

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

Thursday, June 2, 2022

Agenda

2:00 PM

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

	1.		Call to Order and Self Introductions
	2.	Action	Approval of Agenda
	3.		Public Comments
	4.	Information	TAC Meeting Minutes of April 7, 2022 Not prepared. The TAC could not reach consensus on resilience arena projects and costs and agreed to complete a questionnaire to assist in preparing the budget.
Pages 3 - 26	5.	Information and Possible Action	Results of Survey and Consideration of FY2022/23 Budget and Resilience Arena Projects
	6.	Information	Next Meeting, July 7, 2022
	7.		Adjournment

ITEM NO. 5 RESULTS OF SURVEY AND PRIOR SCOPES OF WORK

Action Requested

It is recommended that the TAC review the results of the survey and scopes of work and consider a budget for FY2022/23 to submit to the Board for approval;

Summary

Please refer to the survey results and the previously considered scopes of work.

Recommendation

It is recommended that the TAC review the results of the survey and scopes of work and consider a budget for FY2022/23 to submit to the Board for approval.

Agency	Q.1. Phase 1 w/o Phase 2 Projects (LGVSD, NMWD, and Napa County)> Associate Member	Q.2. Phase 2 agencies > will have a Phase 2 construction Project	Q.3 Phase 2 agencies w/o Phase 2 project > Associate Member	Q.4. Phase 2 agencies with Phase 2 projects; total budget support (depends on number of agencies participating)	Q.5 Sonoma and Marin agencies; participation in the DCP study; and maximum cost.	Q.6 Sea level rise Option A, all agencies. Specific to LGVSD and Marin agencies. Y/N to participation and maximum cost.	Q.7 Sea Level Rise Option B Sub regional plan for Marin County agencies. Y/N to participation and maximum cost	Q.8 Sea Level Rise Option C, regional plan for all agencies. Y/N to participation and maximum cost.
LGVSD	Yes, to becoming associate member 7/1/22	NA	NA	NA	Yes \$8,000	Yes \$58,000 total project cost. Preferred.	Yes \$58,000 total project cost. Second choice.	Yes \$58,000 total project cost. Third choice.
Napa County	Yes, to becoming associate member 7/1/22.	NA	NA	NA	No	No	No	No
NMWD	Yes, to becoming associate member 7/1/22.	NA	NA	NA	Yes \$8,000	No	No	No
Novato San	Yes, to becoming associate	No	Yes, to becoming associate	NA \$0	No	No	No	No

Agency	Q.1. Phase 1 w/o Phase 2 Projects (LGVSD, NMWD, and Napa County)> Associate Member	Q.2. Phase 2 agencies > will have a Phase 2 construction Project	Q.3 Phase 2 agencies w/o Phase 2 project > Associate Member	Q.4. Phase 2 agencies with Phase 2 projects; total budget support (depends on number of agencies participating)	Q.5 Sonoma and Marin agencies; participation in the DCP study; and maximum cost.	Q.6 Sea level rise Option A, all agencies. Specific to LGVSD and Marin agencies. Y/N to participation and maximum cost.	Q.7 Sea Level Rise Option B Sub regional plan for Marin County agencies. Y/N to participation and maximum cost	Q.8 Sea Level Rise Option C, regional plan for all agencies. Y/N to participation and maximum cost.
	member 7/1/22.		member 7/1/22.					
MMWD	NA	Yes	NA	\$40,000 max agency cost. Assumes completion of EIR/EIS; participation of other at least 3 other agencies and ability to withdraw from Phase 2 at completion of EIR and financial capability	No	No	No	No

Agency	Q.1. Phase 1 w/o Phase 2 Projects (LGVSD, NMWD, and Napa County)> Associate Member	Q.2. Phase 2 agencies > will have a Phase 2 construction Project	Q.3 Phase 2 agencies w/o Phase 2 project > Associate Member	Q.4. Phase 2 agencies with Phase 2 projects; total budget support (depends on number of agencies participating)	Q.5 Sonoma and Marin agencies; participation in the DCP study; and maximum cost.	Q.6 Sea level rise Option A, all agencies. Specific to LGVSD and Marin agencies. Y/N to participation and maximum cost.	Q.7 Sea Level Rise Option B Sub regional plan for Marin County agencies. Y/N to participation and maximum cost	Q.8 Sea Level Rise Option C, regional plan for all agencies. Y/N to participation and maximum cost.
				analysis and prior to grant solicitation.				
Sonoma Water	NA	Yes	NA	Up to \$209,000. (original estimate w/o Task 7 and w/ \$4,000 for Sonoma Water	Yes \$25,000 max agency cost		Yes \$20,000 max agency cost	
SVCSD	NA	Yes	NA	Up to \$209,000. (original estimate w/o Task 7 and w/ \$4,000 for Sonoma Water	Yes \$10,000 max agency cost		Yes \$20,000 max agency cost	

