

NOVATO SANITARY DISTRICT

December 14, 2009

A regular meeting of the Board of Directors of the Novato Sanitary District will be held at 6:30 p.m., Monday, December 14, 2009, at the District Office, 500 Davidson Street, Novato.

Materials related to items on this agenda are available for public inspection in the District Office, 500 Davidson Street, Novato, during normal business hours.

AGENDA

1. PLEDGE OF ALLEGIANCE:

2. AGENDA APPROVAL:

3. PUBLIC COMMENT (PLEASE OBSERVE A THREE-MINUTE TIME LIMIT):

This item is to allow anyone present to comment on any subject not on the agenda, or to request consideration to place an item on a future agenda. Individuals will be limited to a three-minute presentation. No action will be taken by the Board at this time as a result of any public comments made.

4. BOARD MEMBER REPORTS:

5. REVIEW OF MINUTES:

- a. Consider approval of minutes of the October 14th and 26th, 2009 meetings.

6. BOARD OF DIRECTORS' ELECTION:

- a. Receive Statement of Votes Cast and Certification of Canvass of Votes.
- b. Administration of Oath of Office and seating of elected Board Members.
- c. Consider adoption of resolution determining persons entitled to fill office.

7. CONSENT CALENDAR:

- a. Consider granting Final Acceptance of the Delong Avenue Pipe Bursting Project and authorize staff to file the Notice of Completion.
- b. Consider awarding sewer repair work on Alameda del Prado to Ghilotti Brothers, Inc. for an amount not to exceed \$35,000.
- c. Consider adoption of resolution authorizing funds transfer and electronic payments services with WestAmerica Bank.
- d. Approval of disbursements and ratification of November payroll and payroll related disbursements.

8. NORTH BAY WATER REUSE AUTHORITY PROJECT:

- a. Consider adopting a Resolution certifying the North San Pablo Bay Restoration and Reuse Project Final Environmental Impact Report and making certain findings in connection therewith.
- b. Consider adopting a Resolution committing to funding the District share of the North San Pablo Bay Restoration and Reuse Project.

9. WASTEWATER TREATMENT FACILITY OPERATION:

- a. Consider approving a contract with Aerotek E&E for temporary Operation & Maintenance Techs.

10. PUMP STATION IMPROVEMENTS PROJECT 72403

- a. Consider approving a contract amendment for Nute Engineering.
- b. Review bids received and award contract to the lowest responsive, responsible bidder for Unit 1.

11. STAFF REPORTS:

- a. Health and Dental Plan premium modifications.
- b. North Bay Watershed Association.
- c. Marin County Leadership Summit.

12. MANAGER'S ANNOUNCEMENTS:

13. ADJOURNMENT:

Next resolution no. 3015

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the District at (415) 892-1694 at least 24 hours prior to the meeting. Notification prior to the meeting will enable the District to make reasonable accommodation to help ensure accessibility to this meeting.

Materials that are public records and that relate to an open session agenda item will be made available for public inspection at the District office, 500 Davidson Street, Novato, during normal business hours.

October 14, 2009

A closed session meeting preceded a regular meeting of the Board of Directors of the Novato Sanitary District, Wednesday, October 14, 2009, at the District Office, 500 Davidson Street, Novato.

At 5:00 p.m., President Di Giorgio opened the closed session of the Board of Directors of the Novato Sanitary District.

BOARD MEMBERS PRESENT: President Michael Di Giorgio, Members James D. Fritz, Arthur T. Knutson, William C. Long and George C. Quesada.

STAFF PRESENT: Manager-Engineer Beverly James, Deputy Manager-Engineer Sandeep Karkal and District Counsel Kent Alm.

PLEDGE OF ALLEGIANCE:

President Di Giorgio announced the Board would meet in closed session to discuss the matter on the Closed Session Agenda.

CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL-ANTICIPATED LITIGATION - TWO POTENTIAL CASES:

Significant exposure to litigation pursuant to Subsection (b) of Government Code Section 54956.9.

CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL-INITIATION OF LITIGATION - ONE POTENTIAL CASE:

Initiation of litigation pursuant to Subsection (b) of Government Code Section 54956.9.

The Closed Session ended at 6:40 p.m.

Open session began at 6:50 p.m.

BOARD MEMBERS PRESENT: President Michael Di Giorgio, Members James D. Fritz, Arthur T. Knutson, William C. Long and George C. Quesada.

STAFF PRESENT: Manager-Engineer Beverly James, Deputy Manager-Engineer Sandeep Karkal, District Counsel Kent Alm, and Administrative Secretary Julie Borda.

ALSO PRESENT: Phil Tucker, CA Healthy Communities Network
Dennis Fishwick, Novato
Dean L. Heffelfinger, Novato
Jim Good, Vice President, Veolia Water
John Bailey, Veolia Water

District Counsel Kent Alm announced that during the first statement of closed session, Anticipated Litigation, under Subsection (b) of Government Code Section 54956.9, the Board authorized the engagement of the law firm of Barg, Coffin, Lewis & Trapp to assist the Board in defense of the on-going EPA matter. He further stated that a formal contract will be presented to the Board presumably at their next meeting.

AGENDA APPROVAL:

On motion of Member Quesada, seconded by Member Fritz, and carried unanimously, the Agenda was approved as mailed.

PUBLIC COMMENT:

Dennis Fishwick, Novato resident, asked Mr. Alm to restate the outcome of the closed session meeting. He obliged. Mr. Fishwick requested the Board not vote on the July 27th minutes as presented with the agenda as the public has not had adequate time for review. He stated he was unable to find any information on the website regarding Agenda Item 4a: Wastewater Treatment Facility Operation.

In regards to Item 4a., District Counsel Kent Alm responded that the October 12th Board meeting contained an item and a report concerning the Emergency Consulting Services Agreement and the intention of staff to bring that item before the Board at an October 14th meeting. Mr. Alm stated that the current Board meeting is a Special Board meeting and the Brown Act requirements dictate a minimum of 24 hour notice.

Dennis Fishwick asked for clarification of where in the October 12th agenda it stated a Special Board meeting would be called on October 14th and when the Emergency Consulting Agreement was discussed.

District Counsel Kent Alm, with the assistance of the Manager, noted that the Special Board meeting was noted on the October 12th Agenda under "Staff Reports: Report on emergency consulting agreement". Mr. Alm clarified the process used to adjourn to a special meeting during a regularly schedule board meeting. He stated that when the Board Agenda was issued on Friday, October 9th, he and the management were aware that a special meeting would need to take place to discuss in more detail the Emergency Consulting Agreement. Mr. Alm noted that the October 12th agenda listed under item 12. Adjournment, that a special meeting would be held on Wednesday, October 14th at 6:30 p.m. In addition, he stated an agenda had been posted 24 hours in advance in compliance with the requirements for a Special board meeting.

The Manager stated that the October 14th Special Board meeting agenda was posted outside the District gates on October 13th as well as being posted on the District website.

Member Quesada questioned if the July 27th Board meeting minutes could be postponed to another Board meeting. District Counsel Kent Alm stated that from his perspective, there is no reason the vote could not be postponed.

Phil Tucker, Project Director, CA Healthy Communities Network, hand delivered a letter to the Board Members from Winter King of Shute, Mihaly & Weinberger dated October 14, 2009, regarding Emergency Consulting Services Agreement with Veolia Water West Operating Services, Inc.

Member Long responded to an article in the Pacific Sun newspaper authored by Phil Tucker, stating he was personally offended by the comments.

Phil Tucker elaborated on his comments in the Pacific Sun, noting that the reporter took his comments out of context. He stated he believes the Board is heading down the wrong path.

REVIEW OF MINUTES:

Consider approval of the July 27th, 2009 Board meeting minutes.

Member Quesada requested the Board postpone the approval of the July 27th meeting minutes.

On motion of Member Quesada, seconded by Member Knutson, and carried unanimously, the Minutes of the July 27th, 2009 Board meeting were postponed until the October 26th Board meeting.

WASTEWATER TREATMENT FACILITY OPERATION:

The Manager introduced Jim Good, Vice President of Veolia Water and John Bailey, Project Manager, Veolia Water. She noted that on September 21st, the District received a letter from Robert Perlmutter of Shute, Mihaly & Weinberger stating their intentions to referend the District Board's decision to contract for wastewater treatment services. She stated that legal counsel advised that this decision is not subject to referendum because if there is a referendable legislative act, it took place on July 27, 2009 when the Board made CEQA findings and authorized the negotiation of the Contract. In addition she stated that the Sanitary District Act specifically delegates the authority to enter into contracts to the Board of Directors of the District, not the public at large.

She stated that organizations have been gathering signatures on a petition to referend the Board's decision, which may put the District's ability to operate the wastewater facility in accordance with applicable laws in jeopardy since the District no longer has an operator with the necessary Grade IV certification to manage the plant operation. She stated our Grade IV Plant Operator, Ed Mann, retired from the District prior to Veolia taking over operations. She stated that Veolia has been operating the facility since October 5th and reported that Veolia has performed admirably.

She stated that in order to prudently prepare for the disruption in service the referendum may cause, the District has entered into discussions with Veolia to provide the emergency consulting services needed to ensure the continued safe operation of the treatment

facilities. She stated District Counsel Kent Alm would explain the Emergency Services Consulting Agreement (Agreement) in further detail.

District Counsel Kent Alm stated the District feels there is substantial uncertainty as to whether the referendum would apply. He stated that the District is still under obligation to maintain and operate the existing treatment facility. He outlined the possible circumstance that may develop in which Veolia Water's existing original agreement may be deemed void and would restrict Veolia Water from collecting monies they had earned in the interim basis. He noted that Veolia Water is concerned that if there were a lengthy court proceeding, whether or not the District prevails, Veolia would not be certain if they would be paid for their activities during this time. Mr. Alm stated Veolia had determined to wait for a period of 45 days. After this time, depending on the circumstances, Veolia will move to a consulting agreement where Veolia's services and responsibilities would be much more minimal. He stated this consulting agreement would provide the specified services and scope of work to ensure the District would be able to maintain and operate the facility within a lawful manner. Veolia would bill the District for these services as outlined in Appendix B (Rate Schedule) of the "Agreement for Emergency Consulting Services".

Mr. Alm referenced the *Lindelli* court case, and noted the District was certain to prepare an interim Emergency Consulting Agreement that was quite different from the original service agreement.

Mr. Alm stated that it is his opinion as well as the staff that it is prudent to move forward quickly with this decision so that the District will be able to execute this Agreement with Veolia Water West Operating Services.

The Manager stated that in an abundance of caution, the District did a CEQA review for the Emergency Services Consulting Agreement and it was determined that no further environmental review is required. She referred to a memorandum which was prepared titled "CEQA Review of Emergency Services Consulting Agreement" which supports that finding.

Mr. Alm discussed the previous CEQA review as well as the current CEQA review, stating that the District feels the reviews are adequate to allow the District to move forward based on the information that has been provided to the Board. Mr. Alm asked the Board to authorize staff to file a Notice of Determination after the meeting because the CEQA issues are being challenged.

Member Fritz noted a spelling error in the Agreement (**Ygnacio** should be **Ignacio**) and the Manager noted that this correction has been made to the final Agreement document. Member Long commented on the Agreement and feels that if the District proceeds with the referendum, the Novato public would be overwhelmingly in favor of the agreement.

Phil Tucker, Project Director, CA Healthy Communities Network, discussed a letter from the law firm of Shute, Mihaly & Weinberger which was issued to District Counsel Kent Alm on September 21, 2009 which requested the District to not implement the contract with Veolia Water. He stated he felt this letter was quite relevant to the current situation. Mr. Tucker

requested that if the Board took action on the Agreement, he be allowed to take a copy of the executed agreement after the Board meeting. He stated that if it is not available this evening, he be given a copy on October 15, 2009.

The Manager questioned Mr. Tucker as to which group he is making the request on behalf of. Mr. Tucker gave an overview of the numerous community groups which CA Healthy Community Network assists. He stated his organization is responsible for partial funding to Shute, Mihaly & Weinberger on some of CA Healthy Community Network's projects.

Dennis Fishwick, Novato resident, stated he was asked by members of the Alliance of Concerned Citizens of Novato (ACC) to comment on their behalf in regards to the Agreement. He stated the ACC was unable to properly review the agreement prior to this Board meeting. He commented on and disputed several points in the Agreement. He discussed the Board's foreknowledge of events which could (and did) lead to the referendum.

Dean L. Heffelfinger, Novato resident, questioned Mr. Alm, Ms. James, Jim Good and John Bailey as to whether they were residents of Novato and they responded "no". Mr. Heffelfinger stated that the District has not allowed an open forum to take place regarding the decision to use a private contractor to operate the treatment facility. He confirmed with the Board that a level four operator was necessary to run the treatment facility and stated the Board has not reviewed other options to locate a level four operator outside of contracting with Veolia.

Jim Good, Vice President of Veolia Water, applauded the board for entering into the Agreement. He discussed the on-going situations such as the referendum and the current risks. He stated he is pleased that the Agreement is in place if the contingency should arise. He stated the Agreement is vastly different from the original agreement which was approved on September 21st; the Agreement is for consulting only, not operating the treatment facility. He stated the Agreement contains a different risk profile where Veolia has virtually no risk responsibility other than responsibility for negligence and willful conduct. He stated this is not a good agreement for the District and one that Veolia Water does not wish to invoke.

The Manager stated that the District must have a minimum of a Grade IV operator to run the treatment facility. She stated that the importance for Veolia Water to operate the facility through the Agreement is to provide the continuity necessary to start-up the new facilities. She stated Veolia provides the District with the best opportunity.

Member Quesada noted that the District originally reviewed five firms to operate the new treatment facility and through the review process, Veolia was found to be the best qualified.

Member Fritz stated Veolia Water is currently working at the District, and he feels is best suited to continue to operate the plant.

On motion of Member Fritz, seconded by Member Long and carried unanimously by those members present, the Board adopted the analysis that is included with regard to CEQA, authorized staff to file the Notice of Determination with regard to the position that no further CEQA review is required (for the reason stated in the Memorandum presented to the Board, titled "CEQA Review of Emergency Services Consulting Agreement") and approve the Agreement for Emergency Consulting Services with Veolia Water.

President Di Giorgio stated that the organizations ACC of Novato as well as CA Health Communities Network are showing a total disrespect for the health and well being of the Citizens of Novato. He stated that this treatment facility cannot shut-down and the District no longer has employees who can operate the new facility. He stated it was through good emergency planning on behalf of the Board that has allowed the plant to stay in operation for the health and safety of the Novato Citizens. He stated attorneys' fees, unanticipated costs and the implementation of the Agreement could cost the rate payers of Novato a little more than \$800,000 per year. He stated it is prudent for the Board to approve the Agreement for the health and safety of the Novato citizens.

District Counsel Kent Alm referenced the Shute, Mihaly & Weinberger document dated October 14, 2009, signed by Winter King, which included an attachment of the September 21, 2009 letter signed by Winter King. He stated that copies were made available to Board members and the public could request a copy through the Request for Public Records Act.

Member Quesada noted that the H1N1 virus continues to be a threat to the District's workforce. He stated that through the employment of Veolia Water, adequate staff and operators would be available due to Veolia's extensive employee base.

Member Long thanked Veolia for their commitment to Novato and for their flexibility to enter into an Agreement if it is necessary. He hopes Veolia Water will stay with the District to create a model for other communities who are considering the advantages of contract operations.

MANAGER'S ANNOUNCEMENTS: None.

ADJOURNMENT: There being no further business to come before the Board, President Di Giorgio adjourned the meeting at 8:00 p.m.

Respectfully submitted,

Beverly B. James
Secretary

Julie Borda, Recording

October 26, 2009

A closed session meeting preceded a regular meeting of the Board of Directors of the Novato Sanitary District, Monday, October 26, 2009, at the District Office, 500 Davidson Street, Novato.

At 5:17 p.m., President Di Giorgio announced the Board would meet in closed session to discuss the matter on the Closed Session Agenda:

CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL-EXPOSURE TO LITIGATION-TWO POTENTIAL CASES:

Significant exposure to litigation pursuant to Subsection (b) of Government Code Section 54956.9.

BOARD MEMBERS PRESENT: President Michael Di Giorgio, Members James D. Fritz, Arthur T. Knutson, William C. Long and George C. Quesada.

ALSO PRESENT (for this initial Closed Session only): Davina Pujari, Attorney for Barg, Coffin, Lewis & Trapp, LLC

At 6:03 p.m., the Board convened the second Closed Session to discuss the matter on the Closed Session Agenda:

CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL-INITIATION OF LITIGATION-ONE POTENTIAL CASE:

Initiation of litigation pursuant to Subsection (c) of Government Code Section 54956.9.

BOARD MEMBERS PRESENT: President Michael Di Giorgio, Members James D. Fritz, Arthur T. Knutson, William C. Long and George C. Quesada.

STAFF PRESENT: Manager-Engineer Beverly James and District Counsel Kent Alm.

The Closed Session ended at 6:35 p.m.

At 6:42 p.m., President Di Giorgio convened the Open Session. There was no reportable action from the Closed Session.

STAFF PRESENT: Manager-Engineer Beverly James, Deputy Manager-Engineer Sandeep Karkal, Administrative Services Manager June Brown, Administrative Secretary Julie Borda, and District Counsel Kent Alm.

ALSO PRESENT: Jo Heffelfinger, Novato resident
Sam Renati, former Board Member, Novato resident
Don Violin, Novato resident

Bill Scott, Novato resident
Jim Henderson, Novato resident
James Erze, Novato resident
Dennis Fishwick, Novato resident
John Bailey, Veolia Water
Chris De Gabriele, Manager, North Marin Water District

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL:

On motion of Member Quesada, seconded by Member Fritz, and carried unanimously, the Agenda was approved as mailed.

PUBLIC COMMENT:

Chris de Gabriele, North Marin Water District, gave an overview of the water supply dispute between the Sonoma County Water Agency and the collective agencies of City of Santa Rosa, Valley of the Moon and the North Marin Water District.

Jim Henderson, Novato resident, discussed his lateral sewer pipe and the District easement on his property on Elm Dr. and East Ct. He discussed conversations which previously took place between himself and the Manager. He requested the District provide him with a definitive date of when the sewer main replacement project might be started. He discussed the moral issues of the election materials which support the District incumbents being paid for and distributed by Veolia Water and Novato Disposal Service.

BOARD MEMBER REPORTS:

Member Long discussed the sewer rate roll-back proposition in Petaluma, noting the sewer service rates are almost double those of the Novato Sanitary District.

Member Quesada noted that the Novato Sanitary District was known throughout CASA (California Association of Sanitation Agencies) as being one of the best sanitary districts in Northern California.

President Di Giorgio discussed Mr. Henderson's comments regarding campaign funds coming from Veolia Water and Novato Disposal Service. He stated he was appreciative of their help.

REVIEW OF MINUTES:

Consider approval of minutes of the July 27th and September 14th, 2009 Board meetings.

On motion of Member Quesada, seconded by Member Fritz, and carried unanimously, the Minutes of the July 27th and September 14th, 2009 Board meetings were approved as written.

CONSENT CALENDAR: *On motion of Member Quesada, seconded by Member Knutson, and carried unanimously, the following consent calendar item was approved:*

- a. Approval of regular disbursements in the amount of \$441,912.99, and upgrade project disbursements in the amount of \$143,607.50.

ADMINISTRATIVE MATTERS:

Consider changing the District's financial institution. The Manager introduced the District's Administrative Services Manager, June Brown. Ms. Brown stated that District staff has been carefully reviewing a number of banking institutions in an effort to find the highest level of security available for the District's banking and on-line banking needs. She discussed security benefits at four different institutions: First Republic Bank (San Rafael), City Bank (San Francisco), Wells Fargo Bank, and WestAmerica Bank. Ms. Brown noted that WestAmerica Bank offers a higher, more sophisticated level of security for electronic banking through the use of a Multifactor Authentication device (fob) which will be available to customers by year's end. Ms. Brown recommended the Board authorize changing all banking activities to WestAmerica Bank.

Mr. Quesada stated that if WestAmerica Bank did not have the FOB available by the first of January 2010, he would like the issue brought back before the Board for subsequent review.

On motion of Member Quesada, seconded by Member Long, and carried unanimously, the Board authorized the Manager to begin using WestAmerica Bank for all the District's banking needs.

Dennis Fishwick, Novato resident, asked that if the District stopped banking with Bank of Marin, would we lose any of the yet un-recovered funds due to the Internet fraud incident.

District Counsel Kent Alm explained that the District would still be allowed to pursue action against Bank of Marin, legal or otherwise, to retrieve all un-recovered funds.

PROPOSITION 1A SUSPENSION:

Consider adopting Resolution No. 3013 approving the form of and authorizing the execution and delivery of a purchase and sale agreement and related documents with respect to the sale of the Novato Sanitary District's Proposition 1A receivable from the

State, and directing and authorizing certain other actions in connection therewith. The Manager explained that the emergency suspension of Proposition 1A was passed by the Legislature and signed by the Governor on July 28, 2009 as part of the State budget package. She detailed how the State will be obligated to perform due to this suspension and explained the establishment of the Prop 1A Securitization Program which was instituted by California Statewide Communities Development Authority. She explained that this Program will enable local agencies to sell their respective Prop 1A Receivables to California Communities Authority. She went on to say that if the District sells its receivables under this program, California Communities will pledge the District's Prop 1A Receivable to secure the repayment of a corresponding amount of the Prop 1A Bonds. She noted that the benefits of participation in this program to the Novato Sanitary District include: immediate cash relief; all costs of financing borne by the State of California; no obligation on Bonds; and security of repayment. She stated that this Program will restore the property tax receipts of \$140,000 to this year's budget.

District Counsel Kent Alm explained the Prop 1A Securitization Program in further detail and discussed the details of the agreement between the District and California Statewide Communities Development Authority. In addition, Mr. Alm gave a basic overview of Resolution No. 3013 which is under consideration by the Board.

On motion of Member Quesada, seconded by Member Long, and carried unanimously, the Board adopted Resolution No. 3013: A Resolution Approving the Form of and Authorizing the Execution and Delivery of a Purchase and Sale Agreement and Related Documents with Respect to the Sale of the Seller's Proposition 1A Receivable from the State; and Directing and Authorizing Certain Other Actions in Connection Therewith.

WASTEWATER TREATMENT FACILITY OPERATION:

Wastewater Operation Committee report. The Manager stated that the Wastewater Operations Committee met for the first time on Friday, October 23rd and noted the Committee will meet on the third Monday of every month, with the time scheduled for either 1 p.m. or 2 p.m. She gave an overview of the initial meeting, summarizing the status of the pre-start up deliverables and the details of the pre-start up submittals and contract monitoring. She stated the Committee will review the previous month's Operation and Maintenance Report and NPDES monitoring report as provided by Veolia Water.

She discussed with the Board the need for an outside wastewater expert on contractor performance to participate in the monthly meetings and review Veolia's performance at regular intervals.

She stated the Wastewater Operation Committee will receive reports from Veolia, District staff, and the outside expert and will then make recommendations and bring any concerns to the Novato Sanitary District Board of Directors.

Member Quesada thanked the Manager and noted that the Wastewater Operation Committee agenda will be posted on the Friday prior to the meeting. Dennis Fishwick, Novato resident, questioned if the District had alternative plans if Veolia Water's contract is suspended until after a referendum vote.

President Di Giorgio noted that if the District was forced to enter into an emergency consulting contract with Veolia Water, the District would be paying as much as an additional \$800,000 per year, above the amount currently negotiated in the Veolia Water contract. He stated Novato Sanitary District sewer service charges may have to increase to pay for this unplanned expenditure.

Member Long questioned how many District employees have transitioned to Veolia Water. The Manager stated that initially nine employees were scheduled for transition, but due to retirement options and the shifting of District positions, only six District staff members became Veolia employees. She further stated that one of these six had retired from the District and was now working for Veolia in a management capacity so Veolia has actively employed five former District employees.

STAFF REPORTS:

North Bay Water Reuse Authority (NBWRA): The Manager gave a report on the current NBWRA's legislative funding, noting that the group received \$162,000 to complete the feasibility study and \$200,000 toward the start of construction for the North San Pablo Bay Restoration and Reuse Project. She discussed State funding and noted the draft EIR/EIS for the Project was released for public comment. She noted that the Joint Committee on Recycled Water will meet on December 2nd to review the findings for the projects specific to Novato. The Novato Sanitary District will be considering individual project approvals for the Novato projects as a "Responsible Agency" at their Board Meeting on December 14, 2009.

Treatment Plant tours: October 24th and November 7th: The Manager stated that the October 24th event was well attended with 25 individuals coming to the District for the presentation and tour. She stated that regular tours will be discontinued after the November 7th tour due to winter weather and the possible inclement conditions that may exist.

Hamilton Hometown Festival: Deputy Manager Sandeep Karkal commented on his participation at the Hamilton Hometown Festival which took place on October 17th. He stated interest was high and that approximately 30 to 40 individuals received information at the District's booth. He noted that Administrative Secretary Julie Borda also assisted with the event.

MANAGER'S ANNOUNCEMENTS:

The Manager stated she will be on vacation the week of November 2nd.

ADJOURNMENT: There being no further business to come before the Board, President Di Giorgio adjourned the meeting at 7:55 p.m.

Respectfully submitted,

Beverly B. James
Secretary

Julie Borda, Recording

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NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Collection System Improvements – DeLong Avenue Pipebursting Project; Project No. 72706	MEETING DATE: 12/14/2009 AGENDA ITEM NO. : 7.a.
RECOMMENDED ACTION: Consider granting Final Acceptance of the Project and authorize staff to file the Notice of Completion.	
SUMMARY AND DISCUSSION: <p>On October 12th the Board of Directors adopted CEQA findings and awarded the project to Bay Pacific Pipelines in the amount of \$56,300.00. This work was being completed under the District's informal bidding process and the work was necessary because the sewer main was full of cracks and sheared joints which prevented adequate maintenance.</p> <p>The Contractor has completed the work and the project is ready for acceptance. Change Orders in the amount of \$8,500.00 were issued, \$3,000.00 for the City Permit and \$5,500.00 to replace a brick manhole at the west end of the project that was not originally identified. The Contractor volunteered to pay the permit fee in order to begin work earlier to fit his schedule and the City's paving schedule. Staff recommends granting Final Acceptance and issuing the Notice of Completion.</p>	
ALTERNATIVES: None.	
BUDGET INFORMATION: This work will be funded from Project 72706, Collection System Improvements. The FY09-10 budget includes \$3,000,000.00 for the project.	
DEPT. MGR. :	MANAGER'S APPROVAL:

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Annual Collection System Repairs – Alameda del Prado 8” Sewer Main Repair; Project No. 72803	MEETING DATE: 12/14/2009 AGENDA ITEM NO. : 7.b.
RECOMMENDED ACTION: Consider awarding repair work to Ghilotti Brothers, Inc. for an amount not to exceed \$35,000.00.	
SUMMARY AND DISCUSSION: <p>The County of Marin is currently completing improvements to Alameda del Prado between Alameda de la Loma and Posada del Sol. Improvements consist of median island reconfigurations and new paving. This work has been fast tracked by the County of Marin as part of the Federal Stimulus Package.</p> <p>As part of the District’s Collection System Improvements Project, District staff identified an area of the collection system on Alameda del Prado where 125 feet of the existing vitrified clay pipe sewer is cracked and sagged and warrants repair to eliminate stoppages caused by grease and roots. This sewer will be located under a new section of median and a newly paved street. The County will place a five year moratorium for prohibition of excavation on the street making future work in this area more costly.</p> <p>Utilizing the District’s informal bidding process under the Uniform Construction Cost Accounting Act, the District requested a proposal from Ghilotti Brothers of San Rafael, the County of Marin’s contractor for the street project, to remove and replace the deficient section of sewer main. Ghilotti Brothers submitted a Proposal in the amount of \$30,493.00 to complete the work. The work includes bypass pumping.</p> <p>District staff has reviewed their Proposal and determined that it is reasonable considering that work will be completed in close proximity to a water main, and requires bypass pumping. Ghilotti Brothers advised the District that because of the unknown soils conditions that the price may rise if poor soils are encountered. Therefore staff recommends authorizing a not to exceed amount of \$35,000.00 to cover any additional costs. Staff recommends awarding the work to Ghilotti Brothers for a cost not to exceed \$35,000.00.</p>	
ALTERNATIVES: None.	
BUDGET INFORMATION: This work will be funded from Project 72803, Annual Collection System Repairs. The FY09-10 budget for repair work is \$200,000.00. To date \$52,902.60 has been expended from this budget.	
DEPT. MGR. :	MANAGER’S APPROVAL:

Novato Sanitary District
November 2009 Payroll and Payroll Related Checks
November 24 - 30, 2009

	<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Credit</u>
Nov 24 - 30, 09	11/25/2009		November 2009 Payroll Checks	126,275.65
	11/25/2009	50069	ACS	80.00
	11/25/2009	50070	EDD	7,508.74
	11/25/2009	50071	Lincoln Financial Group	3,285.00
	11/25/2009	50072	Lincoln Financial Group-401a Plan	4,186.79
	11/25/2009	50073	Local Union 315	320.00
	11/25/2009	50074	Hampton, Cari	400.00
	11/25/2009	50075	Marin Employ Federal Credit Union	517.00
	11/25/2009	ach	United States Treasury	23,850.46
	11/25/2009	50076	North Bay Children's Center	40.00
	11/25/2009	50077	State Street Bank & Trust	2,000.00
	11/25/2009	50078	CalPers Health	32,119.08
	11/25/2009	50079	Fort Dearborn Life Insurance	3,921.40
	11/25/2009	50080	Lincoln Financial Group-401a Plan	3,548.92
	11/25/2009	50081	PERS Retirement	33,535.22
	11/25/2009	50082	Retiree-Bolick	459.32
	11/25/2009	50083	Retiree-Coates	1,220.58
	11/25/2009	50084	Retiree-Cordeiro	915.60
	11/25/2009	50085	Retiree-Dimarco	915.60
	11/25/2009	50086	Retiree-Edington	915.60
	11/25/2009	50087	Retiree-Goldfarb	687.46
	11/25/2009	50088	Retiree-Green	687.46
	11/25/2009	50089	Retiree-Jackson	179.16
	11/25/2009	50090	Retiree-Longman	915.60
	11/25/2009	50091	Retiree-Macleod	459.32
	11/25/2009	50092	Retiree-Mann	915.60
	11/25/2009	50093	Retiree-Neighbors	459.32
	11/25/2009	50094	Retiree-O'Shea	459.32
	11/25/2009	50095	Retiree-Perucchi	915.60
	11/25/2009	50096	Retiree-Rotnicki	179.16
	11/25/2009	50097	Retiree-Sproul	459.32
	11/25/2009	50098	Retiree-Welsh	915.60
	11/25/2009			
Nov 24 - 30, 09				253,247.88

12/10/09

Novato Sanitary District Check Register

December 14, 2009

<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Credit</u>
Dec 14, 09			
12/14/2009	50126	Di Giorgio, Mike	1,175.59
12/14/2009	50127	Fritz, James D.	675.00
12/14/2009	50128	Long, William C.	1,243.90
12/14/2009	50129	Quesada, George C.	900.00
Dec 14, 09			<u>3,994.49</u>

To: Board of Directors
Novato Sanitary District

From: Beverly James, Manager/ Engineer

Date: December 14, 2009

Subject: Staff Report for North Bay Water Recycling Program (NBWRP) EIR –
CEQA and Project Approval, Phase I Implementation Plan

Project Background

Novato Sanitary District is a Member Agency of the North Bay Water Recycling Authority (NBWRA), which has developed the North Bay Water Recycling Program (formerly the North San Pablo Bay Restoration and Reuse Project) to provide recycled water for agricultural, urban, and environmental uses and to promote the expanded beneficial use of a recycled water system in the North Bay region. The North Bay Water Recycling Program (NBWRP) has been developed in conformance with the requirements of the Reclamation's Public Law 102-575, Title XVI, including preparation of a Feasibility Study, and passage of Senate Bill 1475.

The Phase I Implementation Plan of the NBWRP includes participation by Novato Sanitary District, in partnership with North Marin Water District, for the implementation of components of the Recycled Water System Expansion Project, including the Novato North and Central Service Area projects, which would increase tertiary capacity by 1.2 mgd at the existing tertiary treatment plant and/or Davidson wastewater treatment plant, increase pumping capacity by 258 horsepower, and require 9.8 miles of additional pipeline for conveyance of recycled water to serve the Valley Memorial Cemetery, Novato High School sports fields, and Stone Tree Golf Course, among other users.

Novato Sanitary District Responsible Agency Status

As provided for in California Environmental Quality Act (CEQA) Guidelines section 15050, the Sonoma County Water Agency (SCWA) has served as the CEQA Lead Agency for the North Bay Water Recycling Program EIR/EIS. As provided for in Section 15090 of the CEQA Guidelines, the SCWA Board of Directors certified the EIR as in compliance with CEQA at its regularly scheduled Board Meeting on December 8, 2009. The U.S. Bureau of Reclamation will consider provision of federal funding under Title XVI, and is the NEPA Lead Agency. This consideration is anticipated in early 2010.

As provided for under CEQA Guidelines section 15096 (a) and (f), the Novato Sanitary District is a Responsible Agency and will consider the environmental effects of the Phase 1 Implementation Plan projects under Novato Sanitary District jurisdiction, referred to as the Novato North and Central Service Area Projects, as identified in the EIR/EIS, prior to reaching a decision. The impacts identified within the Novato Sanitary Service Area were identified as being reduced to a

less than significant level through the implementation of mitigation measures identified in the Mitigation Monitoring and Reporting Program. However, the EIR/EIS acknowledges that the NBWRP would provide recycled water for urban, agricultural, and environmental uses, and as such, would contribute to the provision of adequate water supply to support a level of growth that is consistent with the amount planned and approved within the General Plans within Marin County. No appreciable growth in population or employment would occur as a direct result of construction or operation of the proposed facilities. However, development under the General Plans accommodated by the proposed project would result in secondary environmental effects, which include effects that would remain significant and unavoidable, even after mitigation.

To support this consideration and a decision on approval of the NBWRP Phase I Projects that are under Novato Sanitary District jurisdiction, staff has prepared resolutions for adoption by the Board, which are supported by the attached documents and include written findings for each impact identified in the EIR/EIS in accordance with the CEQA Guidelines §§ 15091, 15096(h). A Statement of Overriding Considerations for effects that would remain significant and unavoidable has also been prepared.

CEQA Process

The SCWA circulated a Notice of Preparation in July 2008, and held a series of scoping meetings in July and August 2008. A Public Draft EIR/EIS (SCH # 2008072096) was circulated for a 60-day public review period from May 5 through July 20, 2009. During this time, three Public Meetings were held in Marin, Sonoma, and Napa Counties. Written and oral comments from 31 entities were reviewed during the public period. The comments focused on concerns regarding the distribution and use of recycled water relative to water supplies generated in the Russian River, the quality of recycled water relative to microconstituents and pathogens, and potential secondary effect to biological resources and water resources from the use of recycled water. A Final EIR/EIS was distributed November 20, 2009, and has been made available for the minimum 10-day review period required by CEQA.

Board Action

Staff recommends that the Board adopt the attached resolutions: considering the certified North Bay Water Recycling Program Final EIR/EIS, adopting related CEQA mitigation findings, alternatives findings, a statement of overriding considerations, and a mitigation monitoring and reporting program, and approving the NBWRP Phase I Implementation Plan projects within its jurisdiction (the Novato North and Central Service Area Projects).;

1331953

**Novato Sanitary District
Resolution No. _____**

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE NOVATO SANITARY DISTRICT CONSIDERING THE CERTIFIED NORTH BAY WATER RECYCLING PROGRAM FINAL EIR/EIS, ADOPTING RELATED CEQA MITIGATION FINDINGS, ALTERNATIVES FINDINGS, A STATEMENT OF OVERRIDING CONSIDERATIONS, AND A MITIGATION MONITORING AND REPORTING PROGRAM, AND APPROVING PROJECTS UNDER ITS JURISDICTION IDENTIFIED IN THE NBWRP PHASE 1 IMPLEMENTATION PLAN

WHEREAS, the District wishes to expand the beneficial use of recycled water in Marin County and to work cooperatively with other agencies within the North Bay region, including Sonoma and Napa Counties, to promote the conservation of limited surface water and groundwater resources; and

WHEREAS, the District is a Member Agency of the North Bay Water Reuse Authority, which has been formed to promote the use of recycled water within the region; and

WHEREAS, the District has participated in the development and preparation of the North *San Pablo Reuse and Restoration Phase 3 Engineering and Economic/ Financial Analysis Report*, which has incorporated projects identified by the District, in partnership with North Marin Water District, for treatment and distribution of recycled water to reduce demands on potable supplies, referred to as the Novato North and Central Service Area Projects, and shown in Draft EIR/EIS Figure 2-4; and

WHEREAS, as provided for in CEQA Guidelines section 15050, the Sonoma County Water Agency is the CEQA Lead Agency for the preparation and circulation of the an Environmental Impact Report/Environmental Impact Statement for the North Bay Water Recycling Program (SCH# 2008072096); and

WHEREAS, as provided for in CEQA Guidelines section 15096, the District is a Responsible Agency, and will consider the EIR/EIS prior to reaching a decision on projects within its jurisdiction that have been included in the North Bay Water Recycling Program; and

WHEREAS, pursuant to the California Environmental Quality Act (CEQA), the State CEQA Guidelines, a Draft Environmental Impact Report/ Environmental Impact Statement (“Draft EIR/EIS”) was prepared for the proposed North Bay Water Recycling Program and circulated for public review; and

WHEREAS, in response to comments received on the Draft EIR, a Final Environmental Impact Report/ Environmental Impact Statement (“Final EIR/EIS”) has been prepared for the proposed North Bay Water Recycling Program, and the review process has been satisfactorily completed as more fully described below; and

WHEREAS, on December 8, 2009, the Sonoma County Water Agency, as CEQA Lead Agency, certified that the Final EIR/EIS has been: completed in compliance with CEQA; was presented to the decision making body of the Lead Agency, and that the decision making body reviewed and considered the information contained in the EIR; and that that final EIR reflects the

lead agency's independent judgment and analysis (Resolution 09-1144, incorporated herein by reference.)

WHEREAS, the Board hereby finds as follows:

PROCEDURAL FINDINGS:

1. In July 2008, SCWA circulated a Notice of Preparation of an Environmental Impact Report to be mailed to local, state, and federal agencies, and to other interested parties. The NOP was mailed to the State Clearinghouse and was available online. The NOP was directly mailed to 63 parties, and a postcard notification of the NOP's availability was sent to 580 parties. The NOP was circulated for a 30-day public review period, which ended on August 25, 2008. The project description for the Notice of Preparation was based on the *Phase 3 Engineering and Economic/ Financial Analysis Report* completed in 2008. No Initial Study was prepared since Agency staff decided in advance that a full EIR/EIS would be required for this project.
2. The July 2008 Notice of Preparation also included notice for the scoping meetings on August 4, 2008 at the Napa Elks Lodge, Napa; August 5, 2008 at the Margaret Todd Senior Center, Novato; and August 6, 2008 at the Sonoma Community Center, Sonoma. The purpose of the scoping meetings was to present the proposed project to the public through use of display maps, route alignments and handouts describing project components and potential environmental impacts. Attendees were provided an opportunity to voice comments or concerns regarding potential effects of the proposed project and to make comments and suggestions on the scope of the Environmental Impact Report. Additional scoping meetings with individual stakeholders were held on August 6th, 2008 with the Russian River and Eel River Interest Groups, and on July 27th, 2008 with California Department of Parks and Recreation (staff meeting).
3. On May 5, 2009, approximately 80 hard copies and/or compact discs of the Draft EIR, along with Notices of Availability, were sent to: responsible and trustee agencies, the Cities of San Rafael, Novato, Sonoma, Santa Rosa, and Napa, Counties of Marin, Sonoma, and Napa, other local water districts, and five libraries. In addition to the Draft EIR, Notices of Availability were published in five newspapers of general circulation, and sent to approximately 2,000 interested agencies and residents located along potential pipeline routes identified in the Draft EIR, and to individuals who have requested to be on the mailing list for the project.
4. SCWA conducted public hearings on June 9, 10, and 11, 2009 to hear testimony regarding the project and the Draft EIR/EIS for the project. Public comment was received and the public hearing was closed.
5. After the end of the public review period for the Draft EIR, written and oral comments from approximately 31 entities were reviewed, and responses to comments were prepared. On November 20, 2009, written responses were sent to all commentors and were otherwise made available to the public. The Response to Comments document is a separately bound document, incorporated herein reference, and together with the Draft EIR constitutes the Final EIR.

6. The Final EIR includes revisions, updates, and clarifications in response to public comment on the Draft EIR. The revisions, updates, and clarifications made for the Final EIR do not include disclosures of: (1) any new significant impact from the project; (2) a substantial unmitigated increase in the severity of any impact; or (3) a feasible alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen project impacts but that the District does not propose to adopt. The new information provided in the Final EIR does not constitute “significant new information” within the meaning of CEQA so as to require recirculation of the Final EIR.

SUBSTANTIVE FINDINGS

1. Pursuant to CEQA Guidelines section 15096, the Board has reviewed and considered the information contained in the Final EIR/EIS for the North Bay Water Recycling Program, and considered the environmental effects of the project as shown in the Final EIR/EIS.

Less than Significant Impacts

2. The Board finds that the Project described in the North Bay Water Reuse Authority EIR/EIS has certain impacts that are less than significant or are beneficial, which are fully and accurately identified in the Final EIR/EIS.

Significant Impacts Reduced to a Less than Significant Level by Mitigation Measures

3. The Board finds that the Project described in the North Bay Water Reuse Authority EIR/EIS would cause certain significant or potentially significant adverse environmental impacts, which are fully and accurately summarized in Exhibit A – Chapter 3, attached hereto, incorporated herein by this reference, and more fully described in the Final EIR. The Board further finds that changes or alterations have been required in or incorporated into the Project that will mitigate those impacts to less than significant levels as summarized in Exhibit A – Chapter 3. Based on such findings, and the above statement of facts, the Board hereby finds that the significant or potentially significant adverse environmental effects posed by the Project have been eliminated or reduced to a less than significant level.
4. The Board finds that the Project described in the North Bay Water Reuse Authority EIR/EIS would cause certain significant or potentially significant adverse environmental impacts, which are fully and accurately summarized in Exhibit A – Chapter 3, attached hereto, incorporated herein by this reference, and more fully described in the Final EIR. The Board further finds that these impacts, and corresponding mitigation measures, fall outside its jurisdiction, and are the responsibility of another agency and should be adopted by such agency and not the District.

Unavoidable Adverse Environmental Impacts

5. The Final EIR/EIS disclosed other significant or potentially significant environmental impacts that may not, or cannot, be avoided if the project identified in the Final EIR is approved, as summarized in Exhibit A – Chapter 3. The Board finds that specific economic, legal, social, technological, or other considerations make infeasible full mitigation of those impacts and make project alternatives infeasible, or that changes are the responsibility of another agency and should be adopted by such agency and not the District.

Alternatives

6. The Board finds that the Final EIR/EIS describes a range of reasonable alternatives to the Project. However, as summarized in Exhibit A – Chapter 4, the alternatives to the Project either cannot feasibly achieve project objectives, or will not avoid or substantially lessen project impacts.

Adoption of Mitigation Monitoring and Reporting Program

7. Pursuant to Public Resources Code section 210821.6, the Board hereby adopts a mitigation monitoring and reporting program (Exhibit A – Chapter 5) for the mitigation measures that were included in the Final EIR/EIS. The Board adopts this plan pursuant to CEQA Guidelines section 15096 (g)(1), which states that a Responsible Agency has responsibility for mitigating or avoiding only the direct or indirect environmental effects of those parts of the project which it decides to carry out, finance, or approve. The contents of this plan are set forth in Exhibit A – Chapter 5, attached hereto and incorporated herein by this reference. This mitigation monitoring and reporting program is designed to ensure compliance with the mitigation measures adopted for the project described in the Final EIR. It will be implemented in accordance with all applicable requirements of CEQA, the state CEQA Guidelines, and the District's Procedures for the Implementation of CEQA.

Statement of Overriding Considerations

8. The Board has weighed the benefits of the North Bay Water Reuse Program, Phase I Implementation Plan against the unavoidable adverse environmental effects identified in the Final EIR/EIS and hereby determines that those benefits outweigh the risks and adverse environmental impacts. The Board determines that these environmental impacts are acceptable and hereby finds that there are overriding considerations that justify the Board's approval of the components of the Phase I Implementation Plan that are under its jurisdiction, which are identified in Exhibit A – Section 6, attached hereto and incorporated herein by this reference.

NOW, THEREFORE, IT IS HEREBY RESOLVED that the foregoing recitals are true and correct and are incorporated herein by reference.

BE IT FURTHER RESOLVED, based on the record of this proceeding and the foregoing findings and determinations, the Board of Directors of the Novato Sanitary District does hereby take the following actions:

1. Approval of the North Bay Water Recycling Program Phase I Implementation Plan. The Board approves and declares its intent to carry out the Projects under its jurisdiction, as described in Exhibit A – Chapter 2.
2. Adoption of Mitigation Findings. The Board adopts the mitigation findings and findings of fact regarding impacts as described in Exhibit A – Chapter 3.
3. Adoption of Findings Concerning Project Alternatives. The Board adopts the findings concerning project alternatives as described in Exhibit A – Chapter 4.
4. Adoption of Mitigation Monitoring and Reporting Program. The Board adopts the mitigation monitoring and reporting program as set forth in Exhibit A – Chapter 5, and authorizes and directs the General Manager or her assigns to take all appropriate steps in accordance with such plan to ensure that the required mitigation measures are carried out.
5. Statement of Overriding Considerations for the North Bay Water Recycling Program Phase I Implementation Plan. The Board adopts the Statement of Overriding Considerations set forth in Exhibit A – Chapter 6 after finding that the Project has certain environmental, economic, legal, social, technical, and other benefits that make the unavoidable adverse environmental impacts associated with it acceptable, and that mitigation of certain environmental impacts is in the jurisdiction of other agencies.
6. Notice of Determination. The Board directs the General Manager or her assigns to file a Notice of Determination with the County Clerk and the State Clearinghouse in accordance with the provisions of CEQA, the state CEQA Guidelines, and the District’s Procedures for the Implementation of CEQA advising of the Board’s approval of the Project described in Exhibit A – Chapter 2.
7. Custodian of Documents. The Board is the custodian of the documents or other material which constitute the record of proceedings upon which this Board’s decision herein is based. These documents may be found at Novato Sanitary District, 500 Davidson Street, Novato CA 94945, during normal business hours.
8. Attached Exhibit. Attached Exhibit A, including Chapters 1-6, is incorporated herein by reference.

PASSED AND ADOPTED by the Board of Directors of Novato Sanitary District, Marin County, California, at a meeting thereof duly held on the 14th day of December, 2009, by the following vote:

AYES,	Members:
NOES,	Members:
ABSENT,	Members:

Secretary
Novato Sanitary District

APPROVED:

President

APPROVED AS TO FORM:

Kenton L. Alm, District Counsel

1331954v2

Exhibit A

Chapter 1. Introduction

Chapter 2. Project Description

Chapter 3. Findings of Fact Regarding Impacts

Chapter 4. Findings Concerning Project Alternatives

Chapter 5. Mitigation Monitoring and Reporting Program

Chapter 6. Statement of Overriding Considerations

CHAPTER 1

Introduction

This report presents the Findings in support of the Draft Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) and Final EIR/EIS to address the potential environmental effects of the implementation of the North San Pablo Bay Restoration and Reuse Project (referred to as the North Bay Water Recycling Program). The North Bay Water Recycling Program (NBWRP) is proposed by the North Bay Water Recycling Authority (NBWRA) to provide recycled water for agricultural, urban, and environmental uses and to promote the expanded beneficial use of a recycled water system in the North Bay region. Implementation of the NBWRP would include upgrades to treatment processes and construction of pipelines, pump stations, and storage facilities to distribute recycled water for use in compliance with Article 4 in Title 22 of the California Code of Regulations, which sets water quality standards and treatment reliability criteria for recycled water.

As provided for in California Environmental Quality Act (CEQA) 15050, the Sonoma County Water Agency (SCWA) is the CEQA Lead Agency for the North Bay Water Recycling Program EIR/EIS. As provided for in Section 15090 of the CEQA Guidelines, the SCWA Board of Directors will consider certification of the EIR as in compliance with CEQA. The U.S. Bureau of Reclamation will consider provision of federal funding under Title XVI, and is the NEPA Lead Agency.

As provided for under CEQA 15096 (a) and (f), Novato Sanitary District is a Responsible Agency and will consider the environmental effects of the project as shown in the EIR/EIS prior to reaching a decision on the project, Recycled Water System Expansion Project-Novato North and Central Service Areas. To support this consideration and a decision on the project, Novato Sanitary District has prepared written findings for each impact identified in the EIR/EIS in accordance with the CEQA Guidelines §§ 15091, 15096(h).

The Findings are made in accordance with the CEQA Guidelines §15091 and §15092. This report includes the following chapters:

1. Introduction
2. Project Description
3. Findings of Fact Regarding Significant Impacts
4. Findings of Fact Regarding Project Alternatives
5. Mitigation Monitoring and Reporting Program
6. Statement of Overriding Considerations

This chapter includes the following sections:

- Environmental Review Process for the Project
- Purpose of the Findings
- Legal Effect of the Findings
- Administrative Record

1.1 Environmental Review Process

In accordance with Sections 15082 of *CEQA Guidelines*, SCWA circulated a Notice of Preparation (NOP; State Clearinghouse #2008072096) to local, state, and federal agencies, and to other interested parties on July 25, 2008. The NOP was mailed to the State Clearinghouse and was available online on the NBWRA website. The NOP was directly mailed to 63 parties, and a postcard notification of the NOP's availability was sent to 580 parties. The NOP was circulated for a 30-day public review period, which ended on August 25, 2008.

The Draft EIR/EIS on the proposed NBWRP (SCH # 2008072096), Notice of Completion, and Notice of Availability were submitted to the State Clearinghouse and released for public and agency review on May 5, 2009. The Notice of Availability briefly described the Project Sponsors, Project purpose and components, the location where the copies of the Draft EIR/EIS could be reviewed, the contact for submission of written comments and/or questions, and the date and time of the public meetings on the Draft EIR/EIS.

The Draft EIR/EIS was circulated for a 60-day public review period from May 5 through July 20, 2009. During this time, three Public Meetings were held to provide interested persons with an opportunity to comment verbally or in writing on the Draft EIR/EIS and the project. The public meetings were held at the following locations:

June 9, 2009
6 p.m. – 7:30 p.m.
Margaret Todd Senior Center
1560 Hill Road, Novato

June 10, 2009
2:30 p.m. – 4 p.m.
Sonoma Community Center
276 East Napa Street, Sonoma

June 11, 2009
6 p.m. – 7:30 p.m.
Napa Elks Lodge
2840 Soscol Avenue, Napa

Following the public comment period, a Final EIR/EIS that provided responses to all the comments received on the Draft EIR/EIS was made available to the public for the minimum 10-day period.

1.2 Purpose of Findings

Section 15091 of the *CEQA Guidelines* requires that, for each significant environmental effect identified in the EIR for a proposed project, the approving agency must issue a written finding reaching one or more of three allowable conclusions:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the findings. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
3. Specific economic, legal, social, technological, or other considerations, make infeasible the mitigation measure or project alternative identified in the EIR.

These findings accomplish the following: a) they address the significant environmental effects identified in the Draft EIR/EIS for the approved project; b) they incorporate all mitigation measures associated with these significant impacts identified in either the Draft EIR/EIS or the Response to Comments/Final EIR/EIS, and; c) they indicate whether a significant effect is avoided or reduced by the adopted mitigation measures to a less-than-significant level, or remains significant and unavoidable, either because there are no feasible mitigation measures or because, even with implementation of mitigation measures, a significant impact will occur. For any effects which remain significant and unavoidable, a statement of overriding considerations is required for approval of the project. The conclusions presented in these Findings are based on the Final EIR/EIS (consisting of the Draft EIR/EIS and Response to Comments) and other evidence in the record of proceedings.

1.3 Legal Effect of Findings

To the extent that these Findings conclude that various proposed mitigation measures outlined in the EIR/EIS are feasible and have not been modified, superseded, or withdrawn, Novato Sanitary District, as the Responsible Agency approving the Phase 1 Projects within its jurisdiction, hereby binds itself to implement these measures. These Findings, in other words, are not merely information, but constitute a binding set of obligations that will come into effect when Novato Sanitary District adopts resolutions approving the project (Pub. Resources Code, §21081.6 subd. (b)). The mitigation measures identified as feasible and within Novato Sanitary District's authority to implement for the approved projects become express conditions of approval which Novato Sanitary District binds itself to upon project approval. Other requirements are referenced in the mitigation monitoring and reporting program (MMRP; in Chapter 5) that will be adopted concurrently with the Findings and will become effective through project implementation. Thus, the Novato Sanitary District Board of Directors upon review of the Draft EIR/EIS and the Final EIR/EIS, including the comments and responses contained therein, and based on all the information and evidence in the record, hereby makes the Findings set forth herein.

1.4 Administrative Record

Novato Sanitary District is the custodian of the administrative record, including all CEQA documents and the other background documents and materials, which constitute the record of the proceedings upon which the Novato Sanitary District Board of Directors decision on the EIR and the project is based. The administrative record is located at Novato Sanitary District, 500 Davidson Street, Novato CA 94945.

CHAPTER 2

Project Description

2.1 Project Background

The North San Pablo Bay Restoration and Reuse Project or the North Bay Water Recycling Program (NBWRP) has been developed in conformance with the requirements of the Bureau of Reclamation's Public Law 102-575, Title XVI, including preparation of a Feasibility Study, and passage of Senate Bill 1475. The U.S. Department of Interior, Bureau of Reclamation (Reclamation) and North Bay Water Reuse Authority's Member Agencies prepared the Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the North San Pablo Bay Restoration and Reuse Project. The document is a joint EIR/EIS and satisfies the requirements of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

The North Bay Water Reuse Authority (NBWRA), established under a Memorandum of Understanding (MOU) in August 2005, is comprised of four wastewater utilities and one water agency: Las Gallinas Valley Sanitary District (LGVSD), Novato Sanitary District, Sonoma Valley County Sanitation District (SVCSD), Napa Sanitation District (Napa SD), and Sonoma County Water Agency (SCWA). Additional agencies supporting the NBWRA through contribution of funds and staff time include North Marin Water District (NMWD) and Napa County.

Under the MOU, the NBWRA is exploring "the feasibility of coordinating interagency efforts to expand the beneficial use of recycled water in the North Bay Region thereby promoting the conservation of limited surface water and groundwater resources." The NBWRP would alter the disposition of recycled water in the North Bay Region by providing increased recycled water supply to urban, agricultural and environmental uses.

2.2 Proposed Project Under Consideration

2.2.1 Phase 1 Implementation Plan

The proposed components under the NBWRP Phase 1 Implementation Plan include improvements at the existing wastewater treatment plants (WWTPs) owned and operated by the Member Agencies, recycled water pipelines, pump stations, and storage reservoirs. **Table 2-1** summarizes the project components for Phase 1 Implementation Plan and identifies the projects under the Novato Sanitary District jurisdiction in the shaded rows. This project would be

implemented in partnership with NMWD. The project components under Novato Sanitary District jurisdiction are discussed in Section 2.2.2 below.

**TABLE 2-1
IMPLEMENTATION PLAN – PHASE 1**

		New Pipeline (miles)	New Demand (AFY)	Capacity Increase (mgd)	New Pumps (HP)	New Storage (AF)
LGVSD	Peacock Gap	--	--	--	--	--
	NMWD URWP (South)	5.9	204	0.7	72	⁽³⁾
	Sears Point	--	--	--	--	--
Novato SD	NMWD URWP (North/Central)	9.8	542	1.2	259	⁽³⁾
	Sears Point	--	--	--	--	--
SVCSD	Southern Sonoma Valley	--	--	--	--	--
	Central Sonoma Valley	--	--	--	--	--
	Sonoma Valley (1A) ¹	5.2	874	0	662	65
	Napa Salt Marsh	7.9	⁽²⁾	0	0	0
Napa SD	Carneros East	--	--	--	--	--
	MST Area	17.5	2,137	4.5	880	0
	Napa (local)	--	--	--	--	--
	Napa Salt Marsh	--	--	--	--	--
Total		46.3	3,757	6.4	1,873	65

¹ Sonoma Valley (1A) is a pipeline alignment originally analyzed as a part of the Sonoma Valley Recycled Water Project EIR and proposed under Phase 1 for the NBWRP. The alignment is described on page 2-18 of this document.

² Additional 3,460 AFY release of recycled water to Napa Salt Ponds 7 and 7A, depending upon year type. Because this is a beneficial use that is not related to recycled water supply, this number is tracked separately in each of the alternatives.

³ Existing 0.5 mg reservoir would be rehabilitated to provide recycled water system storage.

SOURCE: CDM, 2009.

The Member Agencies have collectively prioritized the projects within their individual service areas to establish an Implementation Plan identifying the order in which projects would be constructed. Phase 1 of the Implementation Plan includes projects that are defined to a level of detail that allows for project-level environmental review. These projects are collectively referred to as Phase 1 Projects. Any additional projects under Alternative 1 – Basic System that are not identified in the Phase I Implementation Plan would require additional CEQA review prior to their implementation. A discussion of Alternative 1 – Basic System is provided in Section 2.2.3 below. As noted in Section 4 of this document, Findings of Fact regarding Alternatives, Alternative 1, Basic System, has been identified as the environmentally superior alternative.

2.2.3 Projects Considered for Adoption by Novato Sanitary District

Novato North Service Area

Under the *Recycled Water System Expansion Project*, NMWD and Novato Sanitary District would implement service in the Novato North Service Area by incrementally expanding tertiary capacity at the existing Novato Recycled Water Treatment Facility from 0.5 mgd to 1.2 mgd. The

Recycled Water Treatment Facility 0.5 mgd upgrade would involve a new modular filter and expansion of the chlorination system. The recycled water pipeline would be routed from Atherton Avenue to Olive Avenue under Highway 101, and north on Redwood Boulevard to San Marin Drive (see Figure 2-4). A separate pipeline would be routed on H Lane to serve the Valley Memorial Park Cemetery. A booster pump would be installed at Atherton Avenue and the distribution system would be connected to the existing 0.5-MG Plum Street Tank, which would be rehabilitated to provide diurnal storage (Nute Engineering, 2006).

Novato Central Service Area

Under the *Recycled Water System Expansion Project*, Novato Sanitary District and NMWD would implement service in the Novato Central Service Area through construction of a recycled water distribution system from the Novato Sanitary District WWTP south to Rowland Boulevard and the Vintage Oaks shopping center, and across Highway 101 to serve urban users west of Highway 101. The treatment facilities at the Recycled Water Treatment Facility would be decommissioned and relocated to the Novato Sanitary District WWTP. Tertiary treatment facilities are included in the Novato Sanitary District Master Plan for the WWTP. From the WWTP, an 18-inch pipeline would be installed along Novato Sanitary District's existing easement, with a jack and bore crossing of US 101 from Rowland Boulevard to Redwood Boulevard. An 18-inch recycled trunk line would then extend north through Novato to deliver recycled water to Novato High School and other irrigated playing fields, with a 10-inch line extending south along Redwood Boulevard (see Figure 2-4).

A new pipeline would connect the WWTP with the North Service Area pipeline in Olive Drive via Lea Drive or McClelland Drive. This would allow continuation of recycled water service to the Stone Tree Golf Course and the other customers in the North Service Area during the course of the relocation of the recycled water facility to the WWTP. This intertie would also incorporate the Plum Street Tank into the distribution system serving both the Novato North and Central Service Areas (Nute Engineering, 2006).

2.2.3 Alternative 1 – Basic System

Three alternatives were considered by the NBWRA for the provision of recycled water. Alternative 1 – Basic System has been identified as the environmentally preferred alternative for implementation, is further discussed in Section 4 would expand recycled water programs currently in operation within each of the Member Agency service areas. Alternative 1 would provide 6,655 AFY of new recycled water for irrigation use and 5,825 AFY for habitat restoration, and would include installation of 83 miles of new pipeline, construction of facilities onsite at the existing WWTPs to provide an additional 7.5 mgd of tertiary treatment capacity, and development of approximately 1,020 acre-feet of new storage, primarily at existing or planned storage ponds at the WWTPs. The defining features of Alternative 1 are as follows:

- Each agency would put first priority on the delivery of recycled water to its local projects. Local projects include the NMWD Urban Reuse Project, the Sonoma Valley Recycled Water Project, and projects in the Napa Milliken-Sarco-Tuluca (MST) Creeks area, and the Carneros East areas. All WWTP treatment and distribution systems are sized and designed to serve their respective local users.

- Interconnectivity between WWTPs would only occur between SVCSD and Napa SD to serve the Napa Salt Marsh Restoration Area during the restoration period (less than 10 years); however, the two agencies do not plan to size or coordinate their facilities to share recycled water in other areas. After the restoration period has been completed, additional recycled water will be required for pond and habitat maintenance.
- LGVSD tertiary treatment capacity would be increased by 0.7 mgd through onsite improvements at the LGVSD treatment plant. Recycled water from LGVSD would be supplied by NMWD to users in the southern portion of the Novato Urban Recycled Water Project area, including Hamilton Field. One existing 0.5-million-gallon (MG) water reservoir, Reservoir Hill Tank, in the southern portion of the Novato Urban Recycled Water Project area would be rehabilitated for recycled water use.
- Novato Sanitary District tertiary treatment would be increased by 1.2 mgd through onsite improvements at the Novato Sanitary District WWTP and decommissioning of the Novato Sanitary District Recycled Water Treatment Facility. Novato Sanitary District and NMWD would pursue implementation of recycled water distribution facilities within the Novato North and Central Service Areas. The Plum Street Tank is an existing 0.5 MG facility that would be rehabilitated for recycled water storage. The system includes 9.8 miles of pipeline.
- SVCSD would treat wastewater at its existing treatment plant and distribute recycled water to local users within its existing SVCSD reuse area (in Carneros West) in addition to the Sonoma Valley Recycled Water Project and Napa Salt Marsh Restoration areas. This alternative would include construction of a new recycled water storage reservoir near the SVCSD WWTP. Additionally, it is assumed that potential user reservoirs would also be utilized for recycled water storage. SVCSD would also implement additional 13.1 miles of SVRWP pipelines.
- Napa SD tertiary treatment would be increased by an estimated 5.9 mgd through onsite improvements at the WWTP. Recycled water from Napa SD would be supplied to users in the Napa MST Area, Carneros East Areas and Napa Salt Marsh Restoration Area. Existing ponds at the WWTP would be reconfigured for recycled water storage. Additionally, it is assumed that potential user ponds would also be utilized for recycled water storage.

Recycled Water Supply, Demand, and Discharge

Table 2-2 summarizes the recycled water demand met in each WWTP service area and discharge to San Pablo Bay that would occur under Alternative 1. Each of the WWTPs currently serves some recycled water customers. Table 2-2 presents this existing demand in acre feet (AF) for each service area, the additional demand that would be met under Alternative 1, and the total recycled water demand for Alternative 1.

**TABLE 2-2
RECYCLED WATER SUPPLY, DEMAND, AND DISCHARGE UNDER ALTERNATIVE 1 (AFY)**

WWTP Service Area	WWTP Inflow (2020)	Existing Recycled Water Demand	New Recycled Water Demand Developed for Alternative 1	Total Recycled Water Demand	Discharge to San Pablo Bay⁽¹⁾
LGVSD WWTP	3,670	902	202	1,104	2,220
Novato SD WWTP	8,677	270	542	812	6,423
SVCSD WWTP	5,508	1,174	2,719	3,893	1,196
Napa WWTP	9,800	2,598	3,192	5,590	3,847
Total	27,655	4,944	6,655	11,599	13,686

¹ Potential for 5,825 AFY release of recycled water to Napa Salt Ponds 7 and 7A, depending upon year type.

SOURCES: CDM, 2009; ESA, 2008

References

Camp Dresser & McKee, Inc. (CDM), Data related to Recycled Water Use and Acreage Served and Wastewater Discharge under the Project Alternatives, 2009.

CHAPTER 3

Findings of Fact Regarding Impacts

3.1 Significant Unavoidable Adverse Impacts

The Draft EIR/EIS described that direct significant impacts attributable to the NBWRP can either be avoided through project design or if unavoidable, can be reduced to a less-than-significant level through mitigation measures identified in the Draft EIR/EIS. Indirect, or secondary, impacts related to growth under the adopted General Plans within the project area may remain significant, and unavoidable for specific issue areas.

Chapter 5 Growth

Impact 5.1 Secondary Effects of Growth

Impact 5.1: The NBWRP would provide recycled water for urban, agricultural, and environmental uses, and as such, would contribute to the provision of adequate water supply to support a level of growth that is consistent with the amount planned and approved within the General Plans of the affected cities within Marin, Sonoma, And Napa Counties and the General Plans for Marin, Sonoma and Napa Counties. No appreciable growth in population or employment would occur as a direct result of construction or operation of the proposed facilities. However, development under the General Plans accommodated by the proposed project would result in secondary environmental effects, which include effects that would be significant and unavoidable.

Mitigation Not Applicable to Novato Sanitary District.

Mitigation Not Applicable to LGVSD, NMWD, and SVCSD.

Mitigation Applicable to Napa SD and Napa County.

The following mitigation measure was identified for projects occurring in Napa County.

Mitigation Measure 5.1a: In order to maintain consistency with the Napa County General Plan, Napa County and Napa SD will approve the MST Local Options 1 and/or 2. This will provide approximately 530 AFY of recycled water that would be available for the existing users in the MST area. Trunk facilities may-accommodate service of up to 1,400 AFY to existing agricultural irrigators only. Any expansion of service beyond the 1,400 AFY or provision of service to new land uses would be subject to approval by the County Planning Department and the Napa County Board of Supervisors.

Findings

Based on the Final EIR/EIS and the entire record before the Novato Sanitary District Board, including the County and City environmental documents referenced in the Draft EIR/EIS, the Board finds that the provision of recycled water within its service area under the NBWRP, while consistent with water supply planning within the service areas, would enable growth under the approved General Plans within each service area to occur, and as such, would contribute to secondary effects of growth associated with buildout under approved General Plans. Some of these secondary effects of growth may remain significant and unavoidable within the Novato Sanitary District service area. The Board finds, in accordance with CEQA Section 15091(a)(3), that specific economic, legal, social, technological, or other considerations, including provisions of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the EIR/EIS (See also Section 6). These findings are consistent with previous findings made by decision making bodies with jurisdiction over these General Plans.

With respect to Mitigation Measure 5.1a, Based on the Final EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(2) that such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Rationale

As discussed in the Draft EIR/EIS, no appreciable growth in population or employment would occur as a direct result of the proposed project. However, provision of recycled water supply would assist in the provision of adequate water supplies to support planned development under the approved General Plans within the City of Novato and Marin County. Buildout under the General Plans would include secondary effects to the environment, as identified in the *City of Novato General Plan EIR* and the *Marin County General Plan EIR*, and summarized in the Draft EIR/EIS. The environmental effects of growth most commonly identified as significant and unavoidable in the service area include those identified in the *City of Novato General Plan*: displacement of wetlands, operation of highways at unacceptable levels of service, and increased emergency service demand and impacts to emergency service response time. The environmental effects of growth identified as significant and unavoidable identified in the *Marin County General Plan* include conflicts with agricultural land use or other existing land uses, consistency with air quality regulations, permanent loss of sensitive species or habitat, alteration of drainage patterns, impacts to water supply and water quality within unincorporated Marin County. These effects are described in Chapter 5, Growth Inducing Effects and Secondary Effects of Growth, of the Draft EIR/EIS. The project provides a level of recycled water supply consistent with the assumptions of the approved *City of Novato General Plan* and *Marin County General Plan*. As noted in these General Plans, some of these impacts will be reduced by identified mitigation measures, but the impacts may not be reduced to a less than significant level.

Implementation of **Mitigation Measure 5.1a**, is applicable to implementation of the MST Area Project under the Phase I Implementation Plan. This project is under the jurisdiction of Napa County.

3.2 Significant Adverse Impacts Reduced to Less-than-Significant Level by Mitigation Measures Incorporated

The Draft EIR/EIS identifies significant impacts that would be reduced to a less-than-significant level by the inclusion of the mitigation measures identified in the Draft EIR/EIS for the approval of NBWRP.

Section 3.1 Geology and Seismicity

Impact 3.1.1 Seismicity

Impact 3.1.1: In the event of a major earthquake in the Bay Area Region, the proposed facilities could be subject to fault rupture, severe ground shaking, liquefaction, or earthquake induced landslides capable of causing injury, structural damage, pipeline rupture and service interruption.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the Mitigation Monitoring and Reporting Program (MMRP). This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.1.1: The Member Agencies will implement the following measures:

- All proposed improvements will be designed and constructed in accordance with current geotechnical industry standard criteria, including the California Building Code (CBC) and American Waterworks Association (AWWA) criteria.
- The project construction materials and backfill materials will be designed according to a geotechnical investigation by a California-licensed geotechnical engineer or engineering geologist to address landslide, subsidence, liquefaction, and expansive soils and seismic hazards such as ground shaking and liquefaction.
- Implementation of industry standard geotechnical measures such as replacing excavated soils with engineered fill materials are effective means to overcome the potential for subsidence. If excavated soils are to be reused for backfill, they would still be appropriately compacted to mitigate the potential for subsidence or settlement and evaluated for expansion and amended, if necessary, to reduce the potential for expansion in accordance with accepted geotechnical practices.
- Proposed facilities will be designed to include flexible connections, where deemed necessary, along with backfill requirements that minimize the potential for significant damage. All other associated improvements will employ standard design and

construction using the most recent geotechnical practices and California Building Code (CBC) seismic criteria, which would provide conservative design criteria.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Incorporation of seismic criteria as it applies to the design of the project components including the WWTP improvements and the recycled water conveyance system would comply with the CBC. Implementation of standard geotechnical measures would mitigate the potential of geological hazards.

Impact 3.1.2 Erosion

Impact 3.1.2: Project construction activities could result in short-term erosion and loss of topsoils.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.1.2: The Member Agencies will implement the following measures:

- Consistent with Stormwater Pollution Prevention Plan (SWPPP) requirements, the construction contractor shall be required to implement BMPs for erosion control onsite. The use of construction BMPs will minimize the potential for erosion and loss of topsoil, and shall include, without limitation, the following:
 - Avoid scheduling construction activities during a rain event, but be prepared for sudden changes in conditions;
 - Construct berms, silt fences, straw bales, fiber rolls, and/or sand bags around stockpiled soils;
 - Cover stockpiled soils during a rain event and monitor perimeter barriers, repair as necessary;
 - Stabilize entrances to work area to prevent tracking of dirt or mud onto roadways; and
- Implement dust control practices as appropriate on all stockpiled material.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Implementation of BMPs would include soil erosion and stormwater runoff control measures and would minimize impacts erosion and loss of topsoil.

Impact 3.1.3 Unstable Soils

Impact 3.1.3: Project improvements could be located on a geologic unit or soil that is unstable that could potentially result in landslide, lateral spreading, subsidence, liquefaction or collapse causing damage to structures and service disruptions.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.1.1: The Member Agencies will implement the following measures:

- All proposed improvements will be designed and constructed in accordance with current geotechnical industry standard criteria, including the California Building Code (CBC) and American Waterworks Association (AWWA) criteria.
- The project construction materials and backfill materials will be designed according to a geotechnical investigation by a California-licensed geotechnical engineer or engineering geologist to address landslide, subsidence, liquefaction, and expansive soils and seismic hazards such as ground shaking and liquefaction.
- Implementation of industry standard geotechnical measures such as replacing excavated soils with engineered fill materials are effective means to overcome the potential for subsidence. If excavated soils are to be reused for backfill, they would still be appropriately compacted to mitigate the potential for subsidence or settlement and evaluated for expansion and amended, if necessary, to reduce the potential for expansion in accordance with accepted geotechnical practices.
- Proposed facilities will be designed to include flexible connections, where deemed necessary, along with backfill requirements that minimize the potential for significant damage. All other associated improvements will employ standard design and construction using the most recent geotechnical practices and California Building Code (CBC) seismic criteria, which would provide conservative design criteria.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Incorporation of industry standards and materials selection as it applies to the design of the WWTP improvement components and the recycled water conveyance system would comply with AWWA and CBC and would minimize the impact associated with unstable soils.

Impact 3.1.4 Expansive Soils

Impact 3.1.4: Project improvements could be located on expansive soils that over time could cause damage to foundations and pipelines resulting in service disruptions.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.1.1: The Member Agencies will implement the following measures:

- All proposed improvements will be designed and constructed in accordance with current geotechnical industry standard criteria, including the California Building Code (CBC) and American Waterworks Association (AWWA) criteria.
- The project construction materials and backfill materials will be designed according to a geotechnical investigation by a California-licensed geotechnical engineer or engineering geologist to address landslide, subsidence, liquefaction, and expansive soils and seismic hazards such as ground shaking and liquefaction.
- Implementation of industry standard geotechnical measures such as replacing excavated soils with engineered fill materials are effective means to overcome the potential for subsidence. If excavated soils are to be reused for backfill, they would still be appropriately compacted to mitigate the potential for subsidence or settlement and evaluated for expansion and amended, if necessary, to reduce the potential for expansion in accordance with accepted geotechnical practices.
- Proposed facilities will be designed to include flexible connections, where deemed necessary, along with backfill requirements that minimize the potential for significant damage. All other associated improvements will employ standard design and construction using the most recent geotechnical practices and California Building Code (CBC) seismic criteria, which would provide conservative design criteria.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Incorporation of industry standards and materials selection as it applies to the design of the WWTP improvement components and the recycled water conveyance system would comply with AWWA and CBC and would reduce the impact related to expansive soils.

Section 3.2 Surface Hydrology

Impact 3.2.1 Changes in Drainage Patterns

Impact 3.2.1: Project construction could modify existing drainage patterns.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.2.1: The Member Agencies would implement the following measure during pipeline installation at stream crossings:

- Schedule construction so as to avoid storm events to the extent feasible ;
- Use trenchless techniques such as jack and bore tunneling to avoid direct impacts to the streams;
- Employ short-term drainage diversion and control measures such as sandbags, dikes, pumps, or other means; and
- Following construction, restore the construction area to pre-existing conditions
- Implement **Mitigation Measure 3.5.1** (see Section 3.5).

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

As discussed in the Draft EIR/EIS, the proposed pipelines would cross drainages only under certain necessary conditions. In such cases, the measures listed above would avoid direct impact to drainages. The drainage designs would be integrated with existing drainage systems, and the construction site would be restored to pre-existing conditions, therefore, the impact on the drainage patterns would be less than significant.

Impact 3.2.3 Increased storm runoff

Impact 3.2.3: New impervious surfaces for the NBWRP would result in an increase in storm runoff.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.2.3: The Member Agencies will implement the following measures:

- Comply with the local storm drainage requirements;
- Incorporate site design features to control any site runoff onsite; and
- Install storm runoff, collection, and treatment system, as applicable, to control the runoff flow offsite.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

New impervious surfaces would be added as part of the pump stations located offsite from the WWTPs; however the increase would be minor and compliance with local storm drain requirements and site design features would control runoff flow onsite.

Impact 3.2.4 Flooding – Sea Level Rise Impact

Impact 3.2.4: Sea-level rise could affect operation of project facilities.

Mitigation Applicable to Novato Sanitary District.

Mitigation Applicable to LGVSD, NMWD, and SVCSD.

Mitigation Not Applicable to Napa County and Napa SD.

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.2.4: Design of proposed facilities shall consider sea level rise potential, and shall include appropriate measures in facility siting and design to address potential impacts related to sea level rise, similar to those applied to facility installation within 100-year flood plains. Design measures may include, but are not limited to: facility siting, access placement, access vault extension above projected water elevation, water tight vaults, and site protection.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Implementation of design measures, such as siting, access placement, access vault extension above projected water elevation, water tight vaults, and site protection would reduce the impact related to sea-level rise.

Section 3.3 Groundwater Resources

Impact 3.3.2 Hydrostatic Pressure

Impact 3.3.2: Proposed facilities may be affected by shallow groundwater levels and natural groundwater fluctuations.

Mitigation

Mitigation Measure 3.3.1: The Member Agencies will implement the following measures:

- All proposed improvements will be designed and constructed in accordance with current geotechnical industry standard criteria.
- Implement industry standard geotechnical measures to address high groundwater conditions as appropriate to reduce the potential for impacts related to groundwater fluctuation, in accordance with accepted geotechnical practices. Possible design features include drainage blankets, perimeter pumps to temporarily decrease

hydrostatic pressure, perimeter drainage trenches, and specific groundwater monitoring scenarios.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Proposed facilities, including pipelines, pump stations, and storage facilities would be constructed in accordance with the geotechnical standards and criteria. The design measures would reduce the impacts related to groundwater fluctuation.

Section 3.4 Water Quality

Impact 3.4.1 Construction-Related Effects

Impact 3.4.1: Disturbance of soils during construction of new project-related infrastructure could generate short term erosion-related water quality impacts. Construction activities could result in the accidental release of fuels or hazardous materials. Project construction activities could require dewatering that could result in the discharge of turbid waters into the local storm drain systems or nearby creeks.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.4.1a: NPDES Construction Activity Stormwater Permit. Member Agencies or their contractor shall comply with the provisions of the NPDES Construction Activity Stormwater permit, including preparation of Notice of Intent to comply with the provisions of this General Permit and preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will identify implementation measures necessary to mitigate potential water quality degradation as a result of construction-related runoff. These measures will include BMPs and other standard pollution prevention actions, such as erosion and sediment control measures, proper control of non-stormwater discharges, and hazardous spill prevention and response. The SWPPP will also include requirements for BMP inspections, monitoring, and maintenance.

The following items are examples of BMPs that would be implemented during construction to avoid causing water quality degradation:

- Erosion control BMPs, such as use of mulches or hydroseeding to prevent detachment of soil, following guidance presented in the California BMP Handbooks – Construction (CASQA 2003). A detailed site map will be included in the SWPPP

outlining specific areas where soil disturbance may occur, and drainage patterns associated with excavation and grading activities. In addition, the SWPPP will provide plans and details for the BMPs to be implemented prior, during, and after construction to prevent erosion of exposed soils and to treat sediments before they are transported offsite.

- Sediment control BMPs such as silt fencing or detention basins that trap soil particles.
- Construction staging areas designed so that stormwater runoff during construction will be collected and treated in a detention basin or other appropriate structure.
- Management of hazardous materials and wastes to prevent spills.
- Groundwater treatment BMPs such that localized trench dewatering does not impact surface water quality.
- Vehicle and equipment fueling BMPs such that these activities occur only in designated staging areas with appropriate spill controls.
- Maintenance checks of equipment and vehicles to prevent spills or leaks of liquids of any kind.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Implementation of stormwater control measures and BMPs related to handling and storage of hazardous materials would minimize sedimentation and water quality impacts.

Impact 3.4.6 Surface Water Storage

Impact 3.4.6: The proposed project would include storage of recycled water at existing WWTP facilities, as well as at individual user properties. Storage of recycled water quality would have the potential to affect localized surface water quality or groundwater quality.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.4.6a: Under the Master Recycling Permit for each Member Agency and Cooperating Agency, user agreements shall include provisions for compliance with

Title 22 and the State Recycled Water Policy regarding storage and use of recycled water onsite at individual properties.

Mitigation Measure 3.4.6b: Prior to storage of recycled water in any “on-stream” storage facility that directly receives and releases stream flow, each Member Agency or Cooperating Agency shall enter into discussions with RWQCB regarding operational requirements to ensure operation of proposed facilities in compliance with Title 22 and the State Recycled Water Policy. It is anticipated that specific operational standards, such as pumping on-stream ponds dry prior to the onset of winter rains or other measures, would be required in order to ensure storage in compliance with Title 22.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

The project would comply with Title 22 and maintain adequate freeboard to reduce the potential for releases of stored recycled water.

Impact 3.4.9 Reuse for Habitat Restoration

Impact 3.4.9: Disinfected tertiary-treated wastewater from the SVCSD and Napa SD WWTPs would be delivered to the Napa Salt Marsh ponds as a dilution source for bittern ponds, thereby improving water quality.

Mitigation Not Applicable to Novato Sanitary District.

Mitigation Not Applicable to LGVSD and NMWD.

Mitigation Applicable to SVCSD and Napa SD, and Napa County.

Mitigation Measure 3.4.9a: SVCSD and Napa SD (as appropriate) shall implement the following measures:

- Prepare a Management Plan for the salt marsh ponds to monitor recycled water application and resulting changes in bittern pond conditions. The management plan will include the following features for Ponds 7 and 7A:
 - a) Facility Plan, includes project purpose and objectives, site selection factors, site sampling and analyses, planning and design elements.
 - b) Operations and Maintenance plan, includes vegetation planning and harvesting, channel and bank maintenance, pump and gate maintenance, vector controls, and contingency/emergency plans.

- c) **Monitoring Program**, includes monitoring of pollutants, habitat diversity, wildlife use, and vector populations.

Findings

Based on the Final EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(2), that such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Rationale

Novato Sanitary District would not be implementing this component of the project under the Phase 1 Implementation Plan currently under consideration.

Section 3.5 Biological Resources

Impact 3.5.1 Impacts on Wetlands, Streams and Riparian Habitats

Impact 3.5.1: Construction of the Proposed Project could result in impacts to jurisdictional wetlands and other waters of the United States, as well as impacts to riparian habitat.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.1: Implement the following measures to avoid, minimize and compensate for impacts to jurisdictional wetlands and other waters of the U.S. and impacts to riparian habitat.

Construction activities resulting in the introduction of fill or other disturbance to jurisdictional wetlands and other waters of the U.S. will require permit approval from the U.S. Army Corps of Engineers and water quality certification from the Regional Water Quality Control Board, pursuant to Section 401 of the Clean Water Act. The Proposed Project will most likely be authorized under Nationwide Permit #12 (Utility Lines) pursuant to Section 404 of the Clean Water Act. The California Department of Fish and Game (CDFG) has jurisdiction in the action area over riparian habitat, including stream bed and banks, pursuant to Sections 1600-1616 of the Fish and Game Code. Pipeline construction resulting in alteration to channel bed or banks, extending to the outer dripline of trees forming the riparian corridor, is subject to CDFG jurisdiction. The project proponent will be required to obtain a Streambed Alteration Agreement (SAA) from the CDFG. Terms of these permits and SAA will likely include, but will not necessarily be limited to, the mitigation measures listed below.

- 1) Specific locations of pipeline segments, storage reservoirs, and pump stations shall be configured, wherever feasible, to avoid and minimize direct and indirect impacts to

wetlands and stream drainage channels. Consideration taken in finalizing configuration placement shall include:

- Reducing number and area of stream channel and wetland crossings where feasible. Crossings shall be oriented as close to perpendicular (90 degree angle) to the drainage or wetland as feasible.
 - Placement of project components as distant as feasible from channels and wetlands.
 - For pipeline construction activities in the vicinity of wetland and stream drainage areas, the construction work area boundaries shall have a minimum 20-foot setback from jurisdictional features¹. Pipeline construction activities in proximity to jurisdictional features include: 1) entrance and exit pits for directional drilling and bore and jack operations; and 2) portions of pipeline segments listed as “parallel” to wetland/water features.
- 2) Sites identified as potential staging areas will be examined by a qualified biologist prior to construction. If potentially jurisdictional features are found that could be impacted by staging activities, the site will not be used.
- 3) Construction methods for channel crossing shall be designed to avoid and minimize direct and indirect impacts to channels to the greatest extent feasible. Use of trenchless methods including suspension of pipeline from existing bridges, directional drilling, and bore and jack tunneling will be used when feasible. Trenchless methods are required for all perennial drainage crossings (i.e., Sonoma Creek). Construction occurring in the vicinity of riparian areas shall be delimited with a minimum 20-foot setback to avoid intrusion of construction activities into sensitive habitat.

The following additional measures shall apply to channel crossings in which the trenching construction method is used:

- Limiting of construction activities in drainage channel crossings to low-flow periods: approximately April 15 to October 15.
- At in-road drainage crossings where drainages pass beneath the road in existing culverts, and where there is sufficient cover between the culvert and road surface, the new pipeline will be installed above the existing culvert without removing or disturbing it. If the pipeline must be installed below the existing culvert, then the culvert will be cut and temporarily removed to allow pipeline installation.
- At off-road drainage crossings, the construction corridor width will be minimized to the greatest extent feasible at the crossing and at least 20 additional feet to either side of the drainage at the crossing.
- If disturbance of the existing culvert is required, sediment curtains upstream and downstream of the construction zone shall be placed to prevent sediment

¹ Setbacks of channels with associated riparian vegetation will be from the outer dripline edge of the riparian corridor canopies and/or the upper bank edge, or per City or County code, whichever is greater.

disturbed during trenching activities from being transported and deposited outside of the construction zone.

- 4) Implement BMPs required in Mitigation Measure 3.4.1 to reduce risk of sediment transport into all construction areas in proximity of drainages.
- 5) For channels or wetlands for which soil removal is necessary (off-road crossings or wetlands to be trenched or otherwise directly disturbed), the top layer of the drainage or wetland bottom shall be stockpiled and preserved during construction. After the pipeline has been installed, the stockpiled material shall be placed back into the drainage or wetland feature to return the beds to approximately their original composition.
- 6) To offset temporary and permanent impacts to wetlands and other waters of the U.S., and impacts to riparian habitat, compensatory mitigation will be provided as required by regulatory permits and SAAs.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Potential impacts to riparian habitat during construction activities would be reduced by complying with the regulatory requirements and through measures such as avoiding stream crossings as feasible and setting setbacks from sensitive habitats.

Impact 3.5.2 Construction Impacts on Special-status Fish and California Freshwater Shrimp

Impact 3.5.2: Construction of Proposed Project facilities could affect special-status invertebrate or fish species including central California coast steelhead, Chinook salmon, California freshwater shrimp, Pacific lamprey, and Sacramento splittail, or designated critical habitat for steelhead.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.2: Specific measures shall be implemented to protect aquatic habitats potentially inhabited by special-status fish and California freshwater shrimp.

Sensitive fisheries and other aquatic resources shall be protected by minimizing in-stream and near-stream habitat impacts during project design, informally consulting with resource agencies (NMFS, USFWS, CDFG, and USACOE), and implementing protective measures. For Sonoma Creek, Petaluma River, Napa River, and other perennial drainages, special-

status fish are presumed present. California freshwater shrimp are presumed present in Sonoma Creek. Because of the sensitivity of seasonal and ephemeral drainages, the following measures will be required to avoid and minimize impacts to aquatic habitat:

- 1) Project designs shall be reconfigured, whenever feasible, to avoid direct impacts to sensitive wetland areas and minimize disturbances to wetland and riparian corridors. Ground disturbance and construction footprints in these areas shall be minimized to the greatest degree feasible.
- 2) If trenching or directional boring stream crossing methods are used, the construction schedule of such activities shall be implemented according to conditions of the SAAs.
- 3) In-stream construction shall be avoided at all locations that are known, or presumed, to support threatened or endangered species, if at the time of construction such locations contain flowing or standing water.
- 4) In the event that equipment shall operate in any watercourse with flowing or standing water, the project proponent will ensure that they have the appropriate permit authorizations.
- 5) Prior to construction, a qualified biologist shall install fencing to establish a minimum 20-foot setback from sensitive habitat.
- 6) For work sites located adjacent to sensitive aquatic sites, a biological resource education program shall be provided by a qualified biologist, as per conditions of the SAAs.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

The project would be designed to avoid sensitive wetland areas and measures such as educating the construction workers would minimize the impacts to special-status species.

Impact 3.5.4 Impacts on Special-status Invertebrates

Impact 3.5.4: Construction of Proposed Project facilities could impact special-status invertebrates including Myrtle's silverspot butterfly, Opler's longhorn moth, Monarch butterfly wintering sites, Ricksecker's water scavenger beetle and California brackish water snail.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.3: Implementation of Mitigation Measure 3.5.5 for the protection of California red-legged frogs and Mitigation Measure 3.5.1 for protection and restoration of wetlands would protect special-status invertebrates that could potentially be impacted by the project. No specific mitigation is required.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Implementation of measures to protect the California red-legged frog and wetlands would also minimize impacts to special-status invertebrates.

Impact 3.5.5 Impacts on Western Pond Turtle

Impact 3.5.5: Construction of the proposed project has the potential to impact western pond turtles in upland and aquatic habitat.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.5: The appropriate Member Agency shall implement protection measures to avoid and minimize impacts to western pond turtles.

- When working within 200 feet of stream crossings, all construction personnel shall receive awareness training relating to the protection of western pond turtles, in accordance with the SAAs. Also, to minimize the likelihood of encountering turtles in upland areas near stream crossings, construction footprints shall be minimized to the greatest extent feasible. Based on reconnaissance-level surveys, if staging and construction activities occur principally within or immediately adjacent to project alignment roads the project will be outside of principal pond turtle habitat.
- Within 48 hours prior to the start of construction activities, a qualified biologist shall perform pond turtle surveys within suitable habitat within projected work areas. If a pond turtle nest is located within a work area, a biologist with the appropriate permits may move the eggs to a suitable facility for incubation, and release hatchlings into the creek system in late fall.

The measures proposed for protection of aquatic species and red-legged frogs (Mitigation Measures 3.5.2 and 3.5.6) will additionally protect western pond turtles during construction.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures such as conducting surveys for pond turtles prior to construction and establishing working areas at a specified distance from the stream crossings would minimize the impact.

Impact 3.5.6 Impacts on California Red-legged Frog

Impact 3.5.6: Construction of the Proposed Project has the potential to affect California red-legged frogs, if present.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.6: The appropriate Member Agency shall implement the following protection measures to avoid and minimize impacts on California red-legged frog.

- 1) The implementation of measures identified for the protection of special-status fish and California freshwater shrimp would also protect California red-legged frogs within aquatic habitat. All protection measures identified in Mitigation Measure 3.5.2 shall be applied to the protection of red-legged frogs at sites that provide potential aquatic habitat for this species. These include informal USFWS consultation, avoiding aquatic habitat, establishing a suitable buffer from the aquatic habitat (e.g., 50 feet), and implementing a worker education program.
- 2) All work activities within or adjacent to aquatic habitat that is potentially occupied by red-legged frogs will be completed between May 1 and November 1.
- 3) A qualified biological resource monitor will conduct a training session for construction personnel working in upland habitat near potentially occupied drainages, as per conditions of the SAAs.
- 4) All trash that could attract predators will be regularly contained and removed from the work site.

In the event trenchless methods cannot be employed, the project proponent would obtain appropriate permit authorizations and implement construction methods per applicable Streambed Alteration Agreements.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures for protecting special-status fish and freshwater shrimp would apply to the protection of California red-legged frog. Mitigation including informal USFWS consultation, avoiding aquatic habitat, and establishing a suitable buffer would minimize the impact.

Impact 3.5.7 Impacts on Threatened and Endangered Marsh Birds

Impact 3.5.7: Construction of the proposed project has the potential to affect western snowy plover, California black rail and California clapper rail and their habitat in and near the project alignments.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.7: Impacts to Threatened and Endangered Marsh Birds. To minimize the likelihood of project effects on threatened and endangered marsh birds, the following reasonable and prudent measures would be implemented by the appropriate Member Agency:

- Protocol-level surveys will be conducted in locations with suitable habitat to determine species presence or absence.
- Agency consultation will be initiated.
- Construction activities will occur during the non-breeding season, September 15 through January 31. The combined breeding season for all three species extends from February 1 through September 14.
- Construction personnel will receive environmental awareness training specific to the identification of clapper rails, black rails, western snowy plover and their habitat.
- Any clapper rail and western snowy plover activity will be immediately reported to the USFWS; black rail activity will be reported to the CDFG.

- Construction activities will be constrained to the smallest area possible to minimize marsh disturbance.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures such as conducting surveys for threatened and endangered marsh birds prior to construction and restricting construction activities to non-breeding season would minimize the impact.

Impact 3.5.8 Impacts on Burrowing Owl

Impact 3.5.8: Construction of the proposed project could result in direct and indirect impacts to burrowing owls, if present in portions of the project alignment. (Less than Significant with Mitigation)

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.8: The following measures to avoid, minimize, or mitigate impacts on burrowing owls would be incorporated into the project by the appropriate Member Agency:

- In areas identified to provide potential burrowing owl habitat, preconstruction surveys for burrowing owls would be conducted by a qualified biologist 14-30 days prior to the start of construction. Surveys would cover grassland areas within 500-foot buffer and check for adult and juvenile burrowing owls and their habitat.
- Construction exclusion areas would be established around the occupied burrows in which no disturbance would be allowed to occur. During the non-breeding season (September 1 through January 31), the exclusion zone would extend 160 feet around occupied burrows. During the breeding season (February 1 through August 31), exclusion areas would extend 250 feet around occupied burrows. Passive relocation of owls is not proposed.
- A qualified biologist (the on-site monitor or otherwise) will monitor owl activity on the site to ensure the species is not adversely affected by the project.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures such as conducting surveys for burrowing owl prior to construction and restricting construction activities to non-breeding season would minimize the impact.

Impact 3.5.9 Impacts on Nesting Birds

Impact 3.5.9: Construction of the proposed project has the potential to affect nesting birds including Swainson's hawk, willow flycatcher, sharp-shinned hawk, Cooper's hawk, tri-colored blackbird, Bell's sage sparrow, golden eagle, northern harrier, California yellow-warbler, white-tailed kite, California horned lark, salt marsh common yellowthroat, loggerhead shrike, San Pablo song sparrow, California thrasher, rookeries, and additional bird species protected by California Fish and Game Code Section 3503 and the federal Migratory Bird Treaty Act (16 USC, Sec. 703, Supp. I, 1989). (Less than Significant with Mitigation)

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.9: To avoid disturbing common and special-status nesting birds, the following protection measures shall be implemented:

- Whenever feasible, vegetation shall be removed during the non-breeding season (generally defined as September 1 to January 31).
- For ground disturbing activities occurring during the breeding season (generally defined as February 1 to August 31), a qualified wildlife biologist will conduct preconstruction surveys of all potential nesting habitat for birds within 500 feet of earthmoving activities.
- If active bird nests are found during preconstruction surveys, a 500-foot no-disturbance buffer will be created around active raptor nests during the breeding season or until it is determined that all young have fledged. A 250-foot buffer zone will be created around the nests of other special-status birds. These buffer zones are consistent with CDFG avoidance guidelines; however, they may be modified in coordination with CDFG based on existing conditions at work locations.
- If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees and shrubs that have been determined to be unoccupied by special-status birds or that are located at least 500 feet from active nests may be removed.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures such as conducting surveys for nesting birds prior to construction and restricting construction activities to non-breeding season would minimize the impact.

Impact 3.5.10 Impacts on Salt Marsh Harvest Mouse and Suisun Ornate Shrew

Impact 3.5.10: Construction of the proposed project has the potential to affect salt marsh harvest mouse and suisun ornate shrew and their habitat in and near the project alignments.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.10: The appropriate Member Agency shall implement protection measures to avoid and minimize impacts on salt marsh mammals during construction.

Where avoidance of sensitive habitat is not feasible (e.g., by bridging or bore and jack), consultation with CDFG and/or USFWS would be initiated. If species are present or presumed to be present after informal consultation with USFWS and/or CDFG, then a formal consultation and Biological Assessment in support of a Biological Opinion would be required. Such a consultation would proceed as part of the Corps 404 permitting program.

To avoid potential impacts on salt marsh harvest mouse and Suisun ornate shrew, a qualified biologist shall conduct specific preconstruction surveys prior to project initiation, following USFWS survey guidelines. The project proponent shall install exclusionary fences to prevent species movement into the action area, and a biologist with the appropriate permits to relocate these species shall live-trap mice and shrews within the enclosure and move these animals outside the fence. The biological monitor shall inspect these fences to ensure their integrity, and shall conduct an education workshop for contractors employees outlining species' biology, legislative protection, and construction restrictions to reduce potential impacts.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or

incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures such as conducting surveys for salt harvest mouse and Suisun ornate shrew prior to construction and restricting construction activities to non-breeding season would minimize the impact.

Impact 3.5.11 Impacts on Special Status Bats

Impact 3.5.11: Construction of the proposed project has the potential to affect roosting or breeding special-status bats in and near the project alignments.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.11: The appropriate Member Agency shall implement protection measures to avoid and minimize impacts on special-status bats in and near project facilities during construction.

Concurrent with breeding bird surveys (Mitigation Measure 3.5.8), a qualified biologist will conduct preconstruction surveys for special-status bats at each bridge crossing location and in rural (i.e., non-road) areas where any large trees (e.g., > 24 inch diameter at breast height) will be removed. If an active roost is observed, a suitably-sized buffer (e.g., 100 to 150 feet) will be placed around the roost if it appears that trenching or other project activities may cause abandonment. Demolition activities must cease until juvenile bats are self-sufficient and will not be directly or indirectly impacted by activities.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures such as conducting pre-construction surveys for special-status bats and avoiding or maintaining a suitable buffer from an active roost would minimize the impact.

Impact 3.5.12 Impacts on American Badger

Impact 3.5.12: Construction of the proposed project has the potential to affect American badger and its habitat in and near the project alignments.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.12: To avoid and minimize impacts on badgers, the appropriate Member Agency shall implement preconstruction surveys prior to ground clearing and grading in annual grasslands habitat or areas that are known or suspected to support badger.

- Within 30-days prior to ground-clearing, a qualified biologist shall survey areas that provide potential badger habitat that occur within 100-feet of project activities. If no evidence of badgers presence is detected, no further mitigation is required. If active badger dens are identified within the action area, badgers will be passively relocated. If identified, vacated dens shall be temporarily covered using plywood sheets or similar materials to prevent badgers from returning to the action area during construction.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures such as conducting pre-construction surveys for American badger and temporary covers on vacated dens would avoid or minimize the impact.

Impact 3.5.13 Impacts on Rare Plants

Impact 3.5.13: Project construction could result in impacts to listed and other special-status plants.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.13. Before the initiation of any vegetation removal or ground-disturbing activities in areas that provide suitable habitat for special-status plants, the following measures shall be implemented by the appropriate Member Agency:

- A qualified botanist will conduct appropriately-timed surveys for special-status plant species, including those identified in Table 3.5.1, in all suitable habitat that would be potentially disturbed by the project.
- Surveys shall be conducted following CDFG- or other approved protocol.

- If no special-status plants are found during focused surveys, the botanist shall document the findings in a letter to the appropriate agencies and no further mitigation will be required.

If special-status plants are found during focused surveys, the following measures shall be implemented:

- Information regarding the special-status plant population shall be reported to the California Natural Diversity Database (CNDDDB).
- If the populations can be avoided during project implementation, they shall be clearly marked in the field by a qualified botanist and avoided during construction activities. Before ground clearing or ground disturbance, all on-site construction personnel shall be instructed as to the species' presence and the importance of avoiding impacts to this species and its habitat.
- If special-status plant populations cannot be avoided, consultations with CDFG and/or USFWS would be required. A plan to compensate for the loss of special-status plant species could be required, detailing appropriate replacement ratios, methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures that would be implemented if the initial mitigation fails; the plan would be developed in consultation with the appropriate agencies prior to the start of local construction activities.
- If mitigation is required, the project proponent shall maintain and monitor the mitigation area for 5 years following the completion of construction and restoration activities. Monitoring reports shall be submitted to the resource agencies at the completion of restoration and for 5 years following restoration implementation. Monitoring reports shall include photo-documentation, planting specifications, a site layout map, descriptions of materials used, and justification for any deviations from the mitigation plan.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures such as conducting surveys of vegetation and consultation with USFWS and CDFG as required, would minimize the impact.

Impact 3.5.14 Impacts on Heritage and Significant Trees

Impact 3.5.14: The proposed project could affect heritage and other significant trees.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.5.14: The following measures shall be implemented by the appropriate Member Agency to avoid or reduce impacts to heritage or other significant trees:

1. Prior to the commencement of construction activities, trees necessary to remove or at risk of being damaged will be identified.
2. A certified arborist will inventory these trees, with the results of the inventory providing species, size (diameter at breast height, or *dbh*), and number of protected trees. Also, in consultation with the appropriate County, the arborist will determine if any are heritage or landmark trees.
3. If any protected trees are identified that will be potentially removed or damaged by construction of the proposed project, design changes will be implemented where feasible to avoid the impact.
4. Any protected trees that are removed will be replaced per applicable City and County tree protection ordinances. Foliage protectors (cages and tree shelters) will be installed to protect the planted trees from wildlife browse. The planted trees will be monitored as required by the ordinance, or regularly during a minimum two-year establishment period and maintenance during the plant establishment period will include irrigation. After the establishment period, the native tree plantings are typically capable of survival and growth without supplemental irrigation.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures such as avoiding protected trees and replacing any removing trees as per the local tree protection ordinances would minimize the impact to heritage and significant trees.

Section 3.6 Land Use

Impact 3.6.3 Impact to Farmland

Impact 3.6.3: Construction activities associated with the project could temporarily affect the agricultural use of important farmland.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.6.1: To support the continued productive use of Important Farmlands in the action area, the appropriate Member Agency shall implement the following measures during project construction:

- Replace soils over pipelines in a manner that will minimize any negative impacts on crop productivity. The surface and subsurface soil layers will be stockpiled separately and returned to their appropriate locations in the soil profile.
- To avoid over-compaction of the top layers of soil, monitor pre-construction soil densities and return the surface soil (approximately the top 3 feet) to within 5 percent of original density.
- Where necessary, rip the top soil layers to achieve the appropriate soil density. Ripping may also be used in areas where vehicle and equipment traffic have compacted the top soil layers, such as the construction staging areas.
- Avoid working or traveling on wet soil to minimize compaction and loss of soil structure. Before construction begins, geotechnical testing will be done to determine the moisture content limit above which work should not occur. Where working or driving on wet soil cannot be avoided, roadways will be capped with spoils that will be removed at the end of construction and/or ripped and amended with organic material as needed.
- Remove all construction-related debris from the soil surface. This will prevent rock, gravel, and construction debris from interfering with agricultural activities.
- Perform soil density monitoring during backfill and ripping to minimize excessive compaction and minimize effects on future agricultural land use.
- Remove topsoil before excavating in fields. Return it to top of fields to avoid detrimental inversion of soil profiles.
- Control compaction to minimize changes to lateral groundwater flow which could affect both irrigation and internal drainage.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or

incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures to support the continued productive use of important farmlands in the action area would mitigate any impacts from project construction.

Impact 3.6.4 Conversion of Farmland

Impact 3.6.4: The project would permanently convert Important Farmland to nonagricultural use.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.6.4: To support the continued productive use of Important Farmlands in the action area, the appropriate Member Agency shall implement the following measures during project construction:

- Replace soils over pipelines in a manner that will minimize any negative impacts on crop productivity. The surface and subsurface soil layers will be stockpiled separately and returned to their appropriate locations in the soil profile.
- To avoid over-compaction of the top layers of soil, monitor pre-construction soil densities and return the surface soil (approximately the top 3 feet) to within 5 percent of original density.
- Where necessary, rip the top soil layers to achieve the appropriate soil density. Ripping may also be used in areas where vehicle and equipment traffic have compacted the top soil layers, such as the construction staging areas.
- Avoid working or traveling on wet soil to minimize compaction and loss of soil structure. Before construction begins, geotechnical testing will be done to determine the moisture content limit above which work should not occur. Where working or driving on wet soil cannot be avoided, roadways will be capped with spoils that will be removed at the end of construction and/or ripped and amended with organic material as needed.
- Remove all construction-related debris from the soil surface. This will prevent rock, gravel, and construction debris from interfering with agricultural activities.
- Perform soil density monitoring during backfill and ripping to minimize excessive compaction and minimize effects on future agricultural land use.
- Remove topsoil before excavating in fields. Return it to top of fields to avoid detrimental inversion of soil profiles.

- Control compaction to minimize changes to lateral groundwater flow which could affect both irrigation and internal drainage.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Based on the Final EIR/EIS and the entire record before Novato Sanitary District, the Board finds that the mitigation measure will reduce the significant effect to a less-than-significant level.

Section 3.7 Traffic and Transportation

Impact 3.7.1 Temporary Congestion and Delays

Impact 3.7.1: Project construction activities could adversely affect traffic and transportation conditions in the action area.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. The measures will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.7.1a: The appropriate Member Agency for each project component shall obtain and comply with local road encroachment permits for roads that are affected by construction activities.

The *Work Area Protection and Traffic Control Manual* includes requirements to ensure safe maintenance of traffic flow through or around the construction work zone, and safe access of police, fire, and other rescue vehicles (CJUTCC, 1996). In addition, the Traffic Management Plan (subject to local jurisdiction review and approval) required by **Mitigation Measure 3.7.1b**, below, would direct how traffic flow is safely maintained during project construction.

Mitigation Measure 3.7.1b: The construction contractor for each project component shall prepare and implement a Traffic Control/Traffic Management Plan subject to approval by the appropriate local jurisdiction prior to construction. The plan shall:

- Identify hours of construction (between 8:00 AM and 7:00 PM; no construction shall be permitted between 10:00 PM and 7:00 AM);
- Identify hours for deliveries (Monday – Friday, 9:00 AM to 3:30 PM, or other hours if approved by the appropriate local jurisdiction);

- Include a discussion of haul routes, limits on the length of open trench, work area delineation, traffic control and flagging;
- Identify all access and parking restriction, pavement markings and signage requirements (e.g., speed limit, temporary loading zones);
- Layout a plan for notifications and a process for communication with affected residents and businesses prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which lanes and access point/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints;
- Include a plan to coordinate all construction activities with emergency service providers in the area at least one month in advance. Emergency service providers shall be notified of the timing, location, and duration of construction activities. All roads shall remain passable to emergency service vehicles at all times;
- Include a plan to coordinate all construction activities with the appropriate local school district at least two months in advance. The school district shall be notified of the timing, location, and duration of construction activities. Coordinate with the appropriate local school district to identify peak circulation periods at schools along the alignment(s) (i.e., the arrival and departure of students), and require their contractor to avoid construction and lane closures during those periods. The construction contractor for each project component shall be required to maintain vehicle, pedestrian, and school bus service during construction through inclusion of such provisions in the construction contract. The assignment of temporary crossing guards at designated intersections may be needed to enhance pedestrian safety during project construction;
- Include the requirement that all open trenches be covered with metal plates at the end of each workday to accommodate traffic and access; and
- Specify the street restoration requirements pursuant to agreements with the local jurisdictions.

Mitigation Measure 3.7.1c: The appropriate Member Agency for each project component shall identify all roadway locations where special construction techniques (e.g., horizontal boring, directional drilling or night construction) will be used to minimize impacts to traffic flow.

Mitigation Measure 3.7.1d: The appropriate Member Agency for each project component shall develop circulation and detour plans to minimize impact to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone.

Mitigation Measure 3.7.1e: The appropriate Member Agency for each project component shall encourage construction crews to park at staging areas to limit lane closures in the public right-of-way.

Mitigation Measure 3.7.1f: The appropriate Member Agency for each project component shall consult with the appropriate public transit service providers at least one month prior to construction to coordinate bus stop relocations (as necessary) and to reduce potential interruption of transit service.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Traffic mitigating measures such as preparing an implementing a traffic control and management plan and complying with the local road encroachment permits would minimize impacts from congestion during project construction.

Impact 3.7.2 Temporary Disruption to Access

Impact 3.7.2: Project construction activity would temporarily disrupt circulation patterns near sensitive land uses (schools, hospitals, fire stations, police stations, and other emergency providers).

Mitigation

Mitigation Measure 3.7.2a: Pipeline construction near schools shall occur when school is not in session (i.e., summer or holiday breaks). If this is not feasible, a minimum of two months prior to project construction, the appropriate Member Agency for each project component shall coordinate with the appropriate local school district to identify peak circulation periods at schools along the alignment(s) (i.e., the arrival and departure of students), and require their contractor to avoid construction and lane closures during those periods.

Mitigation Measure 3.7.2b: A minimum of two months prior to project construction, the appropriate Member Agency for each project component shall coordinate with the appropriate local school district to identify alternatives to their Safe Routes to School program, alternatives for the school busing routes and stop locations, and other circulation provisions, as part of the Traffic Control/Traffic Management Plan (see Mitigation Measure 3.7.1a).

Mitigation Measure 3.7.2c: Implement Mitigation Measure 3.7.1b.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or

incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Coordination with local school districts and identifying alternative traffic routes would minimize the impacts from temporary disruption to access to sensitive land uses.

Impact 3.7.3 Temporary Disruption to Access

Impact 3.7.3: Project construction activity would have temporary effects on alternative transportation or alternative transportation facilities.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. The measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.7.3: Implement Mitigation Measure 3.7.1f.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Consulting with the appropriate public transit service providers prior to construction would minimize effects on access to alternative transportation facilities.

Impact 3.7.4 Temporary Displacement of Parking

Impact 3.7.4: Project construction activity would temporarily create parking demand for construction workers and construction vehicles, and displace parking spaces.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. The measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.7.4: Implement Mitigation Measure 3.7.1e.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Parking at construction staging areas would reduce the impacts from the increase in parking demand for construction workers.

Impact 3.7.5 Temporary Potential Traffic Hazards

Impact 3.7.5: Project construction activity would temporarily increase the potential for accidents on project roadways.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. The measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.7.5: Implement Mitigation Measure 3.7.1b through 3.7.1f.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures noted above to reduce traffic congestion and delays from increased traffic from project construction would minimize any related traffic hazards.

Impact 3.7.6 Road Wear

Impact 3.7.6: Project construction activity would increase wear and tear on the designated haul routes used by construction vehicles to access the project work sites.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. The measure will mitigate the above impact to a less-than-significant level.

Mitigation Measure 3.7.6: Roads damaged by construction shall be repaired to a structural condition equal to that which existed prior to construction activity as per conditions of the encroachment permit (see Mitigation Measure 3.7.1a).

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

The roads used for construction would be restored to pre-existing condition, therefore the traffic from project construction would not cause significant road wear.

Section 3.8 Air Quality

Impact 3.8.1 Temporary Construction Emission of Criteria Pollutants

Impact 3.8.1: Project construction activities could result in substantial short-term criteria pollutant emissions.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. The measures will mitigate the above impact to a less than significant level.

Mitigation Measure 3.8.1a: Construction Fugitive Dust Control Plan. The appropriate Member Agency shall require its contractor(s) to implement a dust control plan that shall include the following dust control procedures during construction as required by the BAAQMD:

- Water all active construction areas at least twice daily, taking into consideration temperature and wind conditions.
- Cover all trucks hauling soil, sand, and other loose materials *or* require trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways, consistent with **Mitigation Measure 3.1.2**, Erosion Control.
- Replant vegetation in disturbed areas as quickly as possible.

Mitigation Measure 3.8.1b: Construction Exhaust Emissions Control Plan. The appropriate Member Agency shall require its contractor(s) to implement an exhaust emissions control plan that shall include the following controls and practices:

- On road vehicles with a gross vehicular weight rating of 10,000 pounds or greater shall not idle for longer than five minutes at any location as required by Section 2485 of Title 13, Division 3, Chapter 10, Article 1 of the California Code of Regulations. This restriction does not apply when vehicles remain motionless during traffic or when vehicles are queuing.
- Off road equipment engines shall not idle for longer than five minutes per Section 2449(d)(3) of Title 13, Division 3, Chapter 9, Article 4.8 of the California Code of Regulations. All vehicle operators shall receive a written idling policy to inform them of idling restrictions. The policy shall list exceptions to this rule that include the following: idling when queuing; idling to verify that the vehicle is in safe operating condition; idling for testing, servicing, repairing or diagnostic purposes; idling necessary to accomplish work for which the vehicle was designed (such as operating a crane); idling required to bring the machine to operating temperature as specified by the manufacturer; and idling necessary to ensure safe operation of the vehicle.
- Off road engines greater than 50 horsepower shall, at a minimum, meet Tier 2 emissions standards. When available, higher Tier engines shall be utilized. Additionally, contractor(s) shall comply with current CARB and BAAQMD regulations for off-road engines greater than 50 horsepower.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Implementation of fugitive dust control plan and exhaust emissions plan would minimize emissions of criteria air pollutants during construction.

Section 3.9 Noise

Impact 3.9.1 Temporary Construction Noise

Impact 3.9.1: Construction activity would violate standards established in the local general plans or noise ordinances, and/or would adversely affect nearby sensitive receptors.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. The measure will mitigate the above impact to a less than significant level.

Mitigation Measure 3.9.1: The appropriate Member Agency shall develop and implement a Construction Noise Reduction Plan that requires, at a minimum, the following:

- The contractor shall locate all stationary noise-generating equipment, including hammer bore and drill rigs, as far as possible from nearby noise-sensitive receptors. Stationary noise sources located within 500 feet of noise-sensitive receptors shall be equipped with noise reducing engine housings, and the line of sight between such sources and nearby sensitive receptors shall be blocked by portable acoustic barriers.
- The contractor shall assure that construction equipment with internal combustion engines have sound control devices at least as effective as those provided by the original equipment manufacturer. No equipment shall be permitted to have an un-muffled exhaust.
- All construction activities within unincorporated areas shall be limited to between the hours depending upon the jurisdiction.
- Residences and other sensitive receptors within 200 feet of a construction area shall be notified of the construction schedule in writing, at least two weeks prior to the commencement of construction activities. This notice shall indicate the allowable hours of construction activities as specified by the applicable local jurisdiction or as defined by this mitigation measure. The construction contractor shall designate a noise disturbance coordinator who would be responsible for responding to complaints regarding construction noise. The coordinator shall determine the cause of the complaint and ensure that reasonable measures are implemented to correct the problem. A contact number for the noise disturbance coordinator shall be conspicuously placed on construction site fences and entrances and included in the construction schedule notification sent to nearby residences and sensitive receptors.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Construction noise levels would be limited to hours set forth in applicable noise ordinances. Construction would be short-term and temporary, therefore sensitive receptors would only be exposed to increased noise levels for a short duration.

Impact 3.9.2 Temporary Vibration Impacts

Impact 3.9.2: Construction activities could expose sensitive receptors to excessive ground-borne vibration levels.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. The measure will mitigate the above impact to a less than significant level.

Mitigation Measure 3.9.2: The appropriate Member Agency will implement the following measure:

The construction contractor shall use a trenchless technology (e.g., horizontal directional drill, lateral drilling, etc.) other than jack and bore when there are structures within 100 feet of the proposed activities. If the construction contractor provides the Member Agency with acceptable documentation indicating that alternative trenchless technology is not feasible for the crossing, the contractor shall develop and implement a Construction Vibration Mitigation Plan to minimize construction vibration damage using all reasonable and feasible means available, including siting the jack and bore as far a possible from all nearby structures. The plan shall provide a procedure for establishing thresholds and limiting vibration values for potentially affected structures based on an assessment of each structure's ability to withstand the loads and displacements due to construction vibrations. The plan should also include the development of a vibration monitoring plan to be implemented during construction of particular crossing.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Most of the proposed pipelines would be installed along existing roadways and may not require use of jack and bore tunneling. In the event jack and bore tunneling would be required, the impacts from ground borne vibration would be minimized by implementing a construction vibration mitigation plan.

Impact 3.9.3 Permanent Increases to Ambient Noise Levels

Impact 3.9.3: Operational activities could permanently generate noise levels above existing ambient levels in the vicinity of sensitive receptor locations.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. The measure will mitigate the above impact to a less than significant level.

Mitigation Measure 3.9.3: The appropriate Member Agency shall implement the following measure:

- All new pump stations shall be located within enclosed structures with adequate setback and screening to achieve acceptable regulatory noise standards for industrial uses as well as to achieve acceptable levels at the property lines of nearby residences, as determine by the applicable local jurisdiction. Noise enclosures shall be designed to reduce equipment noise levels by at least 20 dBA.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Implementation of the mitigation measure would lessen distribution and booster pump station-related noise levels that could permanently increase ambient noise levels.

Section 3.10 Hazardous Materials

Impact 3.10.1 Exposure to Hazardous Materials

Impact 3.10.1: Project construction could expose workers and the public to hazardous materials that could be present in the soil or shallow groundwater encountered during excavation.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. The measures will mitigate the above impact to a less than significant level.

Mitigation Measure 3.10.1a: Project contract specifications shall require that, in the event that evidence of potential soil contamination such as soil discoloration, noxious odors, debris, or buried storage containers, is encountered during construction, the contractor will have a contingency plan for sampling and analysis of potentially hazardous substances,

including use of a photoionization detector. The required handling, storage, and disposal methods shall depend on the types and concentrations of chemicals identified in the soil. Any site investigations or remediation shall comply with applicable laws and will coordinate with the appropriate regulatory agencies,

Mitigation Measure 3.10.1b: If unknown USTs are discovered during construction, the UST, associated piping, and impacted soil shall be removed by a licensed and experienced UST removal contractor. The UST and contaminated soil shall be removed in compliance with applicable county and state requirements governing UST removal.

Mitigation Measure 3.10.1c: Prepare a project-specific Health and Safety Plan that would apply to excavation activities. The plan shall establish policies and procedures to protect workers and the public from potential hazards posed by hazardous materials. The plan shall be prepared according to federal and California OSHA regulations and submitted to the appropriate agency with jurisdiction prior to beginning site activities.

Mitigation Measure 3.10.1d: Project contract specifications shall include a Dust Abatement Program to minimize potential public health impacts associated with exposure to contaminants in soil dust.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures such as preparation of a health and safety plan and dust abatement program would reduce any exposure to hazardous materials during construction.

Impact 3.10.2 Release of Hazardous Materials

Impact 3.10.2: Project construction could increase the potential for accidental release of hazardous materials.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. The measures will mitigate the above impact to a less than significant level.

Mitigation Measure 3.10.2a: Consistent with the SWPPP requirements, the construction contractor shall be required to implement BMPs for handling hazardous materials onsite. The use of construction BMPs will minimize any adverse effects on groundwater and soils, and will include, but not limited to, the following:

- Follow manufacturers' recommendations and regulatory requirements for use, storage, and disposal of chemical products and hazardous materials used in construction;
- Spill control and countermeasures, including employee spill prevention/response training;
- Avoid overtopping construction equipment fuel gas tanks;
- During routine maintenance of construction equipment, properly contain and remove grease and oils; and
- Properly dispose of discarded containers of fuels and other chemicals.

Mitigation Measure 3.10.2b: The contractor shall follow the provisions of California Code of Regulations, Title 8, Sections 5163 through 5167 for General Industry Safety Orders to protect the action area from being contaminated by the accidental release of any hazardous materials and/or wastes. The local Certified Unified Program Agency (CUPA) will be contacted for any site-specific requirements regarding hazardous materials or hazardous waste containment or handling.

Mitigation Measure 3.10.2c: Oil and other solvents used during maintenance of construction equipment shall be recycled or disposed of in accordance with applicable regulatory requirements. All hazardous materials shall be transported handled, and disposed of in accordance with applicable regulatory requirements.

Mitigation Measure 3.10.2d: In the event of an accidental release of hazardous materials during construction, containment and clean up shall occur in accordance with applicable regulatory requirements.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Implementation of BMPs to control usage and handling of hazardous materials and following regulatory requirements in the event of spills would reduce release of hazardous materials and any impacts associated with the release.

Impact 3.10.4 Wildland Fires Hazard

Impact 3.10.4: Construction activities in grassland areas could have the potential to expose people or equipment to risk of loss, injury, or death involving wildland fires.

Mitigation Applicable to Novato Sanitary District.

Mitigation Not Applicable to SVCSO, Napa SD, and Napa County.

Mitigation Applicable to LGVSD and NMWD.

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. The measures will mitigate the above impact to a less than significant level.

Mitigation Measure 3.10.4a: For applicable Member Agencies, in consultation with local fire agencies, a Fire Safety Plan will be developed for each of the service areas associated with the project. The Fire Safety Plan(s) will describe various potential scenarios and action plans in the event of a fire.

Mitigation Measure 3.10.4b: For applicable Member Agencies, during project construction, all staging areas, welding areas, or areas slated for development using spark-producing equipment will be cleared of dried vegetation or other material that could ignite. Any construction equipment that includes a spark arrestor shall be equipped with a spark arrestor in good working order. All vehicles and crews working at the project site(s) will have access to functional fire extinguishers at all times. In addition, construction crews will be required to have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Development and implementation of a Fire Safety Plan, and implementation of best management practices during construction would reduce fire hazards to a less-than-significant level.

Section 3.11 Public Services and Utilities

Impact 3.11.1 Temporary Effect on Response Times for Emergency Service Providers

Impact 3.11.1: Project construction activities could temporarily affect response times for emergency service providers.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. The measure will mitigate the above impact to a less than significant level.

Mitigation Measure 3.11.1: The Member Agencies will coordinate with local emergency service providers in its service area to inform them of the proposed construction activities and schedule, and provide temporary alternate access routes around construction areas as necessary.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Coordinating with local emergency service providers would reduce any effects on the response times for emergency response during project construction.

Impact 3.11.2 Short-term Police and Fire Assistance

Impact 3.11.2: Project construction activities could require short-term police and fire protection services to assist in traffic management or in the event of an accident.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. The measure will mitigate the above impact to a less than significant level.

Mitigation Measure 3.11.2: Public service providers shall provide, upon request, a copy of the Traffic Control Plan to the related police and fire agencies for their review prior to construction. The appropriate Member Agency shall provide 72-hour notice to the local service providers prior to construction of individual pipeline segments. Discussion on the Traffic Control Plan is provided in Section 3.7, Traffic and Circulation.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

As noted in the traffic control plan, pre-construction notice to the local service providers would reduce any impacts related to police and fire assistance during project construction.

Impact 3.11.3 Temporary Accidental Disruption to Utility Services

Impact 3.11.3: Project construction could result in temporary planned or accidental disruption to utility services.

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. This measure will mitigate the above impact to a less than significant level.

Mitigation Measure 3.11.3: The Member Agencies will identify utilities along the proposed pipeline routes and project sites prior to construction and implement the following measures:

- a. Utility excavation or encroachment permits shall be obtained as required from the appropriate agencies. These permits include measures to minimize utility disruption. The service provider and its contractors shall comply with permit conditions regarding utility disruption.
- b. Utility locations shall be verified through the use of the Underground Service Alert services and/or field survey (potholing).
- c. As necessary, detailed specifications shall be prepared as part of the design plans to include procedures for the excavation, support, and fill of areas around utility cables and pipes. All affected utility services shall be notified of construction plans and schedule. Arrangements shall be made with these entities regarding protection, relocation, or temporary disconnection of services.
- d. In areas where the pipeline would traverse parallel to underground utility lines within five feet, the project applicant shall employ special construction techniques, such as trench wall-support measures to guard against trench wall failure and possible resulting loss of structural support for the excavated areas.
- e. Residents and businesses in the project corridor shall be notified of any planned utility service disruption two to four days in advance, in conformance with county and state standards.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Identifying utilities along the proposed pipeline routes and project sites prior to construction and executing measures to notify and coordinate with the affected utility services would minimize accidental disruption of utility services.

Section 3.12 Cultural Resources

Impact 3.12.1 Impact to Cultural Resources/Archaeological Sites

Impact 3.12.1: Project construction could affect existing cultural resources or uncover unknown and/or buried archaeological materials in areas of high prehistoric archaeological sensitivity.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. The measures will mitigate the above impact to a less than significant level.

Mitigation Measure 3.12.1: The standard Section 106 process outlined at 36 CFR Part 800 will be completed prior to supplying Federal funds to be used for construction of any facilities for the project. This includes all construction money that involves whole or in partial financing and includes both payment in advance or in reimbursement.

If project circumstances are such that it is infeasible to implement the measures identified below, a phased identification and evaluation strategy that accounts for the individual project effects will be developed in accordance with the procedures for doing so detailed in 36 CFR Part 800.4(b)(2). The alternative procedures would provide a similar level of accounting regarding the effects to cultural resources in a manner not inconsistent with the standard process provided for at 36 CFR Part 800. The alternative procedures agreed to in the Programmatic Agreement would need to be completed prior to construction of any actions that are subsidized with Federal funds. Pursuant to the Section 106 process, the appropriate Member Agency will incorporate the following measures:

Mitigation Measure 3.12.1a: Prepare a Cultural Resources Monitoring Plan. Prior to authorization to proceed, or issuance of permits, the applicant shall prepare and submit a cultural resources monitoring plan to the appropriate jurisdiction for review and approval. Monitoring shall be required for all surface alteration and subsurface excavation work including trenching, boring, grading, use of staging areas and access roads, and driving vehicles and equipment within all areas delineated as sensitive for cultural resources. A qualified professional archaeologist (cultural resources monitor) that is approved by each Member Agency in consultation with all affected jurisdictions shall prepare the plan. The plan shall address (but not be limited to) the following issues:

- Training program for all construction and field workers involved in site disturbance;
- Person(s) responsible for conducting monitoring activities, including Native American monitors;
- How the monitoring shall be conducted and the required format and content of monitoring reports, including any necessary archaeological re-survey of the final pipeline alignment (including the need to conduct shovel-test units or auger samples to identify deposits in advance of construction), assessment, designation and mapping of the sensitive cultural resource areas on final project maps, assessment and survey of any previously unsurveyed areas;
- Person(s) responsible for overseeing and directing the monitors;

- Schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports;
- Procedures and construction methods to avoid sensitive cultural resource areas (i.e. boring conduit underneath recorded or discovered cultural resource site);
- Clear delineation and fencing of sensitive cultural resource areas requiring monitoring;
- Physical monitoring boundaries (e.g., 200-foot radius of a known site);
- Protocol for notifications in case of encountering of cultural resources, as well as methods of dealing with the encountered resources (e.g., collection, identification, curation);
- Methods to ensure security of cultural resources sites;
- Protocol for notifying local authorities (i.e. Sheriff, Police) should site looting and other illegal activities occur during construction.

Mitigation Measure 3.12.1b: Archaeological and Native American Monitoring. If an intact archaeological deposit is encountered, all soil disturbing activities in the vicinity of the deposit shall cease until the deposit is evaluated. The appropriate Member Agency, as necessary, shall retain the services of a Native American monitor and a qualified archaeological consultant that has expertise in California prehistory to monitor ground-disturbing within areas designated as being sensitive for buried cultural resources. The archaeological monitor shall immediately notify the appropriate Member Agency of the encountered archaeological deposit. The monitors shall, after making a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit, present the findings of this assessment to NBWRA and the appropriate Member Agency. During the course of the monitoring, the archaeologist may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources.

If a Member Agency, in consultation with the monitors, determines that a significant archaeological resource is present within their jurisdiction and that the resource could be adversely affected by the NBWRP, the Member Agency shall:

- Re-design the NBWRP to avoid any adverse effect on the significant archaeological resource; *or*,
- Implement an archaeological data recovery program (ADRP) (unless the archaeologist determines that the archaeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible). If the circumstances warrant an archaeological data recovery program, an ADRP shall be conducted. The project archaeologist and the Member Agency shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the appropriate Member Agency for review and approval. The ADRP shall identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ADRP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery,

in general, shall be limited to the portions of the historic property that could be adversely affected by the NBWRP. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.

Mitigation Measure 3.12.1c: Cultural Resources Assessment for Staging Areas. When locations for staging are defined the areas of potential effect should be subject to a cultural resources investigation that includes, at a minimum:

- An updated records search at the Northwest Information Center;
- An intensive survey of all areas within the lots;
- A report disseminating the results of this research; and,
- Recommendations for additional cultural resources work necessary to mitigate any adverse impacts to recorded and/or undiscovered cultural resources.

Mitigation Measure 3.12.1d: Inadvertent Discoveries. If discovery is made of items of historical or archaeological interest, the contractor shall immediately cease all work activities in the area (within approximately 100 feet) of discovery. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. After cessation of excavation the contractor shall immediately contact the NBWRA and appropriate Member Agency. The contractor shall not resume work until authorization is received from the appropriate Member Agency.

- In the event of unanticipated discovery of archaeological indicators during construction, the Member Agency shall retain the services of a qualified professional archaeologist to evaluate the significance of the items prior to resuming any activities that could impact the site.
- In the case of an unanticipated archaeological discovery, if it is determined that the find is unique under the National Historic Preservation Act (NHPA) and/or potentially eligible for listing in the National Register, and the site cannot be avoided, appropriate Member Agency shall provide a research design and excavation plan, prepared by an archaeologist, outlining recovery of the resource, analysis, and reporting of the find. The research design and excavation plan shall be submitted to NBWRA and appropriate Member Agency and approved by the appropriate Member Agency prior to construction being resumed.

Mitigation Measure 3.12.1e: Project-level Cultural Resources Assessment. When project-level plans are completed for the Basic System; the Partially Connected System; and the Fully Connected System, NBWRA the appropriate Member Agency will conduct a cultural resources investigation for the APE that includes, at a minimum:

- An updated records search at the Northwest Information Center (NWIC);

- An intensive cultural resources survey of the Area of Potential Effect (APE);
- A report disseminating the results of this research; and,
- Recommendations for additional cultural resources work necessary to mitigate any adverse impacts to recorded and/or undiscovered cultural resources.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Measures such Section 106 consultation and monitoring of cultural resources, archaeological and Native American sites, and cultural resource assessment would minimize impacts to the sites.

Impact 3.12.2 Discovery of Human Remains

Impact 3.12.2: Project construction could result in damage to previously unidentified human remains.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. The measures will mitigate the above impact to a less than significant level.

Mitigation Measure 3.12.2: Discovery of Human Remains. If potential human remains are encountered, the appropriate Member Agency shall halt work in the vicinity of the find and contact the county coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner shall contact the Native American Heritage Commission (NAHC). As provided in Public Resources Code Section 5097.98, the NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

In the inadvertent discovery of human remains, work would halted and the mitigation would include notifying the NAHC and the most likely descendants would recommend the means of treating and disposing the remains.

Section 3.13 Recreation

Impact 3.13.1 Temporary Disturbance

Impact 3.13.1: Project construction could result in short-term disturbance adjacent to recreational facilities.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. These measures will mitigate the above impact to a less than significant level.

Mitigation Measure 3.13.1a: The appropriate Member Agency shall coordinate with the appropriate local and regional agencies to identify detour routes for the bikeways and trails during construction where feasible, as part of the Traffic Control/Traffic Management Plan (see Measure 3.11.1a).

Mitigation Measure 3.13.1b: Implement Mitigation Measures 3.8-1a through 3.8.1b, Mitigation Measures 3.9.1 through 3.9-3.

Mitigation Measure 3.13.2: Before beginning construction, the contractor will develop, in consultation with the appropriate representative(s) of the affected park's managing agency, a plan indicating how public access to the park will be maintained during construction. If needed, flaggers will be stationed near the construction activity area to direct and assist members of the public around the activity areas while maintaining access to the parks.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Coordination with the local agencies and consulting local park management agency prior to construction would minimize any disturbance to recreational facilities.

Section 3.14 Aesthetics

Impact 3.14.1 Temporary Impact to Scenic Vista

Impact 3.14.1: NBWRP construction activities could temporarily affect scenic vistas or corridors in the NBWRP area.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. The measures will mitigate the above impact to a less than significant level.

Mitigation Measure 3.14.1a: Following construction activities, disturbed areas shall be restored to baseline conditions, including repaving roadways, replanting trees, and/or reseeding with a native seed mix typical of the immediately surrounding area.

Mitigation Measure 3.14.1b: Berms around constructed reservoirs shall be vegetated with native seed mixes to soften the visual effect of the reservoirs from adjacent roadways.

Mitigation Measure 3.14.1c: Design elements shall be incorporated to enhance visual integration of the booster pump station and distribution pump station with their surroundings. Proposed facilities shall be painted low-glare earth-tone colors that blend with the surrounding terrain. Highly reflective building materials and/or finishes shall not be used in the designs for proposed facilities.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Temporary effects to scenic vistas would be minimized by restoring the areas to pre-existing conditions and incorporating design elements to integrate the project components with the surroundings.

Impact 3.14.2 Impact to Views Along Scenic Roadways

Impact 3.14.2: Implementation of NBWRP could affect views along eligible or designated Caltrans Scenic Highways, or locally-defined scenic routes.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. The measures will mitigate the above impact to a less than significant level.

The appropriate Member Agency will implement the following measures:

Mitigation Measure 3.14.1a (identified above)

Mitigation Measure 3.14.1b (identified above)

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Implementation of measures to minimize effects on scenic vista would also lessen the impacts to views along scenic roadways.

Impact 3.14.3 Source of Light or Glare

Impact 3.14.3: NBWRP components could introduce new sources of light and glare on the project sites.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. The measures will mitigate the above impact to a less than significant level.

Mitigation Measure 3.14.3a: The exterior lighting installed around the operational and capacity storage reservoirs, distribution pump station, storage tanks, and booster pump station shall be of a minimum standard required to ensure safe visibility. Lighting also shall be shielded and directed downward to minimize impacts of light and glare.

Mitigation Measure 3.14.3b: All exterior lighting is directed downward and oriented to insure that limited light source is directly visible from neighboring residential areas. If necessary, landscaping would be provided around proposed facilities. The vegetation would be selected, placed, and maintained to minimize off-site light and glare onto surrounding areas.

Mitigation Measure 3.14.1c: Design elements shall be incorporated to enhance visual integration of the booster pump station and distribution pump station with their surroundings. Proposed facilities shall be painted low-glare earth-tone colors that blend with the surrounding terrain. Highly reflective building materials and/or finishes shall not be used in the designs for proposed facilities.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Exterior lighting for the proposed components would be designed and installed to reduce the glare.

Impact 3.14.4 Long-term Impact to Aesthetic Character

Impact 3.14.4: Development of the proposed facilities, particularly pump stations and storage reservoirs, would permanently alter the aesthetic character of the action area.

Mitigation

The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP. The measures will mitigate the above impact to a less than significant level.

Mitigation Measure 3.14.4a: After construction of any facility that is above grade and visible to sensitive receptors, visual screening and vegetation measures will be implemented to reduce impacts to scenic views. Trees or other suitable vegetation along the fenceline of the facility should be incorporated to reduce the industrial appearance of the structures. Similarly, berms for new storage ponds or pond reconfiguration will be re-vegetated to reduce the barren appearance of the berms.

Mitigation Measure 3.14.4b: Dark colored, non-reflective building materials should be used for project components that cause potentially significant impact from glare to visual resources.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Designing the project elements to provide visual screening or using non-reflecting building materials would not have a significant effect to the existing aesthetic character.

Chapter 4 Cumulative Impacts

Impact 4.1 Wastewater Treatment Capacity

Impacts 4.1: Construction-related Cumulative Impacts. Concurrent construction of several projects within the Sonoma, Napa, and Marin County areas could result in cumulative short-term impacts associated with construction activities. If implemented at the same time as other construction projects, construction of facilities under all three of the alternatives could contribute to potential short-term cumulative effects associated with erosion, cultural resource disturbance, disturbance of adjacent land uses, traffic disruption, dust generation, construction noise, aesthetics, air quality, biological resources, hazardous materials, water quality, public services and utilities. However, construction-related impacts would not result in long term alteration of the environment, and could be mitigated to less than significant levels through the use of mitigation measures identified throughout Chapter 3 (of the Draft EIR/EIS).

Mitigation

The following mitigation measure is hereby adopted and will be implemented as set forth in the MMRP. The measure will mitigate the above impact to a less than significant level.

Mitigation Measure 4.1: Member Agencies shall coordinate construction activities along selected alignments to identify overlapping pipeline routes, project areas, and construction schedules. To the extent feasible, construction activities shall be coordinated to consolidate the occurrence of short-term construction-related impacts.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Due to their short-term nature and the inclusion of appropriate mitigation measures as established in Chapter 3 of the Draft EIR/EIS, NBWRP's contribution to cumulative impacts on wastewater treatment capacity is not considerable.

Impact 4.5 Cumulative Long-term Impacts on Biological Resources

Impact 4.5: Concurrent construction of the NBWRP with other projects proposed in the Sonoma, Napa, and Marin County area, and other water and wastewater infrastructure projects, could result in cumulative long-term impacts to biological resources.

Mitigation

Implement Measures 3.5.1 through 3.5.14. The following mitigation measures are hereby adopted and will be implemented as set forth in the MMRP.

Findings

Based on the EIR/EIS and the entire record before Novato Sanitary District, the Board finds, in accordance with CEQA Section 15901(a)(1), that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

Rationale

Mitigation measures for protection of the biological resources would minimize project impacts and its contribution to cumulative impacts to less than cumulatively considerable.

CHAPTER 4

Findings Concerning Project Alternatives

4.1 Introduction

CEQA requires that an EIR “describe a range of reasonable alternatives to the project or to the location of the project, which could feasibly attain the basic objectives of the project...” CEQA Guidelines §15126 (d). If a project alternative will substantially lessen the significant environmental effects of a proposed project, the decision maker should not approve the proposed project unless it determines that specific economic, legal, social, technological, or other considerations,... make the project alternative infeasible.” Public Resources Code §21002, CEQA Guidelines §15091(a)(3). The EIR evaluated alternative approaches to accomplishing the objectives of the project. The Findings with respect to the alternatives identified in the Draft EIR/EIS are identified in this section.

4.2 Proposed Objectives

The project is proposed to promote the expanded beneficial use of recycled water in the North Bay region to achieve the following objectives:

- Offset urban and agricultural demands on potable water supplies;
- Enhance local and regional ecosystems;
- Improve local and regional water supply reliability;
- Maintain and protect public health and safety;
- Promote sustainable practices;
- Give top priority to local needs for recycled water, and;
- Implement recycled water facilities in an economically viable manner.

4.3 Reasonable Range of Alternatives and Findings

Three alternatives were analyzed in the Draft EIR/EIS at a project or program level of detail in addition to the “No Project Alternative” and the “No Action Alternative”. Each of the action alternatives (discussed below) were developed to meet the purpose, objectives, and need identified by the North Bay Water Reuse Authority (NBWRA).

- **No Project Alternative**, assumes that the proposed project is not implemented, and reviews two scenarios: 1) consideration of existing conditions without the project, a “no build scenario”; and 2) consideration of “reasonably foreseeable” future conditions without the project. This second scenario is identical to the No Action Alternative, identified below.
- **No Action Alternative**, provides a “future without the project” scenario as a baseline to compare the impacts of the proposed Action Alternatives.
- **Alternative 1, Basic System**, includes use of recycled water near each of the individual wastewater treatment plants (WWTPs);
- **Alternative 2, Partially Connected System**, adds additional pipelines, pump stations and storage to partially connect the existing WWTPs; and
- **Alternative 3, Fully Connected System**, provides a fully integrated recycled water distribution system connecting all four Member Agency WWTPs.

In addition to the alternatives of the project above, Chapter 6, Alternatives, of the Draft EIR/EIS examined the following alternatives to the project:

- **Importation of Water**
 - Importation of Recycled Water
 - Importation of Potable Water
- **Desalination**

4.3.1 No Project Alternative

Discussion of the No-Project Alternative must examine the existing conditions and reasonably foreseeable future conditions that would exist if the project were not approved (CEQA §15126.6(e)). Under the No Project Alternative, the NBWRA would not implement construction of facilities identified under the Proposed Action to provide a reliable recycled water distribution system to serve the water users in the LGVSD, Novato SD, SVCSD, and Napa SD service areas.

Relationship to Project Objectives

Implementation of the No Project Alternative would not provide the benefits of water reclamation which include recycled water use, potable supply savings, reduced reliance on surface and groundwater, reduced groundwater pumping, and habitat enhancement. Additionally, the No Project Alternative would not improve current water reliability, either locally or regionally, particularly during peak demand periods. The No Project Alternative would not comply with State goals for water recycling, and would not reduce or assist in management of discharges to San Pablo Bay.

Environmental Impacts

Implementation of the No Project Alternative would avoid the construction related impacts and operational impacts identified for the proposed project. As identified in Section 3.0, impacts

associated with the proposed project would be reduced to a less than significant level through the incorporation of mitigation measures identified in the Draft EIR/EIS. The No Action Alternative would not result in the level of potable offset for imported surface water, local surface water and groundwater supplies that would be provided under the Action Alternatives. Similarly, it would not substantially alter the amount of treated effluent discharged to tributaries to North San Pablo Bay. Over time, demand pressures on imported surface water, local surface water, and groundwater supplies would be increased, and current water supply and delivery reliability issues would be exacerbated as growth under the approved General Plans within the NBWRP service area occurs. The No Action Alternative would not take advantage of a local, sustainable, and energy efficient water supply.

Findings

The No Project Alternative fails to achieve any of the project objectives, which are directed at improving water supply reliability, recharging groundwater, offsetting surface water demand, minimizing environmental impacts, achieving financial sustainability, and protecting human health. Because it would not meet any of the project objectives, or substantially reduce or avoid identified significant impacts, the No Project Alternative is not considered environmentally superior.

4.3.2 No Action Alternative

In addition to the No Project Alternative, the EIR examines a No Action Alternative, as required under NEPA. The No Action Alternative represents a “future-without-project” scenario: a continuation of existing conditions for an estimation of the most reasonable future conditions that could occur without implementation of any action alternatives. The No Action Alternative assumes that there is no joint project among the Member Agencies. It represents the “current status” in which additional wastewater treatment capacity and water recycling occurs strictly from the implementation of local plans for expansion, and the potential need to develop additional potable water supplies continues to be a regional challenge. In general, each Member Agency would continue to implement individual water recycling projects, subject to the availability of funding and completion of the CEQA process. The No Action Alternative would likely result in a smaller increment of water recycling projects within the region. For example it is anticipated that SVCSD would implement only one of the four pipeline systems identified in the Sonoma Valley Recycled Water Project (SVRWP) EIR, based upon the ability to fund such construction. Additionally, the lack of federal funding may delay or preclude the implementation of individual planned projects, due to the need to increase user rates in order to provide funds for implementation.

Relationship to Project Objectives

Implementation of the No Action Alternative would partially meet some the project objectives, as it assumes that a smaller subset of recycled water projects, providing approximately 1,067 acre-feet per year (AFY) of recycled water, would be implemented. The No Action Alternative would not satisfy any of the project objectives to the degree of the proposed project, and it would not

meet the objective of providing regional water supply reliability, as no connections between the WWTPs would occur.

This alternative would not involve the capital costs associated with the Basic, Partially Connected, and Fully Connected Systems; however it would not be the most economically superior alternative. Financial constraints would limit implementation to local projects and these projects would be ineligible for federal or state funding.

Environmental Impacts

The No Action Alternative would also have a subset of the impacts identified in Section 3.0, primarily associated with the construction of the facilities that individual member agencies would be able to implement without the benefit of regional coordination or federal funding. Under the No Action Alternative, projects in the Novato SD and SVCSD service areas would likely occur, and would provide approximately 1,067 AFY of recycled water. Adverse environmental impacts associated with the construction of pipelines and pump stations would occur under the No Action Alternative, however to a lesser degree than the Basic, Partially Connected, and Fully Connected Systems. The impacts would likely be shorter in duration and would affect fewer sensitive receptors than those expected under implementation of the Proposed Action. In general, construction-related emissions and impacts to air quality, and increased ambient noise would result under the other action alternatives except for the No Project Alternatives. Similarly, the No Action Alternative would potentially affect cultural, surface water, or biological resources in the SVCSD, Novato SD, and Napa SD service areas. The four service areas would experience some level of beneficial socioeconomic impact under the three action alternatives, while there would be no impact under the No Action Alternative.

Although the level of environmental impacts related to construction impacts would be of a smaller scale compared to the proposed project, the No Action Alternative would not result in the level of potable offset for imported surface water, local surface water and groundwater supplies that would be provided under the Action Alternatives. Similarly, it would not substantially alter the amount of treated effluent discharged to tributaries to North San Pablo Bay. Over time, demand pressures on imported surface water, local surface water, and groundwater supplies would be increased, and current water supply and delivery reliability issues would be exacerbated as growth under the approved General Plans within the NBWRP service area occurs. The No Action Alternative would not take advantage of a local, sustainable, and energy efficient water supply.

Findings

Because it would not substantially offset potable demand or reduce groundwater pumping, and would not significantly reduce or assist in management of effluent discharge to San Pablo Bay, the No Action Alternative is not considered environmentally superior.

4.3.3 Alternative 1: Basic System

The Basic System would expand recycled water programs currently in operation within the Member Agency service areas. It is the most localized of the three alternatives and emphasizes the implementation of local recycled water projects. Each agency would put first priority on the delivery of recycled water to its local projects. Local projects include the NMWD Urban Reuse Project, the SVRWP, the Napa Salt Marsh Pipeline, and projects in the Napa Milliken-Sarco-Tulucay (MST) Creeks area and the Carneros East areas. All WWTP treatment and distribution systems are sized and designed to serve their respective local users. Interconnectivity between WWTPs would only occur between SVCSD and Napa SD to serve the Napa Salt Marsh Restoration Area. The Basic System would include implementation of a system consisting of 83 miles of pipeline, construction of facilities onsite at existing WWTPs to provide an additional 7.8 million gallons per day (mgd) of tertiary treatment capacity, and development of 1,020 acre-feet of storage, primarily at existing or planned storage ponds at the WWTPs. In total, the Basic System would provide 6,655 acre-feet of new recycled water for irrigation use, and an additional 5,825 for habitat enhancement.

Relationship to the Project Objectives

The Basic System would be consistent with the Proposed Action's stated objectives, as it would provide recycled water for urban and agricultural potable offset, thereby increasing water supply reliability, would provide a sustainable supply for habitat enhancement at the Napa Salt Pond, would have secondary benefits to surface and groundwater supplies, and would focus on provision of recycled water to local service areas. From an economic standpoint, projected capital costs associated with the Basic System are estimated at \$209 million¹, with annual operations and maintenance costs estimated a \$1.8 million. This represents the lowest capital cost of the three action alternatives.

Environmental Impacts

Based on the comparison of environmental effects in the Draft EIR/EIS, the Basic System is the environmentally superior alternative in almost all resource areas. As noted in Section 6.3, there would be no significant and unavoidable impacts associated with the Basic System. Chapter 3 recommends measures to mitigate any significant impacts to a less-than-significant level. Effects on natural resources would be in proportion to the size and number of facilities proposed. Most of the adverse environmental impacts would be associated with construction activities; the Basic System requires construction of the least amount of infrastructure, therefore would result in less construction-related impacts. Of all of the action alternatives, the Basic System requires the least amount of storage, making use of existing storage or land available at the WWTPs. Implementing the larger recycled water distribution systems would require additional storage. However, the facilities proposed under the Basic System would have the lowest capacity to treat and distribute

¹ Costs are shown in 2008 dollars. All costs were escalated to April 2008 dollars using the Building Cost Index. (CDM, 2008)

recycled water, and would therefore reduce the least amount of discharge to the tributaries of North San Pablo Bay.

Findings

The Basic System would achieve the project objectives with least environmental impacts and costs, although would not provide the benefits from increased connectivity that would occur under the Partially and Fully Connected Systems. The Basic System would have the capacity to provide recycled water to offset potable demand and improve water supply reliability, although to a lesser degree than the Partially Connected and Fully Connected Alternatives. The Basic System appears to best meet the stated objectives of the project, for the following reasons:

- 1) The Basic System provides offset for urban and agricultural demands on potable supplies, although not to the degree provided by the Partially Connected and Fully Connected Systems.
- 2) The Basic System includes the greatest provision of recycled water to Napa Salt Ponds, as well as secondary benefit to local surface and groundwater supplies;
- 3) The Basic System would improve local and regional water supply reliability, although not to the degree provided by the Partially Connected and Fully Connected Alternatives.
- 4) The Basic System would maintain and protect public health and safety, as would all of the alternatives. The No Project Alternative was actually rated highest, as it would not construct or operate any proposed facilities.
- 5) The Basic System would promote sustainable practices by providing recycled water, although not to the degree provided by the Partially Connected and Fully Connected Alternatives.
- 6) The Basic System is the most local of the alternatives, as no connections between WWTPs would be provided, with the exception of provision of recycled water to the Napa Salt Ponds. Therefore, the ability to “export” water from one service area to another is limited.
- 7) The Basic System is the least expensive of the alternatives considered, with the exception of the No Action and No Project Alternatives.

4.3.4 Alternative 2: Partially Connected System

The Partially Connected System represents the median alternative. Each agency would put first priority on the delivery of recycled water to its local projects. Additional local projects include the Peacock Gap Golf Course area, further development of the NMWD Urban Reuse Project, the SVRWP, and projects in Napa MST, and the Carneros East areas. Interconnectivity between WWTPs would be expanded between Novato SD and LGVSD to serve the Sear’s Point Area, in addition to the connection between SVCSD and Napa SD WWTPs. The Partially Connected System would provide 11,250 AFY of new recycled water for irrigation use and an additional 2,933 AFY for habitat enhancement. Under this alternative, SVCSD would implement a system consisting of installation of 139 miles of new pipelines, construction of facilities onsite at the

existing WWTPs to provide 15.9 mgd of tertiary treatment capacity, and development of approximately 2,220 acre-feet of storage, primarily at existing or planned storage ponds at the WWTPs.

Relationship to the Project Objectives

The Partially Connected System would be consistent with the Proposed Action's stated objectives. It would expand regional interconnectivity, provide a greater amount of recycled water to offset potable demand, and provide greater amount of water for habitat restoration. From an economic perspective, the Partially Connected Alternative is moderately economically viable, as it represents the mid-range cost of the three action alternatives. Projected capital costs associated with the Partially Connected System are estimated at \$377.5 million, with annual operations and maintenance costs estimated at \$2.8 million.

Environmental Impacts

Based on the comparison of environmental effects, the Partially Connected System is not the environmentally superior alternative in any resource area. In most cases, the impacts for the Partially Connected System would be greater than the impacts under the Basic System. Although most significant impacts would be mitigated to a less-than-significant level, the Partially Connected System would require more infrastructure than the Basic System, and therefore result in more construction-related impacts.

Findings

As noted in the Draft EIR/EIS, the Partially Connected Alternative has the capability to meet the majority of the project objectives, and may meet some of those objectives, such as provision of recycled water or reduction of discharge to San Pablo Bay, more fully than the proposed project. However, it would also result in substantial environmental impacts above and beyond those of the proposed project, would increase the overall cost of the project, and would not substantially reduce significant unavoidable impacts that cannot otherwise be mitigated. Therefore, it is not considered feasible or a desirable alternative to the proposed project.

4.3.5 Alternative 3: Fully Connected System

The Fully Connected System would maximize the local and regional reuse of recycled water, and incrementally, would have the greatest facility requirements of the three alternatives considered. It would include all of the components described under the Partially Connected System in addition to pipelines to extend service and connect all four WWTPs. The Fully Connected System requires a total of 153 miles of conveyance pipeline, construction of facilities onsite at the existing WWTPs to provide an additional 20.8 mgd of tertiary treatment capacity, and development of approximately 2,220 acre-feet of storage, primarily at existing or planned storage ponds at the WWTPs. The Fully Connected System would provide 12,761 AFY of new recycled water for irrigation use, and an additional 3,085 AFY for habitat enhancement.

Relationship to Project Objectives

The Fully Connected System would be consistent with the project objectives. By providing maximum recycled water, the Fully Connected Alternative would be capable of significantly offsetting potable demand and increasing water supply reliability, expanding regional interconnectivity, and supporting habitat restoration. From an economic perspective, the Fully Connected System would be beneficial to the regional economy, as discussed above. However, projected capital costs associated with the Fully Connected System are estimated at \$414 million, with annual operations and maintenance costs estimated at \$3.1 million. This represents the highest cost alternative, which is not the most economically viable alternative.

Environmental Impacts

Based on the comparison of environmental effects in Section 6.3, the Fully Connected System is the environmentally superior alternative in several impact areas. The Fully Connected System would reduce the maximum amount of discharge to the Bay, offset the maximum amount of groundwater pumping, and provide the maximum amount of recycled water use. Although, most of these benefits are related to water supply and water quality, the Fully Connected System could result in adverse impacts to existing drainage patterns and stormwater flow, as well as temporary construction-related impacts to water quality.

Findings

As noted in the Draft EIR/EIS, the Fully Connected Alternative has the capability to meet the majority of the project objectives, and may meet some of those objectives, such as provision of recycled water or reduction of discharge to San Pablo Bay, more fully than the proposed project. However, it would also result in substantial environmental impacts above and beyond those of the proposed project, would increase the overall cost of the project, and would not substantially reduce significant unavoidable impacts that cannot otherwise be mitigated. Therefore, it is not considered feasible or a desirable alternative to the proposed project.

4.3.6 Importation of Water

Under this alternative, potable or treated recycled water would be imported to Sonoma, Napa, or Marin counties from another community not participating in the NBWRA, such as Windsor, Yountville, Petaluma, Rohnert Park, Vallejo or Santa Rosa. For recycled water importation, a pipeline would be constructed from a sanitation district of another community to the users in Sonoma, Napa, or Marin, with booster pump stations to maintain sufficient water pressure.

Even if water were imported from the nearest community, this alternative would require construction of a large conveyance pipeline network to serve the LGVSD, Novato SD, SVCSD, and Napa SD service areas. This alternative would require installation of a minimum of 50 miles of pipeline through a combination of roadways and undeveloped areas (ESA, 2006). This alternative was analyzed for the three criteria that were used to assess the alternatives of the project above.

For potable water importation into the region, expansion of the Department of Water Resources (DWR) North Bay Aqueduct (NBA), the capacity of which is fully allocated, would be necessary. This would also entail identification and acquisition of additional State Water Project (SWP) entitlements to serve additional supplies to the MST area, or other NBWRA service areas. For cost comparison, the Phase 3 Feasibility Study (CDM, 2008) included expansion of the NBA to provide 1,937 AFY of imported water to Napa MST area. Facility expansion would require a series of new pipeline alignments and booster pump station from Barker Slough. The cost of this type of system is estimated at \$40 million, plus an additional \$8 million in legal fee and bonding fees. Additional local cost beyond NBA expansion costs would include a new potable distribution system to the MST Area, and long-term water supply costs. Importation of SWP supplies to the MST area are estimated at approximately \$96 million (CDM, 2008).

Relationship to Project Objectives

Importation of recycled water into the NBWRP service area would have the potential to meet some of the objectives, in that it would provide a recycled water supply to offset the use of potable supplies for irrigation. However, it is not anticipated that this alternative would provide a more sustainable or cost effective water supply, given the pipeline distances involved.

Fundamentally, this alternative would not offset potable supplies currently used for irrigation. Rather, they would continue to use imported potable supplies to meet irrigation demands. These alternatives would not reduce the amount of treated effluent discharge to tributaries of North San Pablo Bay, and would not provide a reliable habitat enhancement water supply for the Napa Salt Ponds. Additional importation of potable supplies would not improve the reliability to local water supplies, as SWP supplies are subject to drought year reliability.

Environmental Impacts

Importation of recycled water from an outside community would incur similar impacts as the alternatives of the project discussed above. Impacts associated with pipeline construction would include short-term impacts to aesthetics, air quality, biological resources, hazards and hazardous materials, water quality, land use, noise, public services and utilities, and traffic. Pipeline construction could also result in temporary and permanent disturbance to jurisdictional wetlands and other waters, riparian habitat, special-status plant and animal species, and known or unknown cultural resources.

This alternative would cause lesser impacts to surface hydrology and reduce groundwater pumping; however, these effects would occur outside the action area and would not address groundwater pumping issues within the action area in Sonoma, Napa, or Marin Counties. Importation of recycled water from an outside community would incur similar impacts as the alternatives of the project discussed above. Impacts associated with pipeline construction would include short-term impacts to aesthetics, air quality, biological resources, hazards and hazardous materials, water quality, land use, noise, public services and utilities, and traffic. Pipeline construction could also result in temporary and permanent disturbance to jurisdictional wetlands

and other waters, riparian habitat, special-status plant and animal species, and known or unknown cultural resources.

Under this alternative, the Member Agencies would face the institutional constraints of developing an agreement to obtain either recycled water or potable water supplies, prepare the cost estimates associated with purchase of the water, the costs of constructing new distribution infrastructure. Importing water from outside communities to individual service areas could require pipelines in excess of what would be required to develop connections between the four Member Agencies. Facility expansion would require a series of new pipeline alignments and booster pump station from Barker Slough. The cost of this type of system is estimated at \$40 million, plus an additional \$8 million in legal fee and bonding fees. Additional local cost beyond NBA expansion costs would include a new potable distribution system to the MST Area, and long-term water supply costs. Importation of SWP supplies to the MST area are estimated at approximately \$96 million (CDM, 2008). Expansion of the NBA for this cost would only meet the needs of one of the NBWRP service areas.

Findings

This alternative would not substantially meet the project objectives, would also result in substantial environmental impacts above and beyond those of the proposed project, would increase the overall cost of the project, and would not substantially reduce significant unavoidable impacts that cannot otherwise be mitigated. Therefore, it is not considered feasible or a desirable alternative to the proposed project.

4.3.7 Desalination

Desalination of saline water from San Pablo Bay would provide a reliable supply of water for irrigation. Currently, reverse osmosis (RO) treatment is the most cost-effective and feasible treatment option for desalination. The desalination plant could be sized and operated to provide a continuous source of supply. Due to the higher salinity of the source water and depending upon the efficacy of the RO process, the high salinity (~35,000 milligrams per liter of total dissolved solids), a flow of 5,500 AF of source water would produce approximately 2,750 AF of desalinated water.² As such, higher feed pressure and need to increase the treatment capacity would result in a high electric power requirement.

Desalination has been previously proposed for both Marin and Sonoma counties. The Marin Municipal Water District has developed a desalination project that would serve the City of San Rafael and Marin County. Construction of a 5-mgd desalination plant is proposed, and capacity could be expanded in 5 mgd increments, up to a maximum capacity of 15 mgd. The source water from San Rafael Bay would undergo several treatment processes at the facility including solid removal, reverse osmosis, and disinfection and addition of materials for taste. The potable product water generated at the facility would be 50 percent of the source water flowing into the facility. The

² Assuming 50 percent efficacy, the RO process would generate 50 percent desalinated water of the source water.

brine produced in the reverse osmosis process would be blended with treated wastewater prior to discharge into the Bay. The solids would be disposed in the Redwood Landfill.

In Sonoma County, the desalination alternative would provide desalination of seawater to provide water supply for irrigation. The desalinated water would require blending with either recycled water or groundwater at the SVCSWD WWTP prior to irrigation use. One option would be to size the plant to supply 2,750 AFY to the Sonoma Valley during irrigation months. Another option is a regional desalination plant that would provide irrigation as well as augmenting drinking water supplies for both the City of Sonoma and unincorporated areas of Sonoma County. The project would consist of an RO plant, an onshore pumping station and chemical treatment unit, a seawater intake structure, an onshore/offshore seawater supply pipeline between the onshore pump station and offshore seawater intake, pipelines to transport seawater and chemicals between the desalination plant and onshore pump station/chemical treatment area, and a pipeline to transport concentrated seawater brine from the desalination plant site to an ocean outfall. A desalination project could also require construction of a power substation (ESA, 2006).

Ability to Meet Project Objectives

This alternative would have the potential to meet some of the project's stated project objectives. However, desalination would not meet project objectives to provide a reliable regional and local supply for habitat enhancement, would increase discharges to San Pablo Bay related to brine disposal, and is not considered as sustainable a supply as recycled water due to power consumption associated with desalination processes.

Environmental Impacts

The desalination alternative (MMWD proposed plant) is more cost-effective than the three action alternatives, but does not satisfy stated project objectives. The environmental impacts associated with the desalination alternative would occur during construction of the project facilities similar to other alternatives. Construction activities would include construction of the RO plant, pipeline, and rebuilding the pier. Environmental impacts to aesthetics, ambient noise, and water quality are typically associated with desalination facilities.

Long-term effects would include water quality impacts from the discharge of the brine generated by the desalination process. The discharge would be dispersed by currents in San Pablo Bay, affecting temperature, nutrients, and turbidity and, therefore, the abundance and diversity of marine organisms. Areas of potential concern in relation to oceanography and marine water quality include temperature, dissolved oxygen, or salinity; possible localized changes in currents or in turbidity, due to the presence of intake pipes on the ocean bottom or due to the pumping/discharge of effluents from the desalination plant; and possible changes in dispersion of sewage plume effluent due to added discharge of brine effluent from the desalination plant. As such, a desalination project would require a baseline study to establish offshore conditions prior to desalination plant startup; and perform quarterly marine water quality/biological monitoring in accordance with the San Francisco Bay Regional Water Quality Control Board requirements during operational phase (ESA, 2006). Implementation of a desalination plant would also require

construction of new facilities, which would incur construction-related impacts similar to those anticipated under the Proposed Action; therefore the desalination alternative would have a similar level of temporary environmental impact when compared to the three action alternatives.

The capital costs and operations and maintenance costs could be prohibitive: the estimated capital cost of the MMWD plant is estimated at \$121.1 million, with annual operations and maintenance costs as high as \$7.1 million. When compared to the proposed Basic System, a desalination plant would be more cost-effective³, but the project may be ineligible for federal funding. Further, there are high energy costs associated with this alternative in addition to the costs for land acquisition, construction of seawater intake and potentially a brine water discharge line and brine water outfall. In addition, considering the extremely high cost for desalination, coupled with its greater dependency on large quantities of power, this alternative was not carried forward for further analysis.

Findings

Because this alternative would not substantially meet the project objectives, would also result in substantial environmental impacts above and beyond those of the proposed project, would increase the overall cost of the project, and would not substantially reduce significant unavoidable impacts that cannot otherwise be mitigated. Therefore, it is not considered feasible or a desirable alternative to the proposed project.

4.4 Environmentally Superior Project Alternative

The lead agency is not required by CEQA to adopt an environmentally superior alternative that will not feasibly attain project objectives or reduce environmental effects. In the process of selecting the environmentally superior alternative, NBWRA has evaluated several factors, including environmental effects, engineering and operational criteria, system reliability and flexibility, cost, and efficient coordination with other water recycling efforts, in determining which alternative is the best project to approve and implement.

The Basic System has been identified as the most environmentally, equitably, and financially sustainable alternative that will effectively fulfill the project objectives. The Basic System would provide adequate conveyance, pumping, and storage capacity that would result in 6,655 AFY of recycled water, therefore offsetting a substantial amount of potable demand and reducing wastewater discharge to San Pablo Bay. The Basic System would achieve the project objectives with least environmental impacts and costs, although would not provide the benefits from increased connectivity that would occur under the Partially and Fully Connected Systems. The Basic System would have the capacity to provide recycled water to offset potable demand and improve water supply reliability, although to a lesser degree than the Partially Connected and Fully Connected Alternatives. The Basic System best meets the stated objectives of the project, for the following reasons:

³ Cost-effectiveness is based on the cost per AFY, calculated using estimated total AFY and costs.

- 1) The Basic System provides offset for urban and agricultural demands on potable supplies, although not to the degree provided by the Partially Connected and Fully Connected Systems.
- 2) The Basic System includes the greatest provision of recycled water to Napa Salt Ponds, as well as secondary benefit to local surface and groundwater supplies;
- 3) The Basic System would improve local and regional water supply reliability, although not to the degree provided by the Partially Connected and Fully Connected Alternatives.
- 4) The Basic System would maintain and protect public health and safety, as would all of the alternatives. The No Project Alternative was actually rated highest, as it would not construct or operate any proposed facilities.
- 5) The Basic System would promote sustainable practices by providing recycled water, although not to the degree provided by the Partially Connected and Fully Connected Alternatives.
- 6) The Basic System is the most local of the alternatives, as no connections between WWTPs would be provided, with the exception of provision of recycled water to the Napa Salt Ponds. Therefore, the ability to “export” water from one service area to another is limited.
- 7) The Basic System is the least expensive of the alternatives considered, with the exception of the No Action and No Project Alternatives.

The Basic System would provide some connectivity between service areas with a major emphasis on local water use. Water reuse would provide environmental benefits by offsetting surface and groundwater use, reducing the need to develop additional water supplies, and reducing discharge to the Bay. Although an incrementally smaller amount of recycled water would be available, it would represent an economically feasible alternative. Implementing the Basic System would cost 80 percent less than the Partially Connected System, and 200 percent less than the Fully Connected System (CDM, 2008). Since the Basic System would represent the lower cost alternative and would be implemented through federal and state funding options, it is the most cost-effective for the Member Agencies and their rate payers. The Basic System would require the least amount of new storage and relies on the use of existing facilities by rehabilitating reservoirs and using ponds at the WWTPs.

Compared to the Basic System, the Partially and Fully Connected Systems would increase regional connectivity and provide incrementally more recycled water treatment and distribution facilities, albeit with greater costs for greater costs for the Member Agencies, construction impacts, and greater potential for conflict with natural resources. Therefore, the Partially and Fully Connected Systems are not the most environmentally superior alternatives (see Table 6-13).

In general, all the three proposed alternatives would meet the stated project objectives and comply with applicable regulations and policies. In relation to the stated project objectives and environmental impacts, the Fully Connected System would involve the greatest capital costs and maximum adverse environmental impacts due to the proportion of facilities that would be required. The benefit of reducing the amount of wastewater discharged to the Bay is

counterbalanced by the detriment caused during construction and facility operation; therefore, the Fully Connected System is not considered environmentally superior.

In general, the Partially Connected System represents the middle ground between the Basic System and the Fully Connected System, balancing the potential environmental impacts, implementation costs, and risk issues associated with the alternatives. In comparison, the Partially Connected System would cause greater environmental impacts than the Basic System, and would cause impacts similar to the Fully Connected System. The Partially Connected System could fulfill the objectives to improve water supply reliability and offset potable demand to a higher degree than the Basic System, however the Partially Connected System would not necessarily be the most financially or environmentally sustainable option, due to increased infrastructure requirements.

Based on the criteria set previously in the chapter for alternatives analysis, with respect to their ability to meet the stated project objectives, their potential environmental impacts, and the cost of implementation, it was determined that the Basic System is identified as the environmentally superior alternative. Of the action alternatives, the Basic System would achieve the project objectives, result in lesser environmental impacts, and would incur lower costs. The Basic System would thus achieve all of the project objectives while simultaneously providing a means for Member Agencies to achieve water management goals, meet future water demand, augment surface water use, and sustain environmental and water quality.

References

Camp Dresser McKee, Inc. (CDM), *Phase 3 Engineering and Economic/ Financial Analysis Report*, June 2008.

Environmental Science Associates, *Sonoma Valley Recycled Water Project, Environmental Impact Report*, 2006.

CHAPTER 5

Mitigation Monitoring and Reporting Program

This chapter summarizes the mitigation measures that would be integrated into the proposed project (i.e., North Bay Water Recycling Program or NBWRP) to reduce the potentially significant impacts to a less-than-significant level. Also provided is a Mitigation Monitoring and Reporting Program (MMRP) organized in a tabular format, keyed to each mitigation measure incorporated into the project. The tables following each measure provide a breakdown of how the mitigation measure would be implemented, who would be responsible, and when it would occur. The tables consist of four column headings which are defined as follows:

- *Implementation Procedure*: If needed, this column provides additional information on how the mitigation measures would be implemented.
- *Monitoring and Reporting Actions*: This column contains an outline of the appropriate steps to verify compliance with the mitigation measure.
- *Monitoring Responsibility*: This column contains an assignment of responsibility for the monitoring and reporting tasks.
- *Monitoring Schedule*: This column provides a general schedule for conducting each monitoring and reporting task, identifying where appropriate both the timing and the frequency of the action.
- *Responsible Agency*: This column states the agency, which would be responsible for implementing the mitigation measure. If the measure applies to all the Member Agencies, the responsible agency noted is “Member Agency”. If the measure applies to specific agencies, the name of the agency or agencies is/are noted in the column.

Geology and Soils

Impact 3.1.1: Seismicity

In the event of a major earthquake in the Bay Area Region, the proposed facilities could be subject to fault rupture, severe ground shaking, liquefaction, or earthquake induced landslides capable of causing injury, structural damage, pipeline rupture and service interruption.

Mitigation Measure 3.1.1

The Member Agencies will implement the following measures:

- All proposed improvements will be designed and constructed in accordance with current geotechnical industry standard criteria, including the California Building Code (CBC) and American Waterworks Association (AWWA) criteria.
- The project construction materials and backfill materials will be designed according to a geotechnical investigation by a California-licensed geotechnical engineer or engineering geologist to address landslide, subsidence, liquefaction, and expansive soils and seismic hazards such as ground shaking and liquefaction.
- Implementation of industry standard geotechnical measures such as replacing excavated soils with engineered fill materials are effective means to overcome the potential for subsidence. If excavated soils are to be reused for backfill, they would still be appropriately compacted to mitigate the potential for subsidence or settlement and evaluated for expansion and amended, if necessary, to reduce the potential for expansion in accordance with accepted geotechnical practices.
- Proposed facilities will be designed to include flexible connections, where deemed necessary, along with backfill requirements that minimize the potential for significant damage. All other associated improvements will employ standard design and construction using the most recent geotechnical practices and California Building Code (CBC) seismic criteria, which would provide conservative design criteria.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Design improvements with current geotechnical industry standard criteria. 2. Conduct geotechnical investigation and design construction and backfill material accordingly. 3. Replace excavated soils with engineered fill or properly compacted excavated soils if reused. After placing backfill, evaluate soil's potential for expansion. 4. Design facilities to include flexible connections.	1. Incorporate design improvements into construction specifications; Comply with CBC and AWWA. 2. Incorporate design recommendations into construction specifications. 3. Incorporate procedure into construction specifications. 4. Incorporate flexible connections into construction specifications.	1. Member Agency 2. Contractor/ Member Agency 3. Contractor/ Member Agency 4. Member Agency	1. Prior to Construction 2. Prior to Construction 3. During Construction 4. Prior to Construction	Member Agency

Impact 3.1.2: Erosion

Project construction activities could result in short-term erosion and loss of topsoils.

Mitigation Measure 3.1.2

The Member Agencies will implement the following measures:

- Consistent with Stormwater Pollution Prevention Plan (SWPPP) requirements, the construction contractor shall be required to implement BMPs for erosion control onsite. The use of construction BMPs will minimize the potential for erosion and loss of topsoil, and shall include, without limitation, the following:
- Avoid scheduling construction activities during a rain event, but be prepared for sudden changes in conditions;
- Construct berms, silt fences, straw bales, fiber rolls, and/or sand bags around stockpiled soils;
- Cover stockpiled soils during a rain event and monitor perimeter barriers, repair as necessary;
- Stabilize entrances to work area to prevent tracking of dirt or mud onto roadways; and
- Implement dust control practices as appropriate on all stockpiled material.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> 1. Prepare a SWPPP. 2. Schedule construction to avoid rainy season. 3. Construct berms and install silt fences, straw bales, fiber rolls, and/or sand bags around stockpiled soils. 4. Cover stockpiled soils during a rain event and monitor perimeter barriers; repair as necessary. 5. Stabilize entrances to work area to prevent tracking of dirt or mud onto roadways. 6. Implement dust control practices as appropriate on all stockpiled material. 	<ol style="list-style-type: none"> 1. Incorporate erosion control BMPs into construction specifications. 2. Incorporate schedule into construction specifications. 3. Incorporate use of these measures into construction specifications. 4. Incorporate use of these measures into construction specifications. 5. Incorporate use of these measures into construction specifications. 6. Incorporate use of these measures into construction specifications. 	<ol style="list-style-type: none"> 1. Member Agency 2. Member Agency 3. Contractor/ Member Agency 4. Contractor/ Member Agency 5. Contractor/ Member Agency 6. Contractor/ Member Agency 	<ol style="list-style-type: none"> 1. Prior to Construction 2. Prior to and During Construction 3. During Construction 4. During Construction 5. During Construction 6. During Construction 	Member Agency

Impact 3.1.3: Unstable Soils

Project improvements could be located on expansive soils that over time could cause damage to foundations and pipelines resulting in service disruptions.

Mitigation Measure

The Member Agencies will implement the Mitigation Measure 3.1.1.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Implement Mitigation Measure 3.1.1	1. Incorporate use of these measures into construction specifications.	1. Contractor/ Member Agency	1. Prior to and During Construction	Member Agency

Impact 3.1.4: Expansive Soils

Project improvements could be located on expansive soils that over time could cause damage to foundations and pipelines resulting in service disruptions.

Mitigation Measure

The Member Agencies will implement the Mitigation Measure 3.1.1.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Implement Mitigation Measure 3.1.1	1. Incorporate use of these measures into construction specifications.	1. Contractor/ Member Agency	1. Prior to and During Construction	Member Agency

Surface Hydrology

Impact 3.2.1: Changes in Drainage Patterns

Project construction could modify existing drainage patterns.

Mitigation Measure 3.2.1

The Member Agencies would implement the following measure during pipeline installation at stream crossings:

- Schedule construction so as to avoid storm events to the extent feasible;
- Use trenchless techniques such as jack and bore tunneling to avoid direct impacts to the streams;
- Employ short-term drainage diversion and control measures such as sandbags, dikes, pumps, or other means; and
- Following construction, restore the construction area to pre-existing conditions

- Implement **Mitigation Measure 3.5.1** (see Section 3.5).

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> 1. Schedule construction to avoid rainy season. 2. Integrate trenchless techniques such as jack and bore to avoid streams. 3. Employ short-term drainage diversion and control measures such as sandbags, dikes, pumps, or other means. 4. Restore site to pre-existing conditions. 	<ol style="list-style-type: none"> 1. Incorporate schedule into construction specifications. 2. Incorporate use of trenchless techniques into construction specifications. 3. Incorporate use of these measures into construction specifications. 4. Inspect final site conditions after construction and verify its condition is it equivalent to that prior to construction. Incorporated into construction specifications. 	<ol style="list-style-type: none"> 1. Member Agency 2. Contractor/ Member Agency 3. Contractor/ Member Agency 4. Contractor/ Member Agency 	<ol style="list-style-type: none"> 1. Prior to and During Construction 2. Prior to Construction 3. During Construction 4. After Construction 	Member Agency

Impact 3.2.3: Increased Storm Runoff

New impervious surfaces for NBWRP would result in an increase in storm runoff.

Mitigation Measure 3.2.3

The Member Agencies will implement the following measures:

- Comply with the local storm drainage requirements;
- Incorporate site design features to control any site runoff onsite; and
- Install storm runoff, collection, and treatment system, as applicable, to control the runoff flow offsite.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> 1. Comply with the local storm drainage requirements. 2. Incorporate site design features to control any site runoff onsite. 	<ol style="list-style-type: none"> 1. Incorporate requirements into construction specifications. 2. Incorporate features into construction specifications. 	<ol style="list-style-type: none"> 1. Member Agency 2. Member Agency 3. Contractor/ Member Agency 	<ol style="list-style-type: none"> 1. Prior to Construction 2. Prior to Construction 3. During and After Construction 	Member Agency

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
3. Install storm runoff, collection, and treatment system, as applicable, to control the runoff flow offsite.	3. Monitor efficacy of system and regularly maintain it.			

Impact 3.2.4: Flooding – Sea Level Rise

Sea-level rise could affect operation of project facilities.

Mitigation Measure 3.2.4

Design of proposed facilities shall consider sea level rise potential, and shall include appropriate measures in facility siting and design to address potential impacts related to sea level rise, similar to those applied to facility installation within 100-year flood plains. Design measures may include, but are not limited to: facility siting, access placement, access vault extension above projected water elevation, water tight vaults, and site protection.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Design facility to address potential impacts related to sea level rise. Design measures may include but are not limited to: facility siting, access placement, access vault extension above projected water elevation, water tight vaults, and site protection.	1. Incorporate design requirements into construction specifications.	1. Member Agency	1. Prior to construction	LGVSD/NMWD, Novato SD/ NMWD, SVCSD

Groundwater Resources

Impact 3.3.2: Hydrostatic Pressure

Proposed facilities may be affected by shallow groundwater levels and natural groundwater fluctuations.

Mitigation Measure 3.3.1

The Member Agencies will implement the following measures:

- All proposed improvements will be designed and constructed in accordance with current geotechnical industry standard criteria.
- Implement industry standard geotechnical measures to address high groundwater conditions as appropriate to reduce the potential for impacts related to groundwater fluctuation, in accordance with accepted geotechnical practices. Possible design features include drainage blankets, perimeter pumps to temporarily decrease hydrostatic pressure, perimeter drainage trenches, and specific groundwater monitoring scenarios.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Design improvements with current geotechnical industry standard criteria. 2. Design improvements to address high groundwater conditions in accordance with accepted geotechnical practices. Possible design features include but are not limited to: drainage blankets, perimeter pumps to temporarily decrease hydrostatic pressure, perimeter drainage trenches, and specific groundwater monitoring scenarios.	1. Incorporate design requirements into construction specifications. 2. Incorporate design requirements into construction specifications.	1. Member Agency 2. Member Agency	1. Prior to construction 2. Prior to construction	Member Agency

Water Quality

Impact 3.4.1: Short Term Construction-Related Effects

Disturbance of soils during construction of new project-related infrastructure could generate short term erosion-related water quality impacts. Construction activities could result in the accidental release of fuels or hazardous materials. Project construction activities could require dewatering that could result in the discharge of turbid waters into the local storm drain systems or nearby creeks.

Mitigation Measure 3.4.1a

NPDES Construction Activity Stormwater Permit. Member Agencies or their contractor shall comply with the provisions of the NPDES Construction Activity Stormwater permit, including preparation of Notice of Intent to comply with the provisions of this General Permit and preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will identify implementation measures necessary to mitigate potential water quality degradation as a result of

construction-related runoff. These measures will include BMPs and other standard pollution prevention actions, such as erosion and sediment control measures, proper control of non-stormwater discharges, and hazardous spill prevention and response. The SWPPP will also include requirements for BMP inspections, monitoring, and maintenance.

The following items are examples of BMPs that would be implemented during construction to avoid causing water quality degradation:

- Erosion control BMPs, such as use of mulches or hydroseeding to prevent detachment of soil, following guidance presented in the California BMP Handbooks – Construction (CASQA 2003). A detailed site map will be included in the SWPPP outlining specific areas where soil disturbance may occur, and drainage patterns associated with excavation and grading activities. In addition, the SWPPP will provide plans and details for the BMPs to be implemented prior, during, and after construction to prevent erosion of exposed soils and to treat sediments before they are transported offsite.
- Sediment control BMPs such as silt fencing or detention basins that trap soil particles.
- Construction staging areas designed so that stormwater runoff during construction will be collected and treated in a detention basin or other appropriate structure.
- Management of hazardous materials and wastes to prevent spills.
- Groundwater treatment BMPs such that localized trench dewatering does not impact surface water quality.
- Vehicle and equipment fueling BMPs such that these activities occur only in designated staging areas with appropriate spill controls.
- Maintenance checks of equipment and vehicles to prevent spills or leaks of liquids of any kind.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Submit Notice of Intent and SWPPP for the NPDES General Construction Permit 2. Incorporate BMPs in standard construction procedures	1. Comply with the SWPPP and NPDES permit requirements 2. Implement BMPs	1. Contractor 2. Contractor/ Member Agency	1. Prior to construction 2. During and following construction	Member Agency

Impact 3.4.6: Surface Water Storage

The proposed project would include storage of recycled water at existing WWTP facilities, as well as at individual user properties. Storage of recycled water quality would have the potential to affect localized surface water quality or groundwater quality.

Mitigation Measure 3.4.6a

Under the Master Recycling Permit for each Member Agency and Cooperating Agency, user agreements shall include provisions for compliance with Title 22 and the State Recycled Water Policy regarding storage and use of recycled water onsite at individual properties.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> Incorporate provisions for compliance with Title 22 and State Recycled Water Policy in user agreements. Comply with provisions in the user agreement 	<ol style="list-style-type: none"> Execute agreement Execute agreement 	<ol style="list-style-type: none"> Member Agency/Users Member Agency/Users 	<ol style="list-style-type: none"> During project operation (recycled water use) During project operation (recycled water use) 	Member Agency

Mitigation Measure 3.4.6b

Prior to storage of recycled water in any “on-stream” storage facility that directly receives and releases stream flow, each Member Agency or Cooperating Agency shall enter into discussions with RWQCB regarding operational requirements to ensure operation of proposed facilities in compliance with Title 22 and the State Recycled Water Policy. It is anticipated that specific operational standards, such as pumping on-stream ponds dry prior to the onset of winter rains or other measures, would be required in order to ensure storage in compliance with Title 22.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> Enter into discussions with San Francisco Bay RWQCB regarding operational requirements for the proposed facilities. Comply with requirements 	<ol style="list-style-type: none"> Incorporate requirements into standard operational procedures. Incorporate requirements into standard operational procedures. 	<ol style="list-style-type: none"> Member Agency Member Agency 	<ol style="list-style-type: none"> Project operation/ prior to storage of recycled water Project operation 	Member Agency

Impact 3.4.9: Reuse for Habitat Restoration

Disinfected tertiary-treated wastewater from the SVCSD WWTP would be delivered to the Napa Salt Marsh ponds as a dilution source for bittern ponds, thereby improving water quality.

Mitigation Measure 3.4.9a

SVCSD and Napa SD (as appropriate) shall implement the following measures:

- Prepare a Management Plan required by the San Francisco Bay RWQCB to obtain a discharge prohibition. The management plan will comply with the RWQCB Resolution 94-086. The management plan will include the following features for Ponds 7 and 7A:
 - a) Facility Plan, includes project purpose and objectives, site selection factors, site sampling and analyses, planning and design elements.
 - b) Operations and Maintenance plan, includes vegetation planning and harvesting, channel and bank maintenance, pump and gate maintenance, vector controls, and contingency/emergency plans; and
 - c) Monitoring Program, includes monitoring of pollutants, habitat diversity, wildlife use, and vector populations.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Prepare Management Plan in compliance with RWQCB's requirements. 2. Implement the Management Plan	1a. Incorporate requirements in the Management Plan 1b. Incorporate Facility Plan, Operations and Maintenance plan, and monitoring program in the Management Plan. 2. Report results as required	1a. SVCSD/ Napa SD 1b. SVCSD/Napa SD 2. SVCSD/ Napa SD	1a. Prior to operation 1b. Prior to operation 2. During operation	SVCSD and Napa SD

Biological Resources

Impact 3.5.1: Impacts on Wetlands, Streams and Riparian Habitats

Construction of the Proposed Project could result in impacts to jurisdictional wetlands and other waters of the United States, as well as impacts to riparian habitat.

Mitigation Measure 3.5.1

Implement the following measures to avoid, minimize and compensate for impacts to jurisdictional wetlands and other waters of the U.S. and impacts to riparian habitat.

Construction activities resulting in the introduction of fill or other disturbance to jurisdictional wetlands and other waters of the U.S. will require permit approval from the U.S. Army Corps of Engineers and water quality certification from the Regional Water Quality Control Board, pursuant to Section 401 of the Clean Water Act. The Proposed Project will most likely be authorized under Nationwide Permit #12 (Utility Lines) pursuant to Section 404 of the Clean Water Act. The California Department of Fish and Game (CDFG) has jurisdiction in the project

area over riparian habitat, including stream bed and banks, pursuant to Sections 1600-1616 of the Fish and Game Code. Pipeline construction resulting in alteration to channel bed or banks, extending to the outer dripline of trees forming the riparian corridor, is subject to CDFG jurisdiction. The project proponent will be required to obtain a Streambed Alteration Agreement (SAA) from the CDFG. Terms of these permits and SAA will likely include, but will not necessarily be limited to, the mitigation measures listed below.

- 1) Specific locations of pipeline segments, storage reservoirs, and pump stations shall be configured, wherever feasible, to avoid and minimize direct and indirect impacts to wetlands and stream drainage channels. Consideration taken in finalizing configuration placement shall include:
 - Reducing number and area of stream channel and wetland crossings where feasible. Crossings shall be oriented as close to perpendicular (90 degree angle) to the drainage or wetland as feasible.
 - Placement of project components as distant as feasible from channels and wetlands.
 - For pipeline construction activities in the vicinity of wetland and stream drainage areas, the construction work area boundaries shall have a minimum 20-foot setback from jurisdictional features¹. Pipeline construction activities in proximity to jurisdictional features include: 1) entrance and exit pits for directional drilling and bore and jack operations; and 2) portions of pipeline segments listed as “parallel” to wetland/water features.
- 2) Sites identified as potential staging areas will be examined by a qualified biologist prior to construction. If potentially jurisdictional features are found that could be impacted by staging activities, the site will not be used.
- 3) Construction methods for channel crossing shall be designed to avoid and minimize direct and indirect impacts to channels to the greatest extent feasible. Use of trenchless methods including suspension of pipeline from existing bridges, directional drilling, and bore and jack tunneling will be used when feasible. Trenchless methods are required for all perennial drainage crossings (i.e., Sonoma Creek). Construction occurring in the vicinity of riparian areas shall be delimited with a minimum 20-foot setback to avoid intrusion of construction activities into sensitive habitat.

The following additional measures shall apply to channel crossings in which the trenching construction method is used:

- Limiting of construction activities in drainage channel crossings to low-flow periods: approximately April 15 to October 15.
- At in-road drainage crossings where drainages pass beneath the road in existing culverts, and where there is sufficient cover between the culvert and road surface, the new pipeline will be installed above the existing culvert without removing or disturbing it. If the pipeline must be installed below the existing culvert, then the culvert will be cut and temporarily removed to allow pipeline installation.

¹ Setbacks of channels with associated riparian vegetation will be from the outer dripline edge of the riparian corridor canopies and/or the upper bank edge, or per City or County code, whichever is greater.

- At off-road drainage crossings, the construction corridor width will be minimized to the greatest extent feasible at the crossing and at least 20 additional feet to either side of the drainage at the crossing.
 - If disturbance of the existing culvert is required, sediment curtains upstream and downstream of the construction zone shall be placed to prevent sediment disturbed during trenching activities from being transported and deposited outside of the construction zone.
- 4) Implement BMPs required in **Mitigation Measure 3.4.1** to reduce risk of sediment transport into all construction areas in proximity of drainages.
 - 5) For channels or wetlands for which soil removal is necessary (off-road crossings or wetlands to be trenched or otherwise directly disturbed), the top layer of the drainage or wetland bottom shall be stockpiled and preserved during construction. After the pipeline has been installed, the stockpiled material shall be placed back into the drainage or wetland feature to return the beds to approximately their original composition.
 - 6) To offset temporary and permanent impacts to wetlands and other waters of the U.S., and impacts to riparian habitat, compensatory mitigation will be provided as required by regulatory permits and SAAs.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Acquire permits from USACE, CDFG, and RWQCB. 2. Implement Best Management Practices (BMPs). 3. Stockpile excavated soil. 4. Implement compensatory mitigation.	1. Comply with regulatory permit. 2. Sign-off on inspection report and/ or MMRP. 3. Sign-off on inspection report and/ or MMRP. 4. Comply with regulatory permits and SAAs.	1. Member Agency 2. Contractor 3. Contractor 4. Member Agency	1. Prior to Construction 2. During Construction 3. During Construction 4. Prior to and During Construction	Member Agency

Impact 3.5.2: Construction Impacts on Special-status Fish and California Freshwater Shrimp

Construction of Proposed Project facilities could affect special-status invertebrate or fish species including central California coast steelhead, Chinook salmon, California freshwater shrimp, Pacific lamprey, and Sacramento splittail, or designated critical habitat for steelhead.

Mitigation Measure 3.5.2

Specific measures shall be implemented to protect aquatic habitats potentially inhabited by special-status fish and California freshwater shrimp.

Sensitive fisheries and other aquatic resources shall be protected by minimizing in-stream and near-stream habitat impacts during project design, informally consulting with resource agencies (NMFS, USFWS, CDFG, and USACOE), and implementing protective measures. For Sonoma Creek, Petaluma River, Napa River, and other perennial drainages, special-status fish are presumed present. California freshwater shrimp are presumed present in Sonoma Creek. Because of the sensitivity of seasonal and ephemeral drainages, the following measures will be required to avoid and minimize impacts to aquatic habitat:

- 1) Project designs shall be reconfigured, whenever feasible, to avoid direct impacts to sensitive wetland areas and minimize disturbances to wetland and riparian corridors. Ground disturbance and construction footprints in these areas shall be minimized to the greatest degree feasible.
- 2) If trenching or directional boring stream crossing methods are used, the construction schedule of such activities shall be implemented according to conditions of the SAAs.
- 3) In-stream construction shall be avoided at all locations that are known, or presumed, to support threatened or endangered species, if at the time of construction such locations contain flowing or standing water.
- 4) In the event that equipment shall operate in any watercourse with flowing or standing water, the project proponent will ensure that they have the appropriate permit authorizations.
- 5) Prior to construction, a qualified biologist shall install fencing to establish a minimum 20-foot setback from sensitive habitat.
- 6) For work sites located adjacent to sensitive aquatic sites, a biological resource education program shall be provided by a qualified biologist, as per conditions of the SAAs.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Consult with resource agencies . 2. Implement recommendations derived during consultation.	1. Design protective measures. 2. Comply with permit conditions; sign-off on inspection report and/or MMRP	1. Member Agency 2. Contractor	1. Prior to Construction 2. During Construction	Member Agency

Impact 3.5.3: Long term Impacts on Special-status Fish

Operation of the proposed project has the potential to affect special-status fish species due to reduced discharges from the WWTPs.

Mitigation Measure 3.5.3

Implementation of **Mitigation Measure 3.5.5** for the protection of California red-legged frogs and **Mitigation 3.5.1** for protection and restoration of wetlands would protect special-

status invertebrates that could potentially be impacted by the project. No specific mitigation is required.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> 1. Implement Mitigation Measure 3.5.1. 2. Implement Mitigation Measure 3.5.5. 	<ol style="list-style-type: none"> 1. Comply with regulatory permit; sign-off on inspection report and/ or MMRP. 2. Comply with permit conditions; sign-off on inspection report and/or MMRP. 	<ol style="list-style-type: none"> 1. Member Agency/ Contractor 2. Contractor/ Qualified Biologist 	<ol style="list-style-type: none"> 1. Prior to and During Construction 2. Prior to Construction 	Member Agency

Impact 3.5.4: Impacts on Special-status Invertebrates

Construction of Proposed Project facilities could impact special-status invertebrates including Myrtle’s silverspot butterfly, Opler’s longhorn moth, Monarch butterfly wintering sites, Ricksecker’s water scavenger beetle and California brackishwater snail.

Mitigation Measure 3.5.3

Mitigation Measure 3.5.3 would reduce potential impacts on special-status invertebrates to a less-than-significant level.

Implementation of **Mitigation Measure 3.5.5** for the protection of California red-legged frogs and **Mitigation 3.5.1** for protection and restoration of wetlands would protect special-status invertebrates that could potentially be impacted by the project. No specific mitigation is required.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> 1. Implement Mitigation Measure 3.5.3. 2. Implement Mitigation Measure 3.5.1. 3. Implement Mitigation Measure 3.5.5. 	<ol style="list-style-type: none"> 1. Comply with regulatory permit; sign-off on inspection report and/ or MMRP. 2. Comply with regulatory permit; sign-off on inspection report and/ or MMRP. 3. Comply with permit conditions; sign-off on inspection report and/or MMRP 	<ol style="list-style-type: none"> 1. Member Agency 2. Member Agency/ Contractor 3. Contractor/ Qualified Biologist 	<ol style="list-style-type: none"> 1. Prior to and During Construction 2. Prior to and During Construction 3. Prior to and During Construction 	Member Agency

Impact 3.5.5: Impacts on Western Pond Turtle

Construction of the proposed project has the potential to impact western pond turtles in upland and aquatic habitat.

Mitigation Measure 3.5.5

Implement protection measures to avoid and minimize impacts to western pond turtles.

- When working within 200 feet of stream crossings, all construction personnel shall receive awareness training relating to the protection of western pond turtles, in accordance with the SAAs. Also, to minimize the likelihood of encountering turtles in upland areas near stream crossings, construction footprints shall be minimized to the greatest extent feasible. Based on reconnaissance-level surveys, if staging and construction activities occur principally within or immediately adjacent to project alignment roads the project will be outside of principal pond turtle habitat.
- Within 48 hours prior to the start of construction activities, a qualified biologist shall perform pond turtle surveys within suitable habitat within projected work areas. If a pond turtle nest is located within a work area, a biologist with the appropriate permits may move the eggs to a suitable facility for incubation, and release hatchlings into the creek system in late fall.

The measures proposed for protection of aquatic species and red-legged frogs (**Mitigation Measure 3.5.2 and Mitigation Measure 3.5.6**) will additionally protect western pond turtles during construction.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Conduct awareness training for construction personnel working within 200 feet of stream crossings. 2. Conduct pond turtle surveys; move eggs if necessary. 3. Implement Mitigation Measure 3.5.2. 4. Implement Mitigation Measure 3.5.6.	1. Comply with SAA permit; sign-off on inspection report and/ or MMRP. 2. Comply with regulatory permits; sign-off on inspection report and/ or MMRP 3. Comply with permit conditions; sign-off on inspection report and/or MMRP 4. Comply with SAA permit conditions; sign-off on inspection report and/or MMRP.	1. Contractor/ Member Agency 2. Qualified Staff Biologist 3. Contractor 4. Contractor/ Qualified Biologist	1. Prior to construction 2. 48 hours Prior to Construction 3. Prior to and During Construction 4. Prior to and During Construction	Member Agency

Impact 3.5.6: Impacts on California Red-legged Frog

Construction of the Proposed Project has the potential to affect California red-legged frogs, if present.

Mitigation Measure 3.5.6

Protection measures to avoid and minimize impacts on California red-legged frogs.

- 1) The implementation of measures identified for the protection of special-status fish and California freshwater shrimp would also protect California red-legged frogs within aquatic habitat. All protection measures identified in **Mitigation Measure 3.5.2** shall be applied to the protection of red-legged frogs at sites that provide potential aquatic habitat for this species. These include informal USFWS consultation, avoiding aquatic habitat, establishing a suitable buffer from the aquatic habitat (e.g., 50 feet), and implementing a worker education program.
- 2) All work activities within or adjacent to aquatic habitat that is potentially occupied by red-legged frogs will be completed between May 1 and November 1.
- 3) A qualified biological resource monitor will conduct a training session for construction personnel working in upland habitat near potentially occupied drainages, as per conditions of the SAAs.
- 4) All trash that could attract predators will be regularly contained and removed from the work site.

In the event trenchless methods cannot be employed, the project proponent would obtain appropriate permit authorizations and implement construction methods per applicable Streambed Alteration Agreements.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Implement Mitigation Measure 3.5.2. 2. Complete all work within or adjacent to aquatic habitat that is inhabited by red-legged frogs between May 1 and November 1 3. Conduct training sessions for construction personnel working in upland habitat near potential occupied drainages. 4. Implement trash removal and trenchless construction methods where necessary.	1. Comply with permit conditions; sign-off on inspection report and/or MMRP. 2. Incorporate into contract specifications. 3. Comply with SAA permit conditions; sign-off on inspection report and/or MMRP. 4. Comply with SAA permit conditions; sign-off on inspection report and/or MMRP.	1. Contractor/ Qualified Biologist 2. Contractor 3. Qualified Biologist/ Construction Personnel 4. Contractor	1. Prior to and During Construction 2. During Construction 3. During Construction 4. During Construction	Member Agency

Impact 3.5.7: Impacts on Threatened and Endangered Marsh Birds

Construction of the proposed project has the potential to affect western snowy plover, California black rail and California clapper rail and their habitat in and near the project alignments.

Mitigation Measure 3.5.7

To minimize the likelihood of project effects on threatened and endangered marsh birds, the following mitigation measures will be implemented:

- Protocol-level surveys will be conducted in locations with suitable habitat to determine species presence or absence.
- Agency consultation will be initiated.
- Construction activities will occur during the non-breeding season, September 15 through January 31. The combined breeding season for all three species extends from February 1 through September 14.
- Construction personnel will receive environmental awareness training specific to the identification of clapper rails, black rails, western snowy plover and their habitat.
- Any clapper rail and western snowy plover activity will be immediately reported to the USFWS; black rail activity will be reported to the CDFG.
- Construction activities will be constrained to the smallest area possible to minimize marsh disturbance.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Conduct protocol-level surveys in areas that contain suitable nesting bird habitat 2. Initiate consultation with resource agency. 3. Adhere to construction schedule with respect to bird breeding season. 4. Conduct training sessions for construction personnel specific to identification of sensitive bird habitat. 5. In the event of presence of sensitive birds, coordinate with CDFG and/ or USFWS.	1. Incorporate survey results and recommendations into project contract specifications. 2. Develop and implement avoidance measures. 3. Incorporate into contract specifications. 4. Incorporate into contract specifications; sign-off on inspection report and/or MMRP. 5. Implement avoidance measures derived from agency coordination.	1. Qualified Staff Biologist 2. Member Agency 3. Contractor/ Member Agency 4. Qualified Biologist/ Construction Personnel 5. Contractor/ Member Agency	1. Prior to Construction 2. Prior to Construction 3. During Construction 4. Prior to Construction 5. During Construction	Member Agency

Impact 3.5.8: Impacts on Burrowing Owl

Construction of the proposed project could result in direct and indirect impacts to burrowing owls, if present in portions of the project alignment.

Mitigation Measure 3.5.8

The following measures to avoid, minimize, or mitigate impacts on burrowing owls would be incorporated into the project.

- In areas identified to provide potential burrowing owl habitat, preconstruction surveys for burrowing owls would be conducted by a qualified biologist 14-30 days prior to the start of construction. Surveys would cover grassland areas within 500-foot buffer and check for adult and juvenile burrowing owls and their habitat.
- Construction exclusion areas would be established around the occupied burrows in which no disturbance would be allowed to occur. During the non-breeding season (September 1 through January 31), the exclusion zone would extend 160 feet around occupied burrows. During the breeding season (February 1 through August 31), exclusion areas would extend 250 feet around occupied burrows. Passive relocation of owls is not proposed.
- A qualified biologist (the on-site monitor or otherwise) will monitor owl activity on the site to ensure the species is not adversely affected by the project.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Conduct surveys for adult and juvenile burrowing owls within a 500-foot buffer. 2. Establish construction exclusion areas of appropriate size, as defined by breeding seasons). 3. Monitor owl activity on construction sites.	1. Incorporate survey results and recommendations into project contract specifications. 2. Incorporate in contract specifications. 3. Summarize results and recommendations in daily log; sign-off on inspection report and/or MMRP.	1. Qualified Biologist 2. Contractor 3. Qualified Biologist	1. 14-30 days Prior to Construction 2. Prior and During Construction 3. During Construction	Member Agency

Impact 3.5.9: Impacts on Nesting Birds

Construction of the proposed project has the potential to affect nesting birds including Swainson’s hawk, willow flycatcher, sharp-shinned hawk, Cooper’s hawk, tri-colored blackbird, Bell’s sage sparrow, golden eagle, northern harrier, California yellow-warbler, white-tailed kite, California horned lark, salt marsh common yellowthroat, loggerhead shrike, San Pablo song sparrow, California thrasher, rookeries, and additional bird species protected by California Fish and Game Code Section 3503 and the federal Migratory Bird Treaty Act (16 USC, Sec. 703, Supp. I, 1989).

Mitigation Measure 3.5.9

The appropriate Member Agency shall implement the following protection elements to avoid disturbing common and special-status nesting birds:

- Whenever feasible, vegetation shall be removed during the non-breeding season (generally defined as September 1 to January 31).
- For ground disturbing activities occurring during the breeding season (generally defined as February 1 to August 31), a qualified wildlife biologist will conduct preconstruction surveys of all potential nesting habitat for birds within 500 feet of earthmoving activities.
- If active bird nests are found during preconstruction surveys, a 500-foot no-disturbance buffer will be created around active raptor nests during the breeding season or until it is determined that all young have fledged. A 250-foot buffer zone will be created around the nests of other special-status birds. These buffer zones are consistent with CDFG avoidance guidelines; however, they may be modified in coordination with CDFG based on existing conditions at work locations.
- If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees and shrubs that have been determined to be unoccupied by special-status birds or that are located at least 500 feet from active nests may be removed.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<p>1. Limit vegetation removal to non-breeding season (September 1 to January 31)</p> <p>2. In the event that construction occurs during the breeding season (February 1 to August 31), conduct surveys of all potential nesting habitat within 500 feet of earthmoving activities.</p> <p>3. In the event that active bird nests are found during preconstruction surveys, establish a 500 foot buffer around active nest sites. Establish a 250-foot buffer around other active special-status bird nests.</p> <p>4. Remove trees, if necessary, that are not occupied by special-status birds.</p>	<p>1. Incorporate into contract specifications.</p> <p>2. Incorporate survey results and recommendations into contract specifications.</p> <p>3. Comply with CDFG guidelines.</p> <p>4. Sign-off on inspection report and/ or MMRP.</p>	<p>1. Contractor</p> <p>2. Qualified Biologist</p> <p>3. Contractor</p> <p>4. Contractor</p>	<p>1. During Construction</p> <p>2. Prior to Construction</p> <p>3. During Construction</p> <p>4. During Construction</p>	Member Agency

Impact 3.5.10: Impacts on Salt Marsh Harvest Mouse and Suisun Ornate Shrew

Construction of the proposed project has the potential to affect salt marsh harvest mouse and suisun ornate shrew and their habitat in and near the project alignments.

Mitigation Measure 3.5.10

The appropriate Member Agency shall implement protection measures to avoid and minimize impacts on salt marsh mammals during construction.

Where avoidance of sensitive habitat is not feasible (e.g., by bridging or bore and jack), consultation with CDFG and/or USFWS would be initiated. If species are present or presumed to be present after informal consultation with USFWS and/or CDFG, then a formal consultation and Biological Assessment in support of a Biological Opinion would be required. Such a consultation would proceed as part of the Corps 404 permitting program.

To avoid potential impacts on salt marsh harvest mouse and Suisun ornate shrew, a qualified biologist shall conduct specific preconstruction surveys prior to project initiation, following USFWS survey guidelines. The project proponent shall install exclusionary fences to prevent species movement into the project area, and a biologist with the appropriate permits to relocate these species shall live-trap mice and shrews within the enclosure and move these animals outside the fence. The biological monitor shall inspect these fences to ensure their integrity, and shall conduct an education workshop for contractors employees outlining species' biology, legislative protection, and construction restrictions to reduce potential impacts.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> 1. Consult with CDFG and/ or USFWS when avoidance of sensitive habitat is not feasible. 2. Conduct surveys for salt harvest mouse and Suisun ornate shrew. 3. Install exclusion fencing; conduct fence inspections. 4. Relocate species if necessary. 5. Conduct education workshops to inform construction personnel. 	<ol style="list-style-type: none"> 1. Compliance with recommendations and/ or Biological Assessment in support of a Biological Opinion. 2. Comply with USFWS guidelines; incorporate survey results and recommendations into contract specifications. 3. Comply with regulatory permit conditions; sign-off on inspection report and/ or MMRP. 4. Comply with regulatory permit conditions; sign-off on inspection report and/ or MMRP. 5. Incorporate into contract specifications; sign-off on inspection report and/ or MMRP. 	<ol style="list-style-type: none"> 1. Member Agency/ Contractor 2. Qualified Biologist 3. Contractor/ Qualified Biologist 4. Qualified Biologist 5. Qualified Biologist/ Construction Personnel 	<ol style="list-style-type: none"> 1. Prior to Construction 2. Prior to Construction 3. During Construction 4. Prior to Construction 5. Prior to Construction 	Member Agency

Impact 3.5.11: Impacts on Special-Status Bats

Construction of the proposed project has the potential to affect roosting or breeding special-status bats in and near the project alignments.

Mitigation Measure 3.5.11

The appropriate Member Agency shall implement protection measures to avoid and minimize impacts on special-status bats in and near project facilities during construction.

Concurrent with breeding bird surveys (**Mitigation Measure 3.5.8**), a qualified biologist will conduct preconstruction surveys for special-status bats at each bridge crossing location and in rural (i.e., non-road) areas where any large trees (e.g., > 24 inch diameter at breast height) will be removed. If an active roost is observed, a suitably-sized buffer (e.g., 100 to 150 feet) will be placed around the roost if it appears that trenching or other project activities may cause abandonment. Demolition activities must cease until juvenile bats are self-sufficient and will not be directly or indirectly impacted by activities.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> 1. Implement Mitigation Measure 3.5.8. 2. Conduct species surveys at specified locations. 3. Establish 100-150-foot buffers around active roosts; cease demolition activities until juvenile bats are self-sufficient. 	<ol style="list-style-type: none"> 1. Summarize results and recommendations in daily log; sign-off on inspection report and/or MMRP. 2. Incorporate results and recommendations into contract specifications; sign-off on inspection report and/ MMRP. 3. Incorporate into contract specifications; sign-off on inspection report. 	<ol style="list-style-type: none"> 1. Qualified Biologist/ Contractor 2. Qualified Biologist 3. Contractor 	<ol style="list-style-type: none"> 1. Prior to and During Construction 2. Prior to construction 3. During Construction 	Member Agency

Impact 3.5.12: Impacts on American Badger

Construction of the proposed project has the potential to affect American badger and its habitat in and near the project alignments.

Mitigation Measure 3.5.12

Mitigation Measure 3.5.12 would be implemented prior to ground-clearing activities to reduce potential impacts on badgers to a less-than-significant level.

Avoid and minimize impacts on badgers through preconstruction surveys prior to ground clearing and grading in annual grasslands habitat or areas that are known or suspected to support badger.

- Within 30-days prior to ground-clearing, a qualified biologist shall survey areas that provide potential badger habitat that occur within 100-feet of project activities. If no evidence of badgers presence is detected, no further mitigation is required. If active badger dens are identified within the project area, badgers will be passively relocated. If identified, vacated dens shall be temporarily covered using plywood sheets or similar materials to prevent badgers from returning to the project area during construction.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Conduct species surveys to identify potential badger habitat with 100 feet of project site. 2. In the event that badger dens are identified, passively relocate badgers.	1. Incorporate survey results and recommendations into contract specifications. 2. Comply with biologist recommendations.	1. Qualified Biologist 2. Qualified Biologist	1. 30 days Prior to Construction 2. Prior to Construction.	Member Agency

Impact 3.5.13: Impacts on Rare Plants

Project construction could result in impacts to listed and other special-status plants.

Mitigation Measure 3.5.13

Before the initiation of any vegetation removal or ground-disturbing activities in areas that provide suitable habitat for special-status plants, the following measures shall be implemented:

- A qualified botanist will conduct appropriately-timed surveys for special-status plant species, including those identified in Table 3.5.1, in all suitable habitat that would be potentially disturbed by the project.
- Surveys shall be conducted following CDFG- or other approved protocol.
- If no special-status plants are found during focused surveys, the botanist shall document the findings in a letter to the appropriate agencies and no further mitigation will be required.

If special-status plants are found during focused surveys, the following measures shall be implemented:

- Information regarding the special-status plant population shall be reported to the California Natural Diversity Database (CNDDDB).
- If the populations can be avoided during project implementation, they shall be clearly marked in the field by a qualified botanist and avoided during construction activities. Before ground clearing or ground disturbance, all on-site construction personnel shall be instructed as to the species' presence and the importance of avoiding impacts to this species and its habitat.
- If special-status plant populations cannot be avoided, consultations with CDFG and/or USFWS would be required. A plan to compensate for the loss of special-status

plant species could be required, detailing appropriate replacement ratios, methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures that would be implemented if the initial mitigation fails; the plan would be developed in consultation with the appropriate agencies prior to the start of local construction activities.

- If mitigation is required, the project proponent shall maintain and monitor the mitigation area for 5 years following the completion of construction and restoration activities. Monitoring reports shall be submitted to the resource agencies at the completion of restoration and for 5 years following restoration implementation. Monitoring reports shall include photo-documentation, planting specifications, a site layout map, descriptions of materials used, and justification for any deviations from the mitigation plan.

Impact 3.5.14: Impacts on Heritage and Other Significant Trees

The proposed project could affect heritage and other significant trees.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> 1. Conduct plant surveys. 2. Implement measures if special-status plants are present. 3. Mark special status plants and inform construction personnel of their presence. 4. Consult with CDFG and/or USFWS if special-status plants cannot be avoided. 5. If compensatory mitigation is required, monitor mitigation area. 	<ol style="list-style-type: none"> 1. Comply with CDFG protocol. Incorporate results and recommendations into contract specifications. In the event that no special-status plants are present, document findings in a letter to the appropriate resources agency. 2. Report information regarding present special-status plants to CNDDB. 3. Sign-off on inspection report and/or MMRP. 4. Coordination with CDFG and or USFWS; compliance with recommendations; development of a compensation plan. 5. Submit annual monitoring reports to resource agencies that include photo documentation, planting specifications, site layout map. 	<ol style="list-style-type: none"> 1. Qualified Botanist 2. Qualified Botanist 3. Qualified Botanist 4. Member Agency 5. Member Agency 	<ol style="list-style-type: none"> 1. Prior to Construction 2. During Construction 3. Prior to Construction 4. Prior to Construction 5. 5 Years Following Construction 	Member Agency

Mitigation Measure 3.5.14

The following measures will be implemented to avoid or reduce impacts to heritage or other significant trees:

1. Prior to the commencement of construction activities, trees necessary to remove or at risk of being damaged will be identified.
2. A certified arborist will inventory these trees, with the results of the inventory providing species, size (diameter at breast height, or *dbh*), and number of protected trees. Also, in consultation with the appropriate County, the arborist will determine if any are heritage or landmark trees.
3. If any protected trees are identified that will be potentially removed or damaged by construction of the proposed project, design changes will be implemented where feasible to avoid the impact.
4. Any protected trees that are removed will be replaced per applicable City and County tree protection ordinances. Foliage protectors (cages and tree shelters) will be installed to protect the planted trees from wildlife browse. The planted trees will be monitored as required by the ordinance, or regularly during a minimum two-year establishment period and maintenance during the plant establishment period will include irrigation. After the establishment period, the native tree plantings are typically capable of survival and growth without supplemental irrigation.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Identify trees at risk or trees to be removed. 2. Inventory trees. 3. Consult with counties to determine if any identified trees are landmark trees. 4. Replace removed trees. 5. Monitor replacement trees.	1. Incorporate recommendations into contract specifications. 2. Record results in inspection report. 3. Record results in inspection report. 4. Comply with City and County Tree ordinances. 5. Comply with City and County Tree ordinances; sign-off on inspection report/ and or MMRP.	1. Certified Arborist/ Contractor 2. Certified Arborist 3. Member Agency 4. Member Agency 5. Member Agency/ Certified Arborist	1. Prior to Construction 2. Prior to Construction 3. Prior to Construction 4. After Construction is Completed 5. Minimum of two years following completion of construction	Member Agency

Land Use and Agricultural Resources

Impact 3.6.3: Impact to Farmland

Construction activities associated with the project could temporarily affect the agricultural use of important farmland.

Mitigation Measure 3.6.1

To support the continued productive use of Important Farmlands in the project area, the appropriate Member Agency shall ensure that the following measures are taken, during construction of the project:

- Replace soils over pipelines in a manner that will minimize any negative impacts on crop productivity. The surface and subsurface soil layers will be stockpiled separately and returned to their appropriate locations in the soil profile.
- To avoid over-compaction of the top layers of soil, monitor pre-construction soil densities and return the surface soil (approximately the top 3 feet) to within 5 percent of original density.
- Where necessary, the top soil layers will be ripped to achieve the appropriate soil density. Ripping may also be used in areas where vehicle and equipment traffic have compacted the top soil layers, such as the construction staging areas.
- Avoid working or traveling on wet soil to minimize compaction and loss of soil structure. Before construction begins, geotechnical testing will be done to determine the moisture content limit above which work should not occur. Where working or driving on wet soil cannot be avoided, roadways will be capped with spoils that will be removed at the end of construction and/or ripped and amended with organic material as needed.
- Remove all construction-related debris from the soil surface. This will prevent rock, gravel, and construction debris from interfering with agricultural activities.
- Perform soil density monitoring during backfill and ripping to minimize excessive compaction and minimize effects on future agricultural land use.
- Remove topsoil before excavating in fields. Return it to top of fields to avoid detrimental inversion of soil profiles.
- Control compaction to minimize changes to lateral groundwater flow which could affect both irrigation and internal drainage.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<p>1. Replace soils over pipelines in a manner that will minimize any negative impacts on crop productivity. Stockpile surface and subsurface soil layers separately and return them to their appropriate locations in the soil profile.</p> <p>2. Monitor pre-construction soil densities and return the surface soil (approximately the top 3 feet) to within 5 percent of original density.</p> <p>3. Where necessary, rip the top soil layers to achieve the appropriate soil density.</p> <p>4. Conduct geotechnical testing to determine the moisture content limit above which work should not occur. Where working or driving on wet soil cannot be avoided, roadways will be capped with spoils that will be removed at the end of construction and/or ripped and amended with organic material as needed.</p> <p>5. Remove all construction-related debris from the soil surface.</p> <p>6. Perform soil density monitoring during backfill and ripping.</p> <p>7. Remove topsoil before excavating in fields. Return it to top of fields to avoid detrimental inversion of soil profiles.</p> <p>8. Control compaction to minimize changes to lateral groundwater flow.</p>	<p>1. Incorporate procedure into construction specifications.</p> <p>2. Incorporate procedure into construction specifications.</p> <p>3. Incorporate procedure into construction specifications.</p> <p>4. Incorporate procedure into construction specifications.</p> <p>5. Incorporate procedure into construction specifications.</p> <p>6. Incorporate procedure into construction specifications.</p> <p>7. Incorporate procedure into construction specifications.</p> <p>8. Incorporate procedure into construction specifications.</p>	<p>1. Contractor/ Member Agency</p> <p>2. Member Agency</p> <p>3. Member Agency</p> <p>4. Member Agency</p> <p>5. Member Agency</p> <p>6. Member Agency</p> <p>7. Member Agency</p> <p>8. Member Agency</p>	<p>1. Prior to Construction/ During Construction</p> <p>2. Prior to Construction/ During Construction</p> <p>3. Prior to Construction/ During Construction</p> <p>4. Prior to Construction/ During Construction</p> <p>5. Prior to Construction/ During Construction</p> <p>6. Prior to Construction/ During Construction</p> <p>7. Prior to Construction/ During Construction</p> <p>8. Prior to Construction/ During Construction</p>	<p>Member Agency</p>

Transportation and Traffic

Impact 3.7.1: Temporary Congestion and Delays

Project construction activities could adversely affect traffic and transportation conditions in the project area.

Mitigation Measure 3.7.1a

The appropriate Member Agency for each project component shall obtain and comply with local road encroachment permits for roads that are affected by construction activities.

The *Work Area Protection and Traffic Control Manual* includes requirements to ensure safe maintenance of traffic flow through or around the construction work zone, and safe access of police, fire, and other rescue vehicles (CJUTCC, 1996). In addition, the Traffic Management Plan (subject to local jurisdiction review and approval) required by **Mitigation Measure 3.7.1b**, below, would direct how traffic flow is safely maintained during project construction.

Mitigation Measure 3.7.1b

The construction contractor for each project component shall prepare and implement a Traffic Control/Traffic Management Plan subject to approval by the appropriate local jurisdiction prior to construction. The plan shall:

- Identify hours of construction (between 8:00 AM and 7:00 PM; no construction shall be permitted between 10:00 PM and 7:00 AM);
- Identify hours for deliveries (Monday – Friday, 9:00 AM to 3:30 PM, or other hours if approved by the appropriate local jurisdiction);
- Include a discussion of haul routes, limits on the length of open trench, work area delineation, traffic control and flagging;
- Identify all access and parking restriction, pavement markings and signage requirements (e.g., speed limit, temporary loading zones);
- Layout a plan for notifications and a process for communication with affected residents and businesses prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which lanes and access point/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints;
- Include a plan to coordinate all construction activities with emergency service providers in the area at least one month in advance. Emergency service providers shall be notified of the timing, location, and duration of construction activities. All roads shall remain passable to emergency service vehicles at all times;

- Include a plan to coordinate all construction activities with the appropriate local school district at least two months in advance. The school district shall be notified of the timing, location, and duration of construction activities. Coordinate with the appropriate local school district to identify peak circulation periods at schools along the alignment(s) (i.e., the arrival and departure of students), and require their contractor to avoid construction and lane closures during those periods. The construction contractor for each project component shall be required to maintain vehicle, pedestrian, and school bus service during construction through inclusion of such provisions in the construction contract. The assignment of temporary crossing guards at designated intