEM NO. 5 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**
 - Agreement with Reclamation executed in June. Sonoma Water is currently working on draft sub-award agreement with Petaluma to pass through money and grant terms and conditions.
- **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 was submitted to Reclamation and their staff used the content from our analysis and their directives and standards to compile their own report.
 - Reclamation completed their report and sent it to the regional director (of the California Great Basin office) for approval.
 - The regional director will pass it off to director of policy for their approval. Approval timeline specifics were not provided but Reclamation staff shared with the team that they do not anticipate needing any additional information from our team.
- **Next Steps:**
 - No additional information should be needed from agencies/consultants for FCA approval.
- **Timeline:**

- Grant agreement should be executed in the next couple of weeks. Both NEPA and FCA items have been completed.

Resiliency Arena 3: Drought Contingency Planning

- **Project Status**
 - Consultant team is in the process of developing a draft Technical Memorandum (TM) outlining the findings and identifying the items that should be addressed to make the Regional Water Supply Resiliency Study meet DCP criteria. The TM will include the crosswalk that shows how the Drought Resiliency Analysis TM, that is part of the Regional Study, compares to the guidance included in Reclamation's Drought Response Framework
- **Next Steps:**
 - Finalize draft summary of findings TM and distribute to the participating agencies for review and feedback.
- **Timeline:** Team is working on finalizing draft, should have a draft version of the document in the next couple of weeks.

Resiliency Arena 4: Sea Level Rise Adaptation

- **Project Status**
 - City of Petaluma to reviewing results of SLR vulnerability and adaptation strategies for the downtown area.
 - American Canyon requests participation in SLR Visioning Process
 - See Item 9 for TAC Consideration
 - ESA continued discussions regarding:
 - OPC Grant Application for NBWRA led Regional Shoreline Plan.
 - State Coastal Conservancy Grant for Technical Development Phase
- **Next Steps:**
 - Update TM2 and TM 3 to include revised PET Study Area and new American Canyon Area
 - Adaptation Strategy Memo: Adaptation Vision Document 1
- **Timeline:** The target completion date for the Draft Vision Document has been revised to Fall 2025.

Recommendation

None at this time.

ITEM NO. 6 STATUS OF CONSULTANT AGREEMENTS FOR FY2025/26

Action Requested

None at this time.

Summary

The FY2025/26 Budget was approved by the Board on April 29, 2025. The budget included the following:

Contract FY 25/26	Amount	Contract Status
ESA Program Management	\$50,000	Pending
Sonoma Water	\$65,000	Administration
Total	\$115,000	FY 25/26
FY24/25 Carry Over	\$267,897	Approved by Sonoma Board April 24, 2025

Sonoma Water is preparing a contract agreement with ESA for Program Management Services for FY25/26. The agreement is anticipated to be in place Sept 1 2025. Brown and Caldwell's contract was approved by the Sonoma Water Board of Directors April 24, 2025, and is in place.

Recommendation

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

Attachment

None.

ITEM NO. 7. PLANNING FOR NBWRA FY 26/27 BUDGET

Action Requested

Discussion

Summary

As previously discussed, in order to better align with Member Agency budget planning, we are including FY 26/27 Budget discussions as a standing item as part of the July, August and September TAC Meetings, in order to allow for Member Agencies to integrate NBWRA into their FY26/27 budgeting processes. This will allow for TAC approval of a budget at the September 11 TAC meeting, and Board consideration at its September 29th Board Meeting.

Based upon input from the TAC and discussion with individual Member Agencies, the Consulting Team has developed the attached scope of work and cost estimate. A key consideration is reconfirmation of projects identified in the Feasibility Study, or identification of re-prioritized/new projects for inclusion in a revised Feasibility Study in FY26/27. The scope of work includes tasks for 3 Resiliency Areas, summarized as follows:

- **Recycled Water Arena.** Resources to update the Feasibility Study and accompanying environment documentation to provide for new or re-prioritized projects identified by Member Agencies. This scope of work also includes funding to support upgrade of the webpage.
- **Drought Contingency Arena.** Completion of Executive Summary and Reclamation acceptance to position NBWRA Member Agencies for Drought Contingency Funding.
- **Indirect Potable Reuse.** No tasks were identified for this resiliency arena.
- **Sea Level Rise Arena.** Two scopes are provided: Option A: technical and community outreach tasks to support Subregional Shoreline Adaptation Plan (SSAP) through either County-led or NBWRA-led process. Option B: technical support to advance adaptation concepts for each Member Agency.

The proposed scope of work and cost estimate for each resiliency arena is attached. In addition, NBWRA Program Management and Administration Costs would be equivalent to FY25/26. A summary of the proposed FY 26/27 Budget is provided in Table A below.

Based upon discussions, a Member Agency specific contingency has also been identified. This will allow each agency to include additional resources in the FY26/27 budget for as needed services, including planning, preliminary design and funding application support. This will be tracked and invoiced as separate tasks by the consulting team and Sonoma Water. Individual agencies should identify contingency budgets for inclusion in the next budget iteration for Sept 11 TAC Meeting.

Table A. FY 26/27 Budget

Contract FY 26/27	Amount	
Program Management/MOU Update	\$50,000	ESA
	\$0	ESA
Administration	\$65,000	Sonoma Water
Sub Total	\$115,000	FY 26/27
Recycled Water Arena	\$285,802	Brown and Caldwell Team
Drought Contingency Arena	\$133,726	Brown and Caldwell Team
Indirect Potable Reuse Arena	0	
Sea Level Rise Arena	\$130,000	Brown and Caldwell Team
Consulting Team Sub Total	\$549,528	
Member Agency Specific Contingency (1)		
Petaluma	\$0	Brown and Caldwell Team
America Canyon	\$0	Brown and Caldwell Team
NBWRA FY 26/27 Budget	\$664,528	

- 1) For illustration purposes only. Individual Member Agencies should identify specific contingency budgets that they want to establish.

Recommendation

Discuss potential scope of work items identified by the Consultant Team. Provide direction to the consulting team regarding any modifications to bring to the TAC at the Sept 11 TAC Meeting. At that time, TAC will consider approval of recommendation to present to NBWRA Board at Sept 29 Board Meeting.

Attachments:

Member Agency FY 26/27 Budget Allocation Breakdown
Brown and Caldwell Scopes of Work:
Recycled Water
Drought Contingency
Sea Level Rise Technical Support Option A
Sea Level Rise Technical Support Option B
ESA Program Management

Fiscal Year 2026/27 Budget Allocations
August 6, 2025

Resilience Arena for Continued Recycled Water Support												
	Total	LGVS	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
<i>Prorated Percent from Feasibility Study after removing associate members</i>		0.000%	11.925%	0.000%	10.832%	13.705%	0.000%	0.000%	32.596%	13.923%	17.020%	0.000%
Brown & Caldwell	\$ 285,802	\$ -	\$ 34,082	\$ -	\$ 30,957	\$ 39,168	\$ -	\$ -	\$ 93,160	\$ 39,791	\$ 48,643	\$ -
Sonoma Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 285,802	\$ -	\$ 34,082	\$ -	\$ 30,957	\$ 39,168	\$ -	\$ -	\$ 93,160	\$ 39,791	\$ 48,643	\$ -

Resilience Arena for Drought Contingency Plan												
	Total	LGVS	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
<i>Shared equally by participating agencies</i>		16.667%	0.000%	0.000%	16.667%	16.667%	16.667%	0.000%	16.667%	0.000%	0.000%	16.667%
Brown & Caldwell	\$ 133,726	\$ 22,288	\$ -	\$ -	\$ 22,288	\$ 22,288	\$ 22,288	\$ -	\$ 22,288	\$ -	\$ -	\$ 22,288
Sonoma Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 133,726	\$ 22,288	\$ -	\$ -	\$ 22,288	\$ 22,288	\$ 22,288	\$ -	\$ 22,288	\$ -	\$ -	\$ 22,288

Resilience Arena for Sea Level Rise Adaptation												
	Total	LGVS	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
<i>Shared equally by participating agencies</i>		25.000%				25.000%			25.000%			25.000%
Brown & Caldwell	\$ 130,000	\$ 32,500	\$ -	\$ -	\$ -	\$ 32,500	\$ -	\$ -	\$ 32,500	\$ -	\$ -	\$ 32,500
Sonoma Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 130,000	\$ 32,500	\$ -	\$ -	\$ -	\$ 32,500	\$ -	\$ -	\$ 32,500	\$ -	\$ -	\$ 32,500

Joint Use												
	Total	LGVS	Napa SD	Novato SD	SVCSD	¹ SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
<i>Shared equally by Phase 2 agencies with \$2,500 contribution from LGVS and Marin County</i>		3.846%	15.385%	0.000%	15.385%	15.385%	0.000%	0.000%	15.385%	15.385%	15.385%	3.846%
Program Management	\$ 50,000	\$ -	\$ 8,333	\$ -	\$ 8,333	\$ 8,333	\$ -	\$ -	\$ 8,333	\$ 8,333	\$ 8,333	\$ -
Sonoma Water Administration	\$ 65,000	\$ 2,500	\$ 10,000	\$ -	\$ 10,000	\$ 10,000	\$ -	\$ -	\$ 10,000	\$ 10,000	\$ 10,000	\$ 2,500
Total	\$ 115,000	\$ 2,500	\$ 18,333	\$ -	\$ 18,333	\$ 18,333	\$ -	\$ -	\$ 18,333	\$ 18,333	\$ 18,333	\$ 2,500

¹ Additional \$4 will be added to SCWA invoice to cover rounding

Summary per Agency												
Agency	Total	LGVS	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon	Marin County
Total	\$ 664,528	\$ 57,288	\$ 52,415	\$ -	\$ 71,578	\$ 112,289	\$ 22,288	\$ -	\$ 166,281	\$ 58,124	\$ 66,976	\$ 57,288

DRAFT Scope of Work – Continued Recycled Water Support

The Brown and Caldwell team (Consultant Team) will continue to provide recycled water support services to the North Bay Water Reuse Authority (NBWRA) member agencies as described in the following scope.

Task 1 – Project Management

Brown and Caldwell will provide project management services including oversight of project staff, budget, and schedule; project administration and accounting; and monthly progress reports with invoices.

Subtask 1.1 – Meetings

The Consultant Team will attend twelve (12) Technical Advisory Committee (TAC) meetings and four (4) NBWRA Board Meetings. All meetings are assumed to be web-based without personal attendance. The Consultant team will help prepare meeting materials and present at these meetings.

Subtask 1.2 – Public Involvement

The Consultant team will support Program public outreach and communications needs by:

- Reviewing provided project-related studies, documents, and messages prior to release and make suggestions and recommendations.
- In coordination with the project team, review provided existing communications material for each geographic area of existing NBWRA member agencies to ascertain an informational approach for meeting the identified needs of constituents, potential customers, special interests, and potentially affected stakeholders.
- Prepare press releases, opinion pieces, message points and other media-related responses to press inquiries and guide project team on media-related matters.
- Manage NBWRA outreach materials including fact sheets, PowerPoint presentations, Web page content, YouTube videos, letters, e-mail broadcasts and exhibits, as requested in writing that may reflect introduction of Phase 2 studies, plans and activities.
- Manage incoming telephone inquiries from the media, potential customers, key stakeholders, and special interest groups of the project areas. Maintain dedicated project phone up to 8 hours per day during business hours.
- Manage permission-based email broadcast lists and distribution of messages.
- Coordinate printing and mailing services.

The Consultant team will provide services up to the limit of the subtask budget.

Subtask 1.3 – Administration

The Consultant team will provide monthly reports along with each monthly invoice, including budget status and a summary of tasks performed.

Task 1 Deliverables

- Monthly progress reports and invoices.

Task 1 Assumptions

- Up to 12 months of PM services and monthly progress reports.
- TAC meetings are assumed to be one (1) hour in duration.
- The Consultant team will not review the information provided for accuracy or quality.
- NBWRA meetings are assumed to be two (2) hours in duration.
- All meetings assume that up to five (5) members of the Consultant team will attend both the TAC and NBWRA meetings.
- A maximum of 18 hours has been budgeted for preparing agendas, presentation materials, and or handouts for meetings.
- Services will be provided up to the limit of the budget.

Task 2 – Feasibility Study Update

The Consultant team will work closely with the NBWRA member agencies and the U.S. Bureau of Reclamation (Reclamation) to update the existing Phase 2 North Bay Water Reuse Program (Program) Title XVI Study (Study). The Consultant team will leverage the existing Reclamation approved Study to complete the process. Services provided will include: 1) coordination with Reclamation regarding Study update; 2) limited update of Study to support Reclamation approval; 3) revision of up to 6 projects into the existing Study to add new project components that were not included in the initial description of the respective projects. The update will rely on findings from relevant studies, assessments, and analysis that have been provided by the NBWRA agencies and completed since the development of the original Study. The Consultant team will participate in one virtual meeting to discuss comments. In the event a substantial update is needed, a revised scope of work and budget can be added by amendment.

Task 2 Deliverables

- One admin draft (for NBWRA agencies review/comment) and one final version of the Study.

Task 2 Assumptions

- The scope of work assumes limited update to the approved Study is necessary.
- NBWRA agencies to provide available existing planning documents within 10 business days of request submittal.
- The Consultant team will use information as provided by NBWRA agencies and not review for accuracy.
- Additional informational or data needs identified as part of this task are not covered under the existing scope and budget but could be developed through an amendment as requested by the NBWRA agencies.
- The Consultant team will conduct quality reviews on deliverables prior to submittal to the NBWRA agencies. The Consultant team will submit deliverables to the NBWRA agencies initially as a draft for review, then as final to address the NBWRA agencies review comments. All deliverables are assumed to be electronic.

- Budget assumes that one (1) follow up meeting may be had to discuss comments. The follow up meeting would be held virtually using Microsoft Teams and be attended by up to two Consultant team staff members.
- NBWRA agencies will provide a single set of collated comments using a comment log within 10 business days of submittal. The Consultant team will document follow-up actions or rationale (if not revising a work product to incorporate one or more NBWRA agencies comment[s]) in the comment log.

Task 3 – Environmental Documentation Update

The Consultant team will review proposed projects relative to previously completed environmental documentation prepared for Phase 2 Program and will determine an environmental strategy to incorporate new or modified projects. From a California Environmental Quality Act (CEQA) perspective, the scope of work assumes an Environmental Impact Report (EIR) Addendum will be the appropriate CEQA mechanism for Member Agencies to meet CEQA requirements for implementation. The Consultant team will work with the individual Member Agencies to identify and leverage any existing CEQA documentation for the projects. To support Title XVI funding, the scope of work assumes an Addendum to the Environmental Assessment/Finding of No Significant Impact (EA/FONSI) will be the appropriate mechanism for review and approval by Reclamation. If a supplemental or subsequent EIR/EIS is required, the Consultant team will generate a revised scope of work and cost estimate for consideration.

Subtask 3.1 – CEQA Process

The Consultant team will coordinate with member agencies to develop an administrative draft project description to support CEQA review of individual projects. Following review and comment by Member Agencies, the Consultant team will prepare an administrative draft Addendum to the previously certified EIR. The Addendum will review new projects identified by the member agencies relative to the previous analysis and confirm that impacts would be less than or equivalent to those previously identified. Following review by Member Agencies, the Consultant team will respond to comments and prepare one public draft Addendum for Member Agency use. The Consultant team will coordinate with Member Agencies to determine an approval process for the Addendum.

Subtask 3.2 – NEPA Process

The Consultant team will use the CEQA project description to prepare a NEPA project description for review by Reclamation and to support NEPA review of individual projects. Following review and comment by Reclamation, the Consultant team will prepare an administrative draft Addendum to the previously approved EA/FONSI. The Addendum will review new projects relative to the previous analysis and confirm that impacts would be less than or equivalent to those previously identified. Following review of the Addendum by Reclamation, the Consultant team will respond to comments and prepare a public draft Addendum for Reclamation use. The Consultant team will coordinate with Reclamation to determine an approval process for the Addendum.

Subtask 3.3 – Regulatory Permitting

The Consultant team will review proposed projects relative to Reclamation's Section 7 consultation with USFWS and Section 106 consultation with the State Historic Preservative Officer (SHPO). This scope of work includes the preparation of a Technical Memorandum (TM) to support amendment of both consultations and assumes that no sensitive species or resources are identified or would be impacted by the new facilities. If sensitive resources are identified, or additional levels of

documentation, such as biological assessment or cultural resources report are needed, the Consultant team will prepare a separate scope and budget for consideration.

Task 3 Deliverables

- CEQA Process:
 - Administrative Draft Project Description.
 - Administrative Draft Addendum.
 - Public Draft Addendum.
 - Member Agency Notices/ Approval Support.
- NEPA Process:
 - Administrative Draft Project Description.
 - Administrative Draft EA/FONSI Addendum.
 - Draft EA/FONSI Addendum for Reclamation review.
 - Final EA/FONSI Addendum.
- One admin draft (for NBWRA agencies review/comment) and one final of a TM to support Section 7 Biological Opinion Addendum.
- One admin draft (for NBWRA agencies review/comment) and one final of a TM to support Section 106 SHPO Concurrent Letter Addendum.

Task 3 Assumptions

- The scope of work assumes that no sensitive species or resources are identified or would be impacted by the new project facilities. If sensitive resources are identified, or additional levels of documentation, such as biological assessment or cultural resources report are needed, the Consultant team will prepare a separate scope and budget for consideration.
- For all deliverables, 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.
- Service will be provided up to the limit of the task budget.

Task 4 – Ongoing Funding Tracking

State and Federal funding opportunities are constantly changing depending on legislation and appropriations. The Consultant team suggests monitoring legislation and NBWRA agency funding opportunities for applicable funding opportunities to provide the NBWRA agencies with information if funding has the potential to impact project direction or an opportunity arises that may be applicable to the Phase 2 Program.

- The Consultant team will monitor federal and state grants and loans for the identified projects that may be eligible and notify NBWRA agencies.
- If the Consultant team identifies opportunities that could be of interest, the Consultant team will contact the issuing agency to better understand the funding opportunity requirements and project eligibility, as needed.
- The Consultant team will monitor funding opportunities for one year from the time potential projects are identified.

Task 4 Deliverables:

- Quarterly funding updates that summarize viable funding opportunities.

Task 4 Assumptions:

- Up to four hours of research and reporting will be provided per month.

Budget

Continued Recycled Water Support																			
Phase	Phase Description	Rene Guillen	Jacki Bates	Bernadette Visitacion-Sumida	Erin Mackey	Seema Chavan	Matt Matasci	Deanna Tanner	Susan Sicora	Sara Romero	Total Labor Hours	Total Labor Effort	DI	ESA	Kennedy Jenks	Total Sub Cost	Total Expense Cost	Total Expense Effort	Total Effort
		PM	PA	Project Oversight	Technical Expert	Funding Expert	Engineering Support	Word Processing	Graphics	Finance			Cost	Cost	Cost				
		\$266.00	\$142.00	\$313.00	\$381.00	\$381.00	\$206.00	\$142.00	\$142.00	\$118.00									
001	Project Management	92	42	4	0	0	0	0	0	10	148	\$32,868	\$41,960	\$9,632	\$7,420	\$59,012	\$59,012	\$61,963	\$94,831
001	Workshops	56	0	0	0	0	0	0	0	0	56	\$14,896	\$10,600	\$5,504	\$4,240	\$20,344	\$20,344	\$21,361	\$36,257
002	Public Involvement	0	0	0	0	0	0	0	0	0	0	\$0	\$25,000	\$0	\$0	\$25,000	\$25,000	\$26,250	\$26,250
003	Administration	36	42	4	0	0	0	0	0	10	92	\$17,972	\$6,360	\$4,128	\$3,180	\$13,668	\$13,668	\$14,351	\$32,323
002	Feasibility Study Update	96	0	0	24	0	144	12	24	0	300	\$69,456	\$6,360	\$0	\$0	\$6,360	\$6,360	\$6,678	\$76,134
001	Feasibility Study Update	96	0	0	24	0	144	12	24	0	300	\$69,456	\$6,360	\$0	\$0	\$6,360	\$6,360	\$6,678	\$76,134
003	Environmental Documentation Update	40	0	0	0	0	0	0	0	0	40	\$10,640	\$0	\$74,725	\$0	\$74,725	\$74,725	\$78,461	\$89,101
001	CEQA Process	16	0	0	0	0	0	0	0	0	16	\$4,256	\$0	\$25,598	\$0	\$25,598	\$25,598	\$26,878	\$31,134
002	NEPA Process	16	0	0	0	0	0	0	0	0	16	\$4,256	\$0	\$21,313	\$0	\$21,313	\$21,313	\$22,379	\$26,635
003	Regulatory Permitting	8	0	0	0	0	0	0	0	0	8	\$2,128	\$0	\$27,814	\$0	\$27,814	\$27,814	\$29,205	\$31,333
004	Ongoing Funding Tracking	8	0	0	0	56	0	8	8	0	80	\$25,736	\$0	\$0	\$0	\$0	\$0	\$0	\$25,736
001	Ongoing Funding Tracking	8	0	0	0	56	0	8	8	0	80	\$25,736	\$0	\$0	\$0	\$0	\$0	\$0	\$25,736
GRAND TOTAL		236	42	4	24	56	144	20	32	10	568	\$138,700	\$48,320	\$84,357	\$7,420	\$140,097	\$140,097	\$147,102	\$285,802
Hours and Dollars are rounded to nearest whole number. To display decimals, change the format of the cells.																			

DRAFT Scope of Work – Drought Contingency Planning: Summary Document Development

The Brown and Caldwell (BC) team shall work collaboratively with the North Bay Water Reuse Authority (NBWRA) member agencies to develop a Drought Contingency Plan (DCP) summary document for the NBWRA member agencies to apply for U.S. Bureau of Reclamation (Reclamation) funding under the “Drought Resiliency Program.” The DCP summary document is based on the information and analysis included in Sonoma Water’s Regional Water Supply Resiliency Study (Study).

Task 1 – DCP Summary Document

The DCP summary document will summarize how the Study addresses each of the six DCP elements identified in Reclamation’s “WaterSMART Drought Response Program Framework”:

- Drought Monitoring
- Vulnerability Assessment
- Mitigation Actions
- Response Actions
- Operational and Administrative Framework
- Plan Development and Update Process

Using the findings of the gap analysis technical memorandum (TM) that was completed as part of the first phase of this work, the BC team will work with the NBWRA agencies to conduct the recommended actions for development of a document that can be used for applications for project funding through Reclamation’s “Drought Resiliency Program.” Information that is not directly in the Study but may be needed to support the development of the DCP summary document will be pulled from relevant studies, assessments, and analysis that have been provided and completed by the NBWRA agencies. Following review and revision the BC team and NBWRA agency representatives will schedule a meeting with Reclamation staff to discuss the DCP Summary Document and to receive Reclamation comments. In the event a substantial analysis or assessment is needed, a revised scope of work and budget can be added by amendment.

Task 1 Deliverables

- One administrative draft (for review/comment) and one final version of the DCP Summary Document.
- Summary of Reclamation meeting, focused on key outcomes and action items.

Task 1 Assumptions

- NBWRA agencies to provide available existing planning documents within 10 business days of request submittal.
- BC will use information as provided by NBWRA agencies and not review for accuracy.

- Additional informational or data needs identified as part of this task are not covered under the existing scope and budget but could be developed through an amendment as requested by the NBWRA agencies.
- BC team will attend one meeting with Reclamation staff to discuss the DCP Summary Document and receive feedback from Reclamation. The meeting will be attended by up to two BC staff and one Data Instincts staff and be up to one hour in duration.
- It is assumed that all the meetings will be held virtually by Microsoft Teams.
- BC will conduct quality reviews on deliverables prior to submittal to the NBWRA Agencies. BC will submit deliverables to the NBWRA Agencies initially as a draft for review, then as final to address the NBWRA Agencies' review comments.
- NBWRA agencies will provide a single set of collated comments using a comment log within 10 business days of submittal. BC will document follow-up actions or rationale (if not revising a work product to incorporate one or more NBWRA agencies comment[s]) in the comment log.

Task 2 – Drought Response Program Grant Application and Management

The Consultant team will support NBWRA member agencies preparation of one (1) grant application. The grant application will include a detailed narrative to address evaluation criteria cited for the respective funding opportunity. The Consultant team will prepare one draft of the grant application that will be submitted to the NBWRA member agencies seeking funding for review and comment and finalize to incorporate comments. Once the grant application is submitted, the Consultant team will respond to questions and comments that may arise as requested by the NBWRA member agencies. The Consultant team will provide services up to the limit of the task budget.

Task 2 Deliverables:

- Draft and final grant applications for one (1) federal funding opportunity related to the WaterSMART Drought Response Program.

Task 2 Assumptions:

- Grant applications developed under this task will relate to funding opportunities for project implementation (design and construction).
- BC support will require notice of at least six (6) weeks before a grant application deadline for coordinating a staffing plan and allowing NBWRA member agencies review time. NBWRA member agencies review period for the draft grant applications is up to five (5) business days depending on the required timeline for the grant opportunity.
- NBWRA member agencies will provide required forms and information required from the grant applicant, such as: required federal/state forms; Board resolution; project budget with in-kind staff costs (including, for example, staff names/titles, estimated number of project hours, and current hourly salary); NBWRA member agencies internal rates for paid absence, fringe benefits, and overhead); federal indirect cost rates; and a letter of local partner funding commitment (i.e., funding amount, date funding will be available, time constraints on funding availability, and other contingencies).
- Consultant team will conduct quality reviews on deliverables prior to submittal to NBWRA member agencies. Consultant team will submit deliverables 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.

- A maximum of eight (8) hours has been budgeted for responding to comments and questions on the submitted grant application.
- Service will be provided up to the limit of the task budget.

Task 3 – Project Management

This task includes facilitation of project meetings; coordination of the project team; oversight of project staff, budget, and schedule; project administration and accounting; and monthly project status reports with invoices.

3.1. Project Management. 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. BC will oversee project staff and budget.

3.2. Progress Meetings. The BC Project Manager (PM) and Sonoma Water PM will hold up to three, one-hour progress meetings by phone to coordinate and collaboratively monitor project progress. While topics and activities for progress meetings will vary through project duration, these meetings will serve as a venue for reviewing analysis assumptions and results.

Task 3 Deliverables

- Up to six (6) monthly progress reports and invoices.

Task 3 Assumptions

- Up to six (6) months of PM services.
- Meetings will be attended by up to two BC staff and one Data Instincts staff and be up to one hour in duration, unless noted otherwise. The progress meetings will be scheduled at the request of the Sonoma Water PM.
- It is assumed that all the meetings will be held virtually by Microsoft Teams.

Budget

Drought Contingency Planning: Summary Document Development																
Phase	Phase Description	Rene Guillen	Jacki Bates	Bernadette Visitacion-Sumida	Seema Chavan	Sara Romero	Matt Matasci	Deanna Tanner	Susan Sicora	Total Labor Hours	Total Labor Effort	Data Instincts	Total Sub Cost	Total Expense Cost	Total Expense Effort	Total Effort
		PM	PA	Project Oversight	QA/QC	Finance	Engineering Support	Word Processing	Graphics			Mike Savage Cost				
		\$266.00	\$142.00	\$313.00	\$381.00	\$118.00	\$206.00	\$142.00	\$142.00							
001	Summary Document Development	168	21	2	32	6	276	16	16	537	\$122,596	\$10,600	\$10,600	\$10,600	\$11,130	\$133,726
001	DCP Summary Document	80	0	0	16	0	168	8	8	280	\$64,256	\$6,360	\$6,360	\$6,360	\$6,678	\$70,934
002	Drought Response Program Grant Application and Management	64	0	0	16	0	108	8	8	204	\$47,640	\$4,240	\$4,240	\$4,240	\$4,452	\$52,092
003	Project Management	24	21	2	0	6	0	0	0	53	\$10,700	\$0	\$0	\$0	\$0	\$10,700
GRAND TOTAL		168	21	2	32	6	276	16	16	537	\$122,596	\$10,600	\$10,600	\$10,600	\$11,130	\$133,726
Hours and Dollars are rounded to nearest whole number. To display decimals, change the format of the cells.																

DRAFT Scope of Work – Sea Level Rise Technical Support, Option A

The following scope provides services to provide Technical Support for a Subregional Shoreline Adaptation Plan (SSAP), either County-led or NBWRA-led. The scope of work below identifies an order of magnitude effort to be applied to the most appropriate focus area as an outcome of the sea level rise (SLR) Vision Process and approved by the participating Member Agencies. This effort has the potential to be augmented by funding from outside sources, and the scale of each of these focus areas can be adjusted based upon pending results of the NBWRA SLR Vision process.

Technical Support Towards preparation of a Subregional Shoreline Adaptation Plan (SSAP)

Creation of an SSAP is a substantial undertaking that is most commonly led by a city or county, however special districts and agencies managing lands along the Bay shoreline can contribute to or lead creation of their own SSAP's. Marin County is aware of the need to create one (or more) SSAPs for their Bay shoreline, and is currently working to develop a planning and multi-jurisdictional governance structure to address SLR impacts holistically across the County . The timeline for the implementation of this governance structure is uncertain.

Given the uncertain timeline for County-level SSAP preparation, the proposed NBWRA effort will generate information for the NBWRA Members Agencies to incorporate into their internal planning processes, understand and become conversant in SLR adaptation strategies applicable to their service areas, and to allow the NBWRA members to proactively and effectively participate in ongoing and future SLR planning efforts at the County-scale.

This task proposes to allocate NBWRA resources towards compilation of information and supporting technical analysis and documentation that will be necessary for the creation of an SSAP, with a specific focus on NBWRA members facilities and service areas. Depending on the outcomes of the Marin County governance structure, NBWRA's information and analysis could be packaged into a stand-alone SSAP specific to the member agencies' service areas or corresponding operational landscape units (OLUs), or could be provided to Marin County to be incorporated into a county-wide SSAP. Sonoma County has applied for, and is anticipated to receive, funds under an Ocean Protection Council (OPC) SB-1 Grant; it is anticipated that the City of Petaluma would participate in the Sonoma County SSAP, and similarly would provide generated information to the County for use or incorporation. Discussions are beginning regarding Napa County's SSAP process, and America Canyon would be one of the key participatory agencies given its shoreline.

Fiscal Year 26/27 Scope of Work

The Consulting Team would leverage information developed as part of the SLR Vision Process to complete corresponding elements of the SSAP as identified in Table 1. below. The focus of this scope of work would be on completing SSAP Element A: Planning Process and SSAP Element B: Existing Conditions, including the community outreach component (identified as Equitable Engagement in the BCDC requirements). The BCDC requirements for these two elements are shown in Figure 1 and 2, respectively. The objective of this effort would be to continue to facilitate

planning/coordination efforts towards the creation of an SSAP that aligns with BCDC’s RSAP guidelines, and to position NBWRA Member Agencies to either participate in County led efforts or continue with an NBWRA SSAP planning process. Individual tasks are identified below.

Table 1. BCDC SSAP Elements versus NBWRA SLR Vision Process		
A. Planning Process	TM1. Vision, Goals, Objectives Memo	Equitable Engagement is required throughout the planning process.
B. Description of Existing Conditions	TM2. Risk and Vulnerability	BCDC RSAP asset and hazard mapping web portal is not yet available.
C. Vulnerability Assessment	TM2. Risk and Vulnerability Memo	Community outreach is needed to identify priority areas
D. Adaptation Strategies and Pathways	TM3. Adaptation Strategy Memo	Community outreach is needed to align strategies/pathways with community priorities
E. Land Use and Policy Plan	Not included in scope	NBWRA members have limited land use planning authority (compared to Cities/Countries)
F. Project Implementation and Funding Plan	TM4. SLR Vision Roadmap	NA
G. Project List	TM4. SLR Vision Roadmap	Specific Projects may not be Identified at Vision Level

Plan Requirements		Plan Submittal Requirements	Standard Submittals
Element A: Planning Process			
A1.	List Subregional Plan partners, including jurisdictions, planning project team members, and affected parties.		
a.	Plan type	Description of plan type and included jurisdiction(s).	☐
b.	Planning project team	List and description of planning team.	☐
	Diverse perspectives	Description of what efforts were taken to include diverse perspectives on the project planning team.	☐ Equity Assessment
	Multilingual communities	Description of how language services are included in the planning effort.	☐ Equity Assessment
c.	Affected parties	List of affected and interested parties.	☐
d.	Tribal consultation	Description of government-to-government consultation process.	☐
A2.	Include a map of the Subregional Shoreline Adaptation Plan area ("planning area").		
a.	Planning area	Map with boundaries of planning area.	☐
A3.	Describe the multi-jurisdictional coordination process.		
a.	Multi-jurisdictional coordination	Description of multi-jurisdictional and county coordination.	☐
A4.	Summarize equitable engagement efforts throughout the planning process.		
a.	Vulnerable community identification	Definitions and mapped locations of Environmental Justice, socially vulnerable communities, and Tribes.	☐
b.	Equitable outreach and engagement	Summary of equitable outreach and engagement efforts.	☐
	Equity in engagement	Description of how the engagement process includes people from vulnerable communities.	☐ Equity Assessment
	Community and Tribal partnerships	Description of efforts to engage communities and Tribes in partnerships.	☐ Equity Assessment

Figure 1. BCDC SSAP Exhibit A Requirements

Element B: Existing Conditions			
B1.	List and describe existing plans, studies, and/or other information that may be relevant to addressing and responding to coastal flooding hazards.		
a.	General and land use plans	Summary of how coastal flooding hazards are referenced and addressed in general and other land use plans.	☐
b.	Hazard and emergency plans	Summary of how coastal flooding hazards are referenced and addressed in hazard and emergency plans.	☐
c.	Climate and resilience plans	Summary of climate and resilience plans and how they relate to this plan.	☐
	Plan Requirements	Plan Submittal Requirements	Standard Submittals
B2.	Map and describe physical and ecological characteristics of the landscape within the planning area.		
a.	Physical conditions	Map(s) and description of physical landscape conditions and characteristics.	☐
b.	Coastal and nearshore hydrological conditions	Map(s) and description of existing coastal and nearshore hydrological characteristics.	☐
c.	Ecosystem Health and Resilience conditions	Map(s) and description of existing ecological and biological conditions.	☐
	Communities and ecosystems	Describe the known relationships of communities and ecosystems and values towards natural and nature-based adaptation.	☐ Equity Assessment
d.	Historical conditions	Map(s) and description of historical physical and ecological landscape characteristics.	☐
e.	Planned future changes	Description of planned future shoreline changes.	☐
B3.	Map and describe existing populations, assets, sectors, services, and land uses within the planning area.		
a.	Community Health and Well-being conditions	Map(s) and description of populations and community services as related to Community Health and Well-being.	☐
	Community assets	Description of what community assets and services were identified by communities.	☐ Equity Assessment
b.	Development, Housing, and Land Use conditions	Map(s) and description of current and future land uses, development, and projects related to Development, Housing, and Land Use.	☐
	Displacement and land use patterns	Description of how land uses may have contributed to displacement risk.	☐ Equity Assessment
c.	Critical Infrastructure and Services conditions	Map(s) and description of utilities infrastructure, stormwater and flood management infrastructure, emergency management, and public trust lands related to Critical Infrastructure and Services.	☐
	Dependency on services	Description of if and how vulnerable communities have specific service dependencies.	☐ Equity Assessment
d.	Public Access and Recreation conditions	Map(s) and description of trails networks, parks and open spaces, and recreation related to Public Access and Recreation.	☐
	Access and safety	Description of the state of connection to and safety of public access.	☐ Equity Assessment
e.	Transportation and Transit conditions	Map(s) and description of land, air, water, and emergency transportation related to Transportation and Transit.	☐
	Mobility and affordability	Description of known challenges of transportation mobility and affordability.	☐ Equity Assessment
	Plan Requirements	Plan Submittal Requirements	Standard Submittals
f.	Shoreline Contamination conditions	Map(s) and description of sites as related to Shoreline Contamination.	☐
	Known and unknown sites	Description of the status of contamination in communities.	☐ Equity Assessment
g.	Collaborative Governance, Flood Management, and Funding conditions	Map(s) and description of boundaries and partnerships related to Collaborative Governance, Flood Management, and Funding.	☐
	Community and Tribal capacity	Description of if and how funding was included for community partnerships in project budgets.	☐ Equity Assessment

Future Planning Efforts

As an outcome of the SLR Vision Process, the potential for funding may support additional efforts in the Sea Level Rise Resiliency Arena. Specifically, there may be substantial benefit to the NBWRA related to development of a North Marin SSAP covering the Novato and Gallinas Operating Landscape Units (OLU) (Figure 3). Similarly, a Regional NBWRA SSAP that includes Marin, Sonoma and Napa Counties could provide substantial value to both NBWRA and its individual Member Agencies. Future planning efforts would be contingent upon the following developments: 1) procurement of additional funding as a result of the NBWRA SLR Vision Process through either Ocean Protection Council SB-1 Grant or State Coastal Conservancy Grant; 2) participation from essential partner agencies, including Marin County, City of Novato and SMART; and 3) BCDC approval to proceed with the proposed SSAP study area (North Marin or Regional).

A scope of work for the tasks to develop a SSAP is provided below for TAC review, modification, application to either study area (North Marin or Regional), and subsequent cost estimating in the event that conditions favoring a NBWRA-led SSAP develop in the future.

Figure 2. BCDC SSAP Exhibit A and Exhibit B Requirements

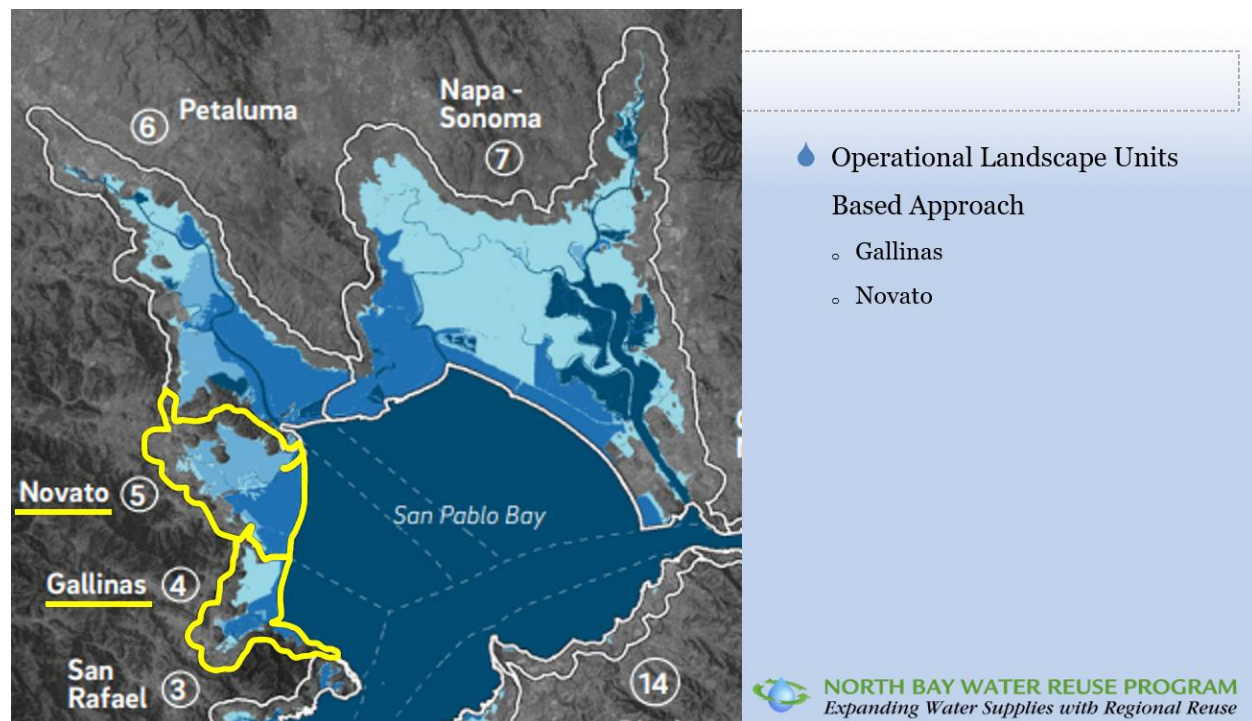


Figure 3. Potential North Marin County Subregional Plan Study Area

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 – Development of SSAP

The Consultant team will work with the NBWRA agencies to develop an SSAP as described in the subtasks below.

Subtask 2.1 – Coordination with BCDC

This task would provide for coordination with BCDC regarding SSAP Elements and technical approach to meet those requirements.

Subtask 2.2 – Coordination with BCDC

The Consultant would coordinate with the City of Novato, Marin County, SMART to engage their participation and align SSAP efforts with local planning requirements.

Subtask 2.3 – Community Outreach Process

The Consultant Team will implement the Equitable Outreach and Engagement Plan developed as part of the NBWRA SLR Vision, which will be developed to be consistent with the RSAP Guidelines (A4). The Consultant Team will assist Member Agencies with the establishment of an interested parties list and coordination of community meetings and information exchanges. The types of interested parties may include representatives from environmental advocacy groups, land trusts, and non-profits, recreational users of the Marin County shoreline, as well as local residents and other interested parties, particularly from vulnerable communities. This task will include three (3) community meetings, with potential meeting topics listed below.

- Overview of Existing Conditions
- Vulnerability Analysis
- Adaptation Strategies & Pathways
- Potential Local Adaptation Vision

The approach and recommended engagement techniques will take into consideration BCDC's Environmental Justice and Tribal Consultation policies. This process will be designed to continue to cultivate existing relationships and grow new relationships through established community networks in the diverse communities along the shoreline. To foster those discussions, the Consulting team will coordinate with Member Agencies to distribute relevant outreach materials for interested parties or "ad hoc advocates" to take back to their organizations and agencies in other meetings, thereby providing an additional method of public outreach from trusted community members. As a part of this task, the Consulting Team also proposes to leverage the NBWRA's website to post materials that can be stored and shared throughout the project duration.

Subtask 2.4 – Administrative Draft SSAP Elements A and B

The Consulting Team would prepare Administrative Draft RSAP Elements for Member Agency and BCDC review. The scope of work assumes one round of comments by BCDC and Member Agencies.

Subtask 2.5 – Draft SSAP

Based upon comments received, the Consulting Team will prepare Draft RSAP Elements for Member Agency and BCDC review. These documents will support future Member Agency participation in County-led SSAP processes, or applied to an NBWRA process.

Task 2 Deliverables:

- Interested party contact list.
- Meeting presentation materials, agendas, sign in sheets, and community outreach flyer design.
- Documentation of community meeting outcomes.
- One admin draft SSAP Elements A and B (for NBWRA agencies review/comment).
- One draft SSAP Elements A and B (for NBWRA agencies review/comment).

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 draft documents.
- Up to three (3) community meetings including meeting attendance/facilitation, technical content development/presentation, and action items. It is assumed that the meetings will be virtual and attended by up to three Consultant staff and be up to one hour in duration.
- Attendance at additional stakeholder meetings and/or City Council briefings are not included in the scope. Addition of the activities will require an amendment.
- Service will be provided up to the limit of the task budget.

Budget

Sea Level Rise Technical Support - Option A														
Phase	Phase Description	Rene Guillen	Jacki Bates	Bernadette Visitacion-Sumida	Sara Romero	Total Labor Hours	Total Labor Effort	Expenses	Total ODCs	ESA Cost	Total Sub Cost	Total Expense Cost	Total Expense Effort	Total Effort
		PM	PA	Project Oversight	Finance									
		\$266.00	\$142.00	\$313.00	\$118.00									
001	Project Management	18	12	2	4	36	\$7,583	\$0	\$0	\$0	\$0	\$0	\$0	\$7,583
002	Development of SSAP	0	0	0	0	0	\$0	\$0	\$0	\$116,588	\$116,588	\$116,588	\$122,417	\$122,417
GRAND TOTAL		18	12	2	4	36	\$7,583	\$0	\$0	\$116,588	\$116,588	\$116,588	\$122,417	\$130,000
Hours and Dollars are rounded to nearest whole number. To display decimals, change the format of the cells.														

DRAFT Scope of Work – Sea Level Rise Technical Support, Option B

The following scope provides services to provide Member Agency Technical Support to further develop concepts generated by the NBWRA Sea Level Rise (SLR) Vision process. The scope of work below identifies an order of magnitude effort to be applied to the most appropriate focus area as an outcome of the SLR Vision Process and approved by the participating Member Agencies. This effort has the potential to be augmented by funding from outside sources, and the scale of each of these focus areas can be adjusted based upon pending results of the NBWRA SLR Vision process.

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 – Member Agency Technical Support

This task would provide technical support to individual Member Agencies to further define and develop adaptation strategies identified in the SLR Vision Process. The objective of this effort would be to support feasibility level analysis for specific adaptation strategies and locations. Potential technical support areas are identified below. Implementation would include technical support for each Member Agency to focus on advancing one technical issue within their study area. Potential technical issues based on the SLR Vision Process are identified below. The Consulting Team is available to review other technical issues identified by the Member Agencies.

Subtask 2.1 –LGVSD Reclamation Area

This subtask includes feasibility study evaluation of the Restoration Area between Miller Creek and Hamilton Field to develop a no-action alternative and up to two larger themed alternatives to progress potential managed retreat strategies that would reduce levee maintenance along the shoreline, provide tidal restoration, and address long-term flooding and sediment management issues related to Miller Creek. The approach would be to use nature-based approaches where both possible and cost-effective while maintaining levels of flood protection that are acceptable to the District and other stakeholders. The feasibility level analysis would provide the next phase of project development, allow LGVSD to review long-term adaptation strategies, and would allow for community property owner and regulatory agency engagement.

The Consulting Team shall develop a no-action baseline and two managed retreat options for the Reclamation Area based upon results of the SLR Vision process. The Consulting Team will provide

initial feasibility analysis of each option, including consideration of opportunities and constraints focusing on engineering and ecology, and based on information from the review of previous studies. At this feasibility level, the Consulting Team will focus effort on evaluation of major constraints and major project elements, and potential approaches to address identified constraints to create a feasible project. The Consulting Team will assess and compare the ecological and flood reduction benefits of each alternative.

The Consulting Team will provide descriptions (text and graphics) of the alternatives, including expected typical dimensions (length, depth/height, width) and materials for these elements. The Consulting Team will apply existing design guidelines and professional judgment to identify the likely scale of restoration project elements.

For each alternative, the Consulting Team will develop concept-level estimates of earthwork quantities, will itemize other major project elements for each alternative, and will provide an assessment of relative cost differences based on engineering judgement scaling the relative magnitude of the other alternatives. For the selected alternative, the Consulting Team will prepare a concept-level order of magnitude opinion of probable construction costs. This probable construction cost will include an appropriate contingency as an allowance for project features that will not be designed in detail under this scope.

The Consulting Team assumes that the project will primarily consist of earthwork, at-grade trails and access roads, planting and vegetation management, and gravity-driven water control structures (culverts, tide gates) where possible and relocating pump stations where needed due to the subsided grades in the area. the Consulting Team anticipates evaluation of the following categories of project elements:

- Existing Flood Protection Levees to be modified
- New Flood Protection Levees
- Ecotone slopes and habitat islands
- Horizontal levee with potential subsurface seepage slopes from LGVSD
- Sediment placement to raise site grades to restoration elevation
- Dredging to increase the depth and/or width of portions of the existing channel, and use of dredged material for restoration
- New Creek and Tidal Channel Excavation
- New embankments for trail and/or maintenance vehicle access (not for flood protection)
- Gravity-driven water control structures where possible

The Consulting Team will not perform detailed evaluation of:

- New/improved bridges, buildings, walls, or other built infrastructure.
- New/improved above ground or underground utility infrastructure.

Analysis of such infrastructure often requires extensive coordination with the owner/manager of that infrastructure, and likely would require technical disciplines not represented in the project team (structural, geotechnical, mechanical). The Consulting Team's analysis shall incorporate provisional assumptions and associated costs about anticipated infrastructure modifications and/or will incorporate information provided by the owner/manager of the infrastructure in question. Such provisional assumptions could have a high level of uncertainty.

Subtask 2.2 – Gallinas Creek Flood Management Strategy

This subtask includes feasibility study evaluation of adaptation strategies identified for the Gallinas Watershed, including flood protection levees, tidal gate and restoration opportunities to develop a no-action alternative and up to two larger themed alternatives to progress potential managed retreat strategies that would provide for enhanced flood protection, restoration and sediment management issues within the Gallinas Creek Watershed. The approach would be to use nature-based approaches where both possible and cost-effective while maintaining levels of flood protection that are acceptable to the District and other stakeholders. The feasibility level analysis would include a HAZUS analysis of physical damage and economic loss due to coastal and/or riverine inundation. Losses are calculated using functions that relate the depth and type of flooding to the degree of damage for various categories of buildings and land use types, allowing Marin County to review long-term adaptation strategies relative to predicted damages.

The Consulting Team shall develop a no-action baseline and two managed retreat options for the based upon results of the SLR Vision process. The Consulting Team will provide initial feasibility analysis of each option, including consideration of opportunities and constraints focusing on engineering, land use and ecology, and based on information from the review of previous studies. At this feasibility level, the Consulting Team will focus effort on evaluation of major constraints and major project elements, and potential approaches to address identified constraints to create a feasible project. As appropriate, this analysis will be coupled with Task 2.1 to identify potential cumulative ecological offsets and mitigation strategies for Gallinas Creek and Miller Creek. The Consulting Team will assess and compare the ecological and flood reduction benefits of each alternative.

The Consulting Team will provide descriptions (text and graphics) of the alternatives, including expected typical dimensions (length, depth/height, width) and materials for these elements. The Consulting Team will apply existing design guidelines and professional judgment to identify the likely scale of elements.

For each alternative, the Consulting Team will develop concept-level estimates of earthwork quantities, will itemize other major project elements for each alternative, and will provide an assessment of relative cost differences based on engineering judgement scaling the relative magnitude of the other alternatives. For the selected alternative, the Consulting Team will prepare a concept-level order of magnitude opinion of probable construction costs. This probable construction cost will include an appropriate contingency as an allowance for project features that will not be designed in detail under this scope.

The Consulting Team assumes that the project will primarily consist of earthwork, at-grade trails and access roads, planting and vegetation management, and gravity-driven water control structures (culverts, tide gates) where possible and relocating pump stations where needed due to the subsided grades in the area. the Consulting Team anticipates evaluation of the following categories of project elements:

- Existing Flood Protection Levees to be modified
- New Flood Protection Levees
- Ecotone slopes and habitat islands
- Horizontal levee with potential subsurface seepage slopes from LGVSD
- Sediment placement to raise site grades to restoration elevation
- Dredging to increase the depth and/or width of portions of the existing channel, and use of dredged material for restoration
- New Creek and Tidal Channel Excavation

- New embankments for trail and/or maintenance vehicle access (not for flood protection)
- Gravity-driven water control structures where possible

The Consulting Team will not perform detailed evaluation of:

- New/improved bridges, buildings, walls, or other built infrastructure.
- New/improved above ground or underground utility infrastructure.

Analysis of such infrastructure often requires extensive coordination with the owner/manager of that infrastructure, and likely would require technical disciplines not represented in the project team (structural, geotechnical, mechanical). The Consulting Team's analysis shall incorporate provisional assumptions and associated costs about anticipated infrastructure modifications and/or will incorporate information provided by the owner/manager of the infrastructure in question. Such provisional assumptions could have a high level of uncertainty.

Subtask 2.3 – Petaluma Upstream Area

This subtask includes feasibility study evaluation of adaptation strategies identified for the Petaluma Upstream Area, including flood protection levees, tidal gate and restoration opportunities to develop a no-action alternative and up to two larger themed alternatives to progress potential managed retreat strategies that would provide for enhanced flood protection for the Petaluma Upstream Area (areas upstream of US 101). The approach would be to use nature-based approaches where both possible and cost-effective while maintaining levels of flood protection that are acceptable to the City and other stakeholders. The feasibility level analysis would provide the next phase of project development, allow the City to review long-term adaptation strategies for consideration.

The Consulting Team shall develop a no-action baseline and two managed retreat options for the based upon results of the SLR Vision process. The Consulting Team will provide initial feasibility analysis of each option, including consideration of opportunities and constraints focusing on engineering, land use and ecology, and based on information from the review of previous studies. At this feasibility level, the Consulting Team will focus effort on evaluation of major constraints and major project elements, and potential approaches to address identified constraints to create a feasible project. This analysis can be augmented and supported by hydrologic modeling conducted by the City as part of its General Plan process.

The Consulting Team will provide descriptions (text and graphics) of the alternatives, including expected typical dimensions (length, depth/height, width) and materials for these elements. The Consulting Team will apply existing design guidelines and professional judgment to identify the likely scale of elements.

For each alternative, the Consulting Team will develop concept-level estimates of earthwork quantities, will itemize other major project elements for each alternative, and will provide an assessment of relative cost differences based on engineering judgement scaling the relative magnitude of the other alternatives. For the selected alternative, the Consulting Team will prepare a concept-level order of magnitude opinion of probable construction costs. This probable construction cost will include an appropriate contingency as an allowance for project features that will not be designed in detail under this scope.

The Consulting Team assumes that the project will primarily consist of earthwork, at-grade trails and access roads, planting and vegetation management, and gravity-driven water control structures (culverts, tide gates) where possible and relocating pump stations where needed due to the subsided grades in the area. the Consulting Team anticipates evaluation of the following categories of project elements:

- Existing Flood Protection Levees to be modified
- New Flood Protection Levees
- Ecotone slopes and habitat islands
- Horizontal levee with potential subsurface seepage slopes from LGVSD
- Sediment placement to raise site grades to restoration elevation
- Dredging to increase the depth and/or width of portions of the existing channel, and use of dredged material for restoration
- New Creek and Tidal Channel Excavation
- New embankments for trail and/or maintenance vehicle access (not for flood protection)
- Gravity-driven water control structures where possible

The Consulting Team will not perform detailed evaluation of:

- New/improved bridges, buildings, walls, or other built infrastructure.
- New/improved above ground or underground utility infrastructure.

Analysis of such infrastructure often requires extensive coordination with the owner/manager of that infrastructure, and likely would require technical disciplines not represented in the project team (structural, geotechnical, mechanical). The Consulting Team's analysis shall incorporate provisional assumptions and associated costs about anticipated infrastructure modifications and/or will incorporate information provided by the owner/manager of the infrastructure in question. Such provisional assumptions could have a high level of uncertainty.

Subtask 2.4 – American Canyon Shoreline

This subtask includes feasibility study evaluation of adaptation strategies identified for the American Canyon shoreline, including flood protection levees, tidal gate and restoration opportunities to develop a no-action alternative and up to two larger themed alternatives to progress potential managed retreat strategies that would provide for enhanced flood protection. The approach would be to use nature-based approaches where both possible and cost-effective while maintaining levels of flood protection that are acceptable to the City and other stakeholders. The feasibility level analysis would provide the next phase of project development, allow the City to review long-term adaptation strategies for consideration.

The Consulting Team shall develop a no-action baseline and two managed retreat options for the based upon results of the SLR Vision process. The Consulting Team will provide initial feasibility analysis of each option, including consideration of opportunities and constraints focusing on engineering, land use and ecology, and based on information from the review of previous studies. At this feasibility level, the Consulting Team will focus effort on evaluation of major constraints and major project elements, and potential approaches to address identified constraints to create a feasible project. This analysis can be augmented and supported by hydrologic modeling conducted by the City as part of its General Plan process.

The Consulting Team will provide descriptions (text and graphics) of the alternatives, including expected typical dimensions (length, depth/height, width) and materials for these elements. The Consulting Team will apply existing design guidelines and professional judgment to identify the likely scale of elements.

For each alternative, the Consulting Team will develop concept-level estimates of earthwork quantities, will itemize other major project elements for each alternative, and will provide an assessment of relative cost differences based on engineering judgement scaling the relative

magnitude of the other alternatives. For the selected alternative, the Consulting Team will prepare a concept-level order of magnitude opinion of probable construction costs. This probable construction cost will include an appropriate contingency as an allowance for project features that will not be designed in detail under this scope.

The Consulting Team assumes that the project will primarily consist of earthwork, at-grade trails and access roads, planting and vegetation management, and gravity-driven water control structures (culverts, tide gates) where possible and relocating pump stations where needed due to the subsided grades in the area. the Consulting Team anticipates evaluation of the following categories of project elements:

- Existing Flood Protection Levees to be modified
- New Flood Protection Levees
- Ecotone slopes and habitat islands
- Horizontal levee with potential subsurface seepage slopes from LGVSD
- Sediment placement to raise site grades to restoration elevation
- Dredging to increase the depth and/or width of portions of the existing channel, and use of dredged material for restoration
- New Creek and Tidal Channel Excavation
- New embankments for trail and/or maintenance vehicle access (not for flood protection)
- Gravity-driven water control structures where possible

The Consulting Team will not perform detailed evaluation of:

- New/improved bridges, buildings, walls, or other built infrastructure.
- New/improved above ground or underground utility infrastructure.

Analysis of such infrastructure often requires extensive coordination with the owner/manager of that infrastructure, and likely would require technical disciplines not represented in the project team (structural, geotechnical, mechanical). The Consulting Team's analysis shall incorporate provisional assumptions and associated costs about anticipated infrastructure modifications and/or will incorporate information provided by the owner/manager of the infrastructure in question. Such provisional assumptions could have a high level of uncertainty.

Task 2 Deliverables:

- One admin draft (for NBWRA agencies review/comment) and one final version of the LGVSD Reclamation Area Technical Memorandum (TM).
- One admin draft (for NBWRA agencies review/comment) and one final version of the Gallinas Creek Flood Management Strategy TM.
- One admin draft (for NBWRA agencies review/comment) and one final version of the Petaluma Upstream Area TM.
- One admin draft (for NBWRA agencies review/comment) and one final version of the American Canyon Shoreline TM.

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 15 days to review draft documents.
- 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 virtual and 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 are not included in the scope. Addition of the activities will require an amendment.
- Service will be provided up to the limit of the task budget.

Budget

Sea Level Rise Technical Support - Option B														
Phase	Phase Description	Rene Guillen	Jacki Bates	Bernadette Visitacion-Sumida	Sara Romero	Total Labor Hours	Total Labor Effort	Expenses	Total ODCs	ESA Cost	Total Sub Cost	Total Expense Cost	Total Expense Effort	Total Effort
		PM	PA	Project Oversight	Finance									
		\$266.00	\$142.00	\$313.00	\$118.00									
001	Project Management	18	12	2	4	36	\$7,583	\$0	\$0	\$0	\$0	\$0	\$0	\$7,583
002	Member Agency Technical Support	0	0	0	0	0	\$0	\$0	\$0	\$116,588	\$116,588	\$116,588	\$122,417	\$122,417
GRAND TOTAL		18	12	2	4	36	\$7,583	\$0	\$0	\$116,588	\$116,588	\$116,588	\$122,417	\$130,000
Hours and Dollars are rounded to nearest whole number. To display decimals, change the format of the cells.														

ESA Program Management Scope of Work

Tasks

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

1. If needed, coordinate room reservations for quarterly (4) Board meetings and bi-monthly (6) TAC-only meetings.
2. Notice Authority Board meetings via email in compliance with the Brown Act.
3. Plan the Authority Board and TAC meetings, including preparation of agendas for the Authority Board and TAC meetings.
4. Coordinate speakers at Authority Board and TAC meetings, prepare agenda item reports, and obtain approval of speakers from TAC Chair or Sonoma Water's Project Manager.
5. Email agenda packets to Authority members by 3 p.m. one week prior to the Board meeting.
6. Organize Authority Board agenda packets as one PDF document.
7. Facilitate Authority Board and TAC meetings as follows: (1) assist with reaching an understanding of issues by Authority Board and TAC members as quickly as possible, (2) ensure efficient time spent on each agenda item, and (3) obtain decisions on various elements of Program where necessary and possible.
8. Prepare and distribute action item minutes to Authority Board and TAC for both Authority Board and TAC meetings.
9. Track the progress of short-term action items from Authority Board and TAC meetings, and prepare a report on said items to include in each TAC agenda packet.
10. Develop letters on behalf of the Authority Board on an as-needed basis as authorized by the Authority Board or TAC Chair.
11. Schedule and participate in periodic coordination conference calls with Sonoma Water and Authority consultants.
12. If requested by Sonoma Water for specific issues, act as point of contact with the public, reporters, and government officials, and respond to inquiries through phone calls or emails.
13. Attend meetings, seminars, or conferences to make presentations on behalf of Authority, as approved by Authority Board or TAC Chair.

Deliverables: Submit the below deliverables in accordance with Paragraph 2.1 (Review and Acceptance of Deliverables).

Deliverable	Due Date
Draft Agendas	At least seven calendar days prior to each meeting
Final Agendas	At each meeting
Draft Action Minutes	Within three calendar days following each meeting
Final Action Minutes	Within seven calendar days of Sonoma Water's approval of draft
Draft Presentation	Five calendar days prior to each presentation
Final Presentation	At each presentation

Task 2: Financial Management

1. At the start of each calendar year, prepare the Program budget in two formats: An annual budget (or multi-year budget if directed by the TAC) and a longer range three-year budget based on Program revenue and cost elements including consultant costs.
2. Include tasks and costs for Phase 1, Phase 2, and Joint Use.
3. Identify cost allocations for the participating agencies.
4. Review complete budget status information provided by Sonoma Water on a quarterly basis and include this information in the Authority Board and TAC meeting packets.
5. Track Authority consultant costs monthly, compare costs to budget, and provide a summary at each Authority Board and TAC meeting.

Deliverables: Submit the below deliverables in accordance with Paragraph 2.1 (Review and Acceptance of Deliverables), or as directed by Sonoma Water.

Deliverable	Due Date
Draft Annual budget	January of each year
Final Annual budget	April of each year
Draft long-range budget	January of each year
Final long-range budget	April of each year
Budget status	Include in Authority Board and TAC packets
Summary of Authority consultants' costs	Include in Authority Board and TAC packets

Task 3: Project Support and Review

1. Provide project support and review on various components of the overall Program including, but not limited to, participation in meetings and conference calls on an as-needed basis.
2. Provide Phase 1 project support and review including, but not limited to, federal and state grant programs and the Integrated Regional Water Management Program.
3. Provide Phase 2 project support and review including, but not limited to, the Phase 2 Feasibility Study and Environmental Impact Report, as well as, federal and state grant programs and the Integrated Regional Water Management Program.

Deliverables: Submit the below deliverables in accordance with Paragraph 2.1 (Review and Acceptance of Deliverables).

Deliverable	Due Date
Summary of activities	Include in monthly reports under Task 4,

Task 4: Program Planning

- i. Review monthly reports of Authority consultants for the purpose of monthly progress reports and other coordination activities.
- ii. Prepare and submit monthly progress reports to Sonoma Water's Project Manager and Administrative Contact that include, but are not limited to:
 - i. A detailed list of work performed.
 - ii. A summary of work performed by Authority consultants, based on review of Authority consultants' monthly reports.
 - iii. Dates and subject of meetings conducted, meeting attendees, and summary of meeting results, and other work performed under this Agreement.
 - iv. Letters developed under Task 1, Paragraph 1.1.j.
 - v. Deliverables as described herein.
 - vi. Progress on each element of the budget.
 - vii. Other information as appropriate or as requested by Sonoma Water Project Manager.

Provide copies of monthly reports to Sonoma Water's Project Manager and Administrative Contact and provide supporting documentation for expenses.

Include consultant monthly reports in Board and TAC meeting agenda packets.

Deliverables: Submit the below deliverables in accordance with Paragraph 2.1 (Review and Acceptance of Deliverables).

Deliverable	Due Date
Monthly Progress Reports	Monthly with invoices
Consultant Monthly Reports	With agenda packets

Task 5: Governance Issues

- i. Coordinate efforts to revise the Fourth Amended MOU and cost sharing methods therein.
- ii. If the TAC determines that a Fifth Amended MOU is needed, chair a task force of representatives from the current and future Authority member agencies, if any, to draft a Fifth Amended MOU for review by Authority member agencies, as approved by the TAC.
- iii. Assist Authority member agencies in resolving issues to develop a final Fifth Amended MOU for approval by the Authority Board and Authority member agencies. Assistance includes, but is not limited to, participation in workshops, development and identification of issues, and task force meetings. The level of effort is limited to the cost estimate.

Deliverables: Submit the below deliverables in accordance with Paragraph 2.1 (Review and Acceptance of Deliverables).

Cost Estimate: \$50,000

ITEM NO. 8 PLANNING FOR SEPTEMBER NBWRA BOARD MEETING

Action Requested

Discussion

Summary

The Board should be updated on the following at the September 29th Board Meeting

1. Status of Phase 1 closeout and reconciliation.
2. Status of Phase 2 projects.
3. Status of the Resilience Area projects
 - a. Consultant Updates/Presentation
4. Financial Report
5. Status of consultant agreements for FY2025/26
6. FY 26/27 Budget
7. Other Items

Please note that the September 29th meeting will be in-person at the North Marin Water District Board Room, located at 999 Rush Creek Pl, Novato.

Recommendation

None

Attachment

None.

ITEM NO. 2 AMERICAN CANYON PARTICIPATION IN ARENA 4: NBWRA SLR VISION PROCESS

Action Requested

Review for Approval

Summary

NBWRA Board Member identified interest in American Canyon participation in the NBWRA SLR Vision Process. Discussions with American Canyon staff indicate that American Canyon would like to participate. The Consulting Team identified the additional cost to integrate American Canyon in the work to date at approximately \$40,000. This is equivalent to the recent addition of the Petaluma Upstream Area \$30,000, plus additional costs to date. Adding American Canyon at an equal participatory share (20%) would reduce the currently participating Member Agency contributions by \$10,425. This would result in a participatory redistribution of costs as follows:

		LGVSD	Marin County	City of Petaluma	Sonoma Water	America Canyon
Original Budget	\$121,000	\$30,250	\$30,250	\$30,250	\$30,250	0
Amended Budget	\$87,488	\$21,872	\$21,872	\$21,872	\$21,872	0
City of Petaluma Upstream Area	\$30,000	0	0	\$30,000	0	0
Existing Distribution	\$238,488	\$52,122	\$52,122	\$82,122	\$52,122	0
New Distribution	\$238,488	\$41,697	\$41,697	\$71,697	\$41,697	\$41,697

Recommendation

Approval

Attachment

None.