Agency	Q.1. Phase 1 w/o Phase 2 Projects (LGVSD, NMWD, and Napa County)> Associate Member	Q.2. Phase 2 agencies > will have a Phase 2 construction Project	Q.3 Phase 2 agencies w/o Phase 2 project > Associate Member	Q.4. Phase 2 agencies with Phase 2 projects; total budget support (depends on number of agencies participating)	Q.5 Sonoma and Marin agencies; participation in the DCP study; and maximum cost.	Q.6 Sea level rise Option A, all agencies. Specific to LGVSD and Marin agencies. Y/N to participation and maximum cost.	Q.7 Sea Level Rise Option B Sub regional plan for Marin County agencies. Y/N to participation and maximum cost	Q.8 Sea Level Rise Option C, regional plan for all agencies. Y/N to participation and maximum cost.
Petaluma	NA	Yes	NA	Up to \$323,000 (The revised estimate with Task 7 plus \$4k for Sonoma Water)	Yes \$5,000 to \$8,000		NA	Yes \$75,000 or as needed to pursue this study
Marin County	NA	NA	NA	NA	Yes No cost ceiling listed	Yes No cost listed	Yes No cost listed	Yes No cost listed
American Canyon <i>See conflict</i>	NA	Yes	<i>Yes, to becoming associate member 7/1/22</i>	<i>Up to \$40,000 max agency cost</i>	NA	NA	NA	Maybe. Need more info
Napa San	NA	Yes	NA	Alternate level	NA	No	No	No

Conclusions

1. Agencies becoming Associate Members effective July 1, 2022
 - a. LGVSD
 - b. NMWD
 - c. Novato San

2. Phase 2 Agencies with a Phase 2 construction project
 - a. MMWD
 - b. Sonoma Water
 - c. SVCSD
 - d. Petaluma
 - e. American Canyon (Included in Y22/23 with expectation that EIR/EIS is completed; need confirmation)
 - f. Napa San, (included in FY22/23 with expectation that EIR/EIS is completed)

3. Resilience Arena for Recycled Water FY2022/23 Budget
 - a. Responses ranged from \$40,000 max, support for \$209,000, and support for \$323,000
 - b. **Conclusion is \$209,000 (the original \$205,000 plus \$4,000 for Sonoma Water) for six agencies, which would be \$34,833 average per agency. Actual costs will depend on project costs. Need to adjust based on current cost percentages.**

4. Resilience Arena for Drought Contingency Plan for Sonoma and Marin Agencies
 - a. Support from LGVSD, NMWD, Sonoma Water, SVCSD, Petaluma, and Marin County
 - b. Total support cost is \$8,000 + \$8,000 + \$25,000 + \$10,000 + \$5,000 to \$8,000 + unknown = \$56,000 to \$59,000
 - c. **Conclusion is there is adequate support for the proposed scope and cost of \$56,000 shared by six agencies.**

5. Resilience Arena for Sea Level Rise adaptation
 - a. Support from LGVSD, Sonoma Water, SVCSD, Petaluma, Marin County,
 - b. Total support cost is \$10,000 (LGVSD with six agencies participating) + \$20,000 + \$20,000 + \$75,000 + unknown + unknown
 - c. Total support cost is \$125,000 plus some unknown amount
 - d. **Conclusion is there is adequate support for a modified sub-regional study with a cost ceiling of \$125,000 or \$31,250 for each of the four agencies. The cost would decrease with Marin County participation. The current estimated cost for a sub-regional study is \$119,000 so a modified scope is reasonable. B&C to revise scope with a cost of \$125,000 and LGVSD, Sonoma Water, SVCSD, and Petaluma as participants. Include a couple of sentences as to how it would differ if Marin County participated.**

6. Joint Use Costs

- a. \$40,000 for Program Management for Weir Technical Services. Note that the term is expected to be through December 31, 2023 so not all costs would be in FY2022/23. In addition, costs are likely to be lower as it appears that the activity for NBWRA over all is declining and fewer meetings are likely.
- b. \$65,500 for Sonoma Water. In addition, costs are likely to be lower as it appears that the activity for NBWRA over all is declining and fewer meetings are likely.
- c. Total cost is currently \$105,500 for Joint Use which would be shared by the five Phase 2 agencies, or \$21,156 per agency.
- d. Currently since there are no specific guidelines for DCP and Sea Level Rise in the MOU, it seems reasonable that associate members that participate in those projects should pay a share of joint use costs. LGVSD and NMWD will be in that position effective July 1, 2022. Assessing an additional \$7,500 to help offset joint use costs is acceptable.
- e. Conclusion, the \$105,500 joint use costs will likely be spread over two fiscal years and associate members participating in DCP and Sea Level rise should pay an additional fee of \$7,500 to help offset joint use costs. Cost for each of the five Phase 2 agencies would be $(\$105,500 - \$15,000 = \$18,100)$ each. LGVSC and NMWD pay \$7,500 each.

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 – Management

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

1.1 Workshops/ Authority Board of Directors/ Technical Advisory Committee Meetings

The Consultant Team will attend an additional twelve (12) Technical Advisory Committee (TAC) meetings and six (6) NBWRA Board Meetings. All meetings are assumed to be held virtually using web-based communications without personal attendance. The BC team will help prepare meeting materials and present as requested up to the limit of the budget.

1.3 Public Involvement

Adding budget for continued support as described in current Consultant agreement. The Consultant team will provide services up to the limit of the budget.

1.4 Administration

BC 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 an additional 12 months of PM services and monthly progress reports.
- TAC meetings are assumed to be one hour in duration.
- NBWRA meetings are assumed to be two hours in duration.

Task 2 – Title XVI Feasibility Study

No changes to the scope or additional budget needed.

Task 3 – Environmental Evaluation

The Consultant team will work closely with the NBWRA member agencies and the U.S. Bureau of Reclamation (Reclamation) to complete the National Environmental Policy Act (NEPA) process. The

Consultant team will leverage the existing State certified environmental document to complete the process.

Task 3 Deliverables

- One admin draft (for NBWRA member agencies review/comment), one draft (for Reclamation review/comment), and one final version of the NEPA certified environmental document.

Task 3 Assumptions

- 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 NBWRA member agencies 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.
- No additional BC budget was added to this task as it is assumed that the remaining budget in the existing contract will be used to support completion of this task. If task is not added as an amendment to existing contract, additional budget will be required.

Task 4 – Financial Capabilities Determination

The Consultant team will work closely with the NBWRA member agencies to update the existing draft Financial Capability Determination (FCD) Report to align with recent updates that were made to the Phase 2 Title XVI Feasibility Study Report, including the following services, provided to the limit of the budget:

1. Update the presentation of financial statement data to enable Reclamation reviewers to compare project investment costs to existing capital assets, project operation costs to current operation costs, and annual project revenue requirements to existing revenues.
2. Update project cost allocation to reflect the current cost estimate, which defines the federal and non-federal cost shares for the Phase 2 Program.
3. Collect information on the non-federal financing plan and status from NBWRA member agencies through emails, phone conference calls, and meetings. The plans should include details and documentation both for funding of the non-federal share of construction (e.g., loans, grants, bonds) and for required annual debt service and annual project operations costs (e.g., user fees and tax assessments).
4. Submit an updated Draft FCD Report to the NBWRA member agencies for review and hold follow-up meetings, as requested, to discuss comments. Revise to address NBWRA member agencies review comments, then submit the FCD Report to Reclamation. Respond to Reclamation's questions and comments. Revise to address Reclamation review comments, then submit the Final FCD Report to Reclamation.

Task 4 Deliverables

- One admin draft (for NBWRA member agencies review/comment), one draft (for Reclamation review/comment), and one final version of the Financial Capability Determination Report.

Task 4 Assumptions

- 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 NBWRA member agencies 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.
- NBWRA member agencies will provide financial statements to be utilized for the financial capability determination.
- A maximum of 8 hours has been budgeted for responding to comments and questions on the submitted FCD Report.

Task 5 – Phase 2 Funding Sources Identification, and Grant Applications and Administration

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 budget.

Task 5 Deliverables:

- Draft and final grant applications for one (1) federal funding opportunity.

Task 5 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 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 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 8 hours has been budgeted for responding to comments and questions on the submitted grant application.

Task 6 – Authority Phase 1 Services

No changes to the scope or additional budget needed.

Task 7 – Additional Services

The NBWRA member agencies may require technical input to support TAC decision processes and to support TAC presentations to the NBWRA Board. Topics can include future direction of NBWRA, future task and scoping to support TAC discussions, cost implications of future actions, organizational issues, other technical questions that arise to support the TAC, and other issues to be defined by the TAC as needed. Requests will be submitted in writing by Sonoma Water. The Consultant team will provide an effort estimate and identification of scope and anticipated deliverables for each work request for agreement with the TAC.

Task 7 Assumptions

- Services will be provided up to the limit of the task budget.
- Consultant team will conduct quality reviews on deliverables prior to submittal to the NBWRA member agencies. The 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.

Budget.

Continued Recycled Water Support																			
Phase	Phase Description	Rene Guillen	Jacki Bates	Bernadette Visitation-Sumida	Melanie Holmer	Erin Mackey	Julia Teixeira	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	Technical Expert	Engineering Support	Word Processing	Graphics	Finance			Cost	Cost	Cost				
		\$203.00	\$122.00	\$268.00	\$327.00	\$268.00	\$147.00	\$147.00	\$122.00	\$98.00									
001	Project Management	76	24	6	0	0	0	0	0	10	116	\$21,572	\$48,600	\$13,500	\$13,500	\$75,600	\$75,600	\$79,380	\$100,952
001	Workshops	58	0	0	0	0	0	0	0	0	58	\$12,127	\$16,200	\$8,100	\$8,100	\$32,400	\$32,400	\$34,020	\$46,147
003	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
004	Administration	18	24	6	0	0	0	0	0	10	58	\$9,445	\$7,400	\$5,400	\$5,400	\$18,200	\$18,200	\$19,110	\$28,555
002	Title XVI Feasibility Study	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
003	Environmental Evaluation	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$85,000	\$0	\$85,000	\$85,000	\$89,250	\$89,250
****	Environmental Evaluation	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$85,000	\$0	\$85,000	\$85,000	\$89,250	\$89,250
004	Financial Capability Determina	14	0	0	0	0	0	0	0	0	14	\$2,927	\$0	\$0	\$12,000	\$12,000	\$12,000	\$12,600	\$15,527
****	Financial Capability Determinir	14	0	0	0	0	0	0	0	0	14	\$2,927	\$0	\$0	\$12,000	\$12,000	\$12,000	\$12,600	\$15,527
005	Phase 2 Grant Application	50	0	0	8	6	25	6	4	0	99	\$20,002	\$5,000	\$0	\$0	\$5,000	\$5,000	\$5,250	\$25,252
****	Phase 2 Grant Application	50	0	0	8	6	25	6	4	0	99	\$20,002	\$5,000	\$0	\$0	\$5,000	\$5,000	\$5,250	\$25,252
006	Phase 1 Services	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
007	Additional Services	180	0	0	20	40	100	6	6	0	352	\$72,217	\$5,000	\$5,000	\$5,000	\$15,000	\$15,000	\$15,750	\$87,967
****	Additional Services	180	0	0	20	40	100	6	6	0	352	\$72,217	\$5,000	\$5,000	\$5,000	\$15,000	\$15,000	\$15,750	\$87,967
GRAND TOTAL		320	24	6	28	46	125	12	10	10	581	\$116,719	\$58,600	\$103,500	\$30,500	\$192,600	\$192,600	\$202,230	\$318,949

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: Review and Assessment of the Regional Water Supply Resiliency Study

The Brown and Caldwell (BC) team shall work collaboratively with the North Bay Water Reuse Authority (NBWRA) member agencies to review Sonoma Water’s Regional Water Supply Resiliency Study (Study) to determine if it compares to the criteria of a “Drought Contingency Plan” (DCP) and to identify actions to be taken to meet the DCP criteria. The purpose is to allow NBWRA member agencies to make needed revisions or enhancements to the Study to afford them the opportunity to apply for U.S. Bureau of Reclamation (Reclamation) funding under the “Drought Resiliency Program.”

Task 1 – Document Review

The BC team will review the DCP requirements as described in Reclamation’s “WaterSMART Drought Response Program Framework” and those that were included in “Funding Opportunity Announcement No. R22AS00178 WaterSMART Drought Response Program: Drought Contingency Planning Grants for Fiscal Year 2022.” Topics will include:

Phase I

- Establishment of a Drought Planning Task Force.
- Development of a Detailed Work Plan.

Phase II

Per Reclamation guidance, new DCPs or DCP updates are required to address each of the six elements that are listed below. Updates to an existing drought plan may focus on only those elements that have not yet been developed in the plan, or that require further development or updating; however, completed plan updates must address each of these six elements.

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

The BC team will review the Study and other pertinent documents provided by NBWRA agencies and compare to the DCP requirements. If necessary, the BC team will meet with the Study consultant to determine available information that is not directly in the Study that could support the DCP effort.

Assumptions

- Sonoma Water will provide the Study or any other pertinent document within 5 days of the submitted request.
- If a meeting between the BC team and the Study consultant is needed, Sonoma Water will direct the Study consultant to meet. 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 the meeting will be held by videoconference.

Task 2 – Technical Memorandum

The BC team will develop and provide a draft Technical Memorandum (TM) outlining the findings and identifying the items that should be addressed to make the Study meet DCP criteria. Findings will be presented to the Technical Advisory Committee (TAC) for comment. Following review and revision the BC team and NBWRA agency representatives will schedule a meeting with Reclamation staff to discuss the proposed approach and to receive Reclamation comments. A final TM will summarize the findings and recommended actions needed to develop a document sufficient to meet DCP requirements to allow applications for project funding through Reclamation’s “Drought Resiliency Program.”

Task 2 Deliverables

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

Task 2 Assumptions

- BC team will attend one meeting with the TAC to present findings and recommended actions needed to make the Study meet the DCP Criteria. The meeting will be attended by up to two BC staff and one Data Instincts staff and be up to two hours in duration.
- BC team will attend one meeting with Reclamation staff to discuss the proposed updates 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 two hours in duration.
- It is assumed that all the meetings will be held by videoconference.
- The TM will identify the needed updates to the existing Study but does not conduct/develop the action items identified in the TM.
- 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.
- The NBWRA member agencies will have 10 days to review the draft TM.
- Sonoma Water will provide a single set of collated comments (in MS Word and/or an Excel comment log) from the NBWRA member agencies. BC will document follow-up actions or rationale (if not revising a work product to incorporate one or more of the NBWRA Agencies’ comment[s]) in the comment log.

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 six, 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

- Monthly progress reports and invoices.

Task 3 Assumptions

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

Budget.

Drought Contingency Planning: Review and Assessment of the Regional Water Supply Resiliency Study																
Phase	Phase Description	Rene Guillen	Jacki Bates	Bernadette Visitacion-Sumida	Melanie Holton	Sara Romero	Julia Teixeira	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				
		\$203.00	\$122.00	\$268.00	\$268.00	\$98.00	\$147.00	\$147.00	\$122.00							
001	DCP Review	118	24	4	8	10	76	8	8	256	\$45,734	\$6,000	\$6,000	\$6,000	\$6,300	\$52,034
001	Document Review	60	0	0	0	0	40	0	0	100	\$18,602	\$4,000	\$4,000	\$4,000	\$4,200	\$22,802
002	Technical Memorandum	40	0	0	8	0	36	8	8	100	\$18,239	\$2,000	\$2,000	\$2,000	\$2,100	\$20,339
003	Project Management	18	24	4	0	10	0	0	0	56	\$8,893	\$0	\$0	\$0	\$0	\$8,893
GRAND TOTAL		118	24	4	8	10	76	8	8	256	\$45,734	\$6,000	\$6,000	\$6,000	\$6,300	\$52,034

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 Adaptation: BRIC Grant Application

The following scope describes the services to develop a FEMA Building Infrastructure and Communities (BRIC) Grant application intended to help support the development of a Las Gallinas Valley Sanitary District and Marin County Adaptation Plan. It is assumed that these services will be amended to the existing Consultant contract.

Task 1 – BRIC Grant Application & Management

The Consultant team will support NBWRA member agencies preparation of one (1) BRIC 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 budget.

Task 1 Deliverables:

- Draft and final grant applications for one (1) BRIC grant application.

Task 1 Assumptions:

- Consultant team will require notice of at least 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 application is up to 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 8 hours has been budgeted for responding to comments and questions on the submitted grant application.

Task 2 – Project Management

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

Task 2 Deliverables

- Monthly progress reports and invoices.

Task 2 Assumptions

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

Budget.

Sea Level Rise Adaptation - BRIC Grant Application												
Phase	Phase Description	Rene Guillen	Jacki Bates	Bernadette Visitacion-Sumida	Sara Romero	Total Labor Hours	Total Labor Effort	ESA	Total Sub Cost	Total Expense Cost	Total Expense Effort	Total Effort
		PM	PA	Project Oversight	Finance			Cost				
		\$203.00	\$122.00	\$268.00	\$98.00							
001	BRIC Grant Application	6	0	0	0	6	\$1,255	\$50,000	\$50,000	\$50,000	\$52,500	\$53,755
****	Sea Level Rise Adaptation	6	0	0	0	6	\$1,255	\$50,000	\$50,000	\$50,000	\$52,500	\$53,755
002	Project Management	2	3	1	1	7	\$1,034	\$0	\$0	\$0	\$0	\$1,034
****	Sea Level Rise Adaptation	2	3	1	1	7	\$1,034	\$0	\$0	\$0	\$0	\$1,034
GRAND TOTAL		8	3	1	1	13	\$2,289	\$50,000	\$50,000	\$50,000	\$52,500	\$54,789

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 Adaptation Plan Option 4B & Option 4C

The following scope describes proposed scope of work for the Option 4B \$115,000 SLR Adaptation Plan, which envisions a Marin County focused plan. To extend this plan to the entire NBWRA service area, Option 4C, we would anticipate a similar scope of work, but at an increased scale, with a cost estimate of \$252,000

Task 1 – Project Management

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

Task 1 Deliverables

- Monthly progress reports and invoices.

Task 1 Assumptions

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

Task 2. Strategic outreach and coordination

ESA will work with Member Agencies to develop a strategic outreach plan aimed at validating sea-level rise risks and vulnerabilities, and building stakeholder (landowner) support for future adaptation concepts. ESA will in implement some aspects of the outreach plan as described below.

1. **Strategic outreach/coordination plan.** ESA will develop a strategic outreach plan (draft and final) that identifies the goals of outreach, key stakeholders, the number of stakeholder outreach meetings, and the content and objectives of each outreach meeting.
2. **External stakeholder outreach meetings:** In partial implementation of the strategic outreach plan, ESA will meet twice with key stakeholders. The first meeting will likely explain risks and vulnerabilities to landowners identified in Task 2a to solicit input on adaptation strategies. This meeting will inform refinement of the screening criteria in Task 3 and development and evaluation of adaptation concepts in Task 4. In a second meeting, including both stakeholders and also select members of the broader community to be determined by the project team and potentially, the TAC. ESA will share the preliminary adaptation options developed in Task 4 and receive feedback. ESA will support facilitation of these meeting with the development of materials, presentation, and agendas for the meetings
3. **Stakeholder Public Meeting/Charette:** ESA will facilitate a public meeting to review adaptation strategies and garner input.
4. **Optional to be augmented with additional funds:** *attend additional stakeholder meetings and/or City Council briefing mid-way, identified in Strategic Outreach plan and agreed upon by NBWRA.*

Deliverables:

- a. Memo: Draft and Final strategic outreach plan
- b. Up to 3 meetings with external stakeholders including meeting attendance/facilitation, technical content development/presentation, and action items.
- c. Two Public Meetings. Including meeting attendance/facilitation, presentations as appropriate, and action items follow up. It is also assumed

that TAC meeting content, agendas, etc. will be identical to the content developed for external stakeholder meetings.

- d. *Optional deliverable: ESA attendance or support of additional individual or public stakeholder meetings.*

Task 3. Decision making framework. This task provides the framework in which the NBWRA and stakeholders will consider and decide about their shoreline adaptation. The goals/vision/and screening criteria that form part of the framework may need to be vetted with stakeholders at a future date in order to get buy-in. A vetting may be identified in the Strategic Outreach Plan.

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

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

Task 4. Understand risks and vulnerabilities

The key risks and priorities identified in this task will directly inform the set of concepts/alternatives developed in task 5.

- c. ESA will review existing studies and synthesize the primary concerns identified therein, studies include: Marin County Hazard Management Plan, BayWave vulnerability assessment; Burlingame General Plan update, the latest FEMA FIRM mapping, BCDC Guidance; and other studies. *Our focus will be applying work completed to date to adaptation strategies that can inform a list of projects for funding. ESA will not generate any new analyses or data in this effort.*
- d. ESA will then identify key risks and vulnerabilities in the project area. This includes highlighting where risks may be the greatest or most urgent, and whether there any areas or risks which would be considered intolerable. They will use this information to identify key or priority areas.
- e. ESA and staff will meet with County and City Floodplain Administrators to validate findings in terms of key vulnerabilities/risks, and to collect any additional critical information from those staff that may be discussed in the meeting.

- f. Following the review, ESA will identify critical information gaps that will be essential to more fully understanding risks. They will make recommendations for filling those gaps in Task 7, and preliminary cost estimates associated with the recommendations.

Deliverables:

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

Task 5. Identify and screen adaptation options to reduce risks and vulnerabilities

- g. ESA will identify no more than 3 concepts to reduce the risks and vulnerabilities identified in Task 4 above. Adaptation concepts will include a range of structural and nonstructural options, and at least one nature-based or multi-benefit strategy.
- h. ESA will then use a matrix to screen/evaluate the adaptation concepts with the screening criteria established in Task 3. This screening/evaluation will consider how well each of the concepts perform compared to the criteria and whether or how they work toward the established goals.
- i. As appropriate, ESA will develop 1 page project summary sheets and background information to support funding applications. We anticipate a CIP list of projects can be developed for articulation at both an individual project and overall program. Our scope of work assume development up of up ten project descriptions.

Deliverables:

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

Task 6. Advance and illustrate concepts for further consideration

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

- j. ESA will work with NBWRA to select 2 top concepts for advancement that consider the results of the screening evaluation and stakeholder input received from Stakeholder Meeting #2.
- k. Create graphic renderings of the 2 selected adaptation concepts. *note, this is the more labor intensive of these two sub-tasks—anticipated that 6a can be done rather efficiently.

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

Task 7. Next steps strategy and Final Presentation

- I. ESA will develop a memo that identifies the next steps for the NBWRA to advance shoreline adaptation. The memo will recommend sequencing, and may include items like:
 - i. Key studies gaps that must be filled, and why
 - ii. Hydraulic and hydrologic modeling that may be needed to better evaluate how adaptation concepts reduce flood risks.
 - iii. Additional studies or analysis needed to refine the adaptation concepts evaluation, i.e., economics/benefit-cost analysis, cost estimates of adaptation concepts
 - iv. Key Projects that Can be applied for funding programs
 - v. Anticipated permitting, rights of way, policy challenges that may need to be addressed, as identified through screening in task 5b.
 - vi. Potential land use changes or zoning updates that may be required
 - vii. List of additional agencies/stakeholders likely needed to advance the effort and/or fund, permit, construct, implement
 - viii. Sequencing of the steps with rough time frame
- m. **Final presentation to NBWRA Board/Stakeholders**
 ESA will develop a final summary presentation to identify the key messages for the NBWRA Member Agencies and stakeholders, likely including an overview of the project process, the key findings, and next steps.

Deliverables:

- a.** Draft and final next steps strategy memo
- b.** Final summary presentation (draft and final)

Budget.

Option 4B

NBWR Focused SLR ESA Labor Detail and Expense Summary

		2021 Employee Billing Rates																																										
Employee Names																																												
Labor Category		Senior Director III	Senior Director II	Senior Director I	Director III	Director II	Director I	Managing Associate III	Managing Associate II	Managing Associate I	Senior Associate III	Senior Associate II	Senior Associate I	Associate III	Associate II	Associate I	Subtotal	Project Technician III	Project Technician II	Project Technician I	Subtotal	Total Hours	Labor Price																					
Task #	Task Name/Description	\$ 325	\$ 300	\$ 275	\$ 260	\$ 245	\$ 225	\$ 220	\$ 205	\$ 190	\$ 185	\$ 170	\$ 160	\$ 145	\$ 135	\$ 115		\$ 130	\$ 110	\$ 90																								
1.0	Project Management		16										8				f	5,960			f	24.00	\$ 5,960																					
2.0	Strategic Outreach		16									32	8				f	11,000			f	56.00	\$ 11,000																					
3.0	Decision Making Framework		16									32	8				f	11,000			f	56.00	\$ 11,000																					
4.0	Vulnerability		8			32						32	8				f	16,520			f	80.00	\$ 16,520																					
5.0	Adaptation Strategies		8			32						80	8				f	24,200			f	128.00	\$ 24,200																					
6.0	Advance Concepts		16			16						40	8				f	16,800			f	80.00	\$ 16,800																					
7.0	Next Steps Strategy		8										8				f	3,560			f	16.00	\$ 3,560																					
																	f	-			f	-	\$ -																					
	Total Hours		88			80						216	56				f	440			f	440	\$ 440																					
	Total Labor Costs	\$ -	\$ 26,400	\$ -	\$ -	\$ 19,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 34,560	\$ 8,120	\$ -	\$ -	f	\$ 68,680	\$ -	\$ -	\$ -	\$ -	\$ 88,680																					
	Percent of Effort - Labor Hours Only	0.0%	20.0%	0.0%	0.0%	18.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	48.1%	12.7%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	0.0%	100.0%																						
	Percent of Effort - Total Project Cost	0.0%	22.9%	0.0%	0.0%	17.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	29.9%	7.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		76.8%																					
																						ESA Labor Cost																					\$ 88,680	
																						Labor Cost Communication Fee																						\$ 2,660
																						ESA Non-Labor Expenses																						
																						Reimbursable Expenses																						\$ 9,134
																						ESA Equipment Usage																						\$ -
																						Subtotal ESA Non-Labor Expenses																						\$ 9,134
																						Subconsultant Costs																						\$ 15,000
PROJECT TOTAL																																												\$ 115,474

Option 4C

NBWR Full Service Area SLR ESA Labor Detail and Expense Summary

		2021 Employee Billing Rates																																										
Employee Names																																												
Labor Category		Senior Director III	Senior Director II	Senior Director I	Director III	Director II	Director I	Managing Associate III	Managing Associate II	Managing Associate I	Senior Associate III	Senior Associate II	Senior Associate I	Associate III	Associate II	Associate I	Subtotal	Project Technician III	Project Technician II	Project Technician I	Subtotal	Total Hours	Labor Price																					
Task #	Task Name/Description	\$ 325	\$ 300	\$ 275	\$ 260	\$ 245	\$ 225	\$ 220	\$ 205	\$ 190	\$ 185	\$ 170	\$ 160	\$ 145	\$ 135	\$ 115		\$ 130	\$ 110	\$ 90																								
1.0	Project Management		16										16				f	2,480			f	32.00	\$ 7,120																					
2.0	Strategic Outreach		40									100	16				f	31,520			f	156.00	\$ 31,520																					
3.0	Decision Making Framework		16									100	16				f	24,480			f	132.00	\$ 24,120																					
4.0	Vulnerability		40			100						100	16				f	25,600			f	256.00	\$ 55,520																					
5.0	Adaptation Strategies		40			100						100	16				f	25,600			f	256.00	\$ 55,520																					
6.0	Advance Concepts		16			40						80	16				f	28,320			f	152.00	\$ 28,720																					
7.0	Next Steps Strategy		8									4	16				f	5,400			f	28.00	\$ 5,400																					
																	f	-			f	-	\$ -																					
	Total Hours		176			240						404	80				f	492			f	1,012	\$ 1,012																					
	Total Labor Costs	\$ -	\$ 52,800	\$ -	\$ -	\$ 58,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 68,680	\$ 12,800	\$ 16,240	\$ -	f	\$ 208,320	\$ -	\$ -	\$ -	\$ -	\$ 209,320																					
	Percent of Effort - Labor Hours Only	0.0%	17.4%	0.0%	0.0%	23.7%	0.0%	0.0%	0.0%	0.0%	0.0%	39.9%	7.9%	11.1%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	0.0%	100.0%																						
	Percent of Effort - Total Project Cost	0.0%	20.9%	0.0%	0.0%	23.3%	0.0%	0.0%	0.0%	0.0%	0.0%	27.2%	5.1%	6.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		83.0%																					
																						ESA Labor Cost																						\$ 209,320
																						Labor Cost Communication Fee																						\$ 6,280
																						ESA Non-Labor Expenses																						
																						Reimbursable Expenses																						\$ 21,560
																						ESA Equipment Usage																						\$ -
																						Subtotal ESA Non-Labor Expenses																						\$ 21,560
																						Subconsultant Costs																						\$ 15,000
PROJECT TOTAL																																												\$ 252,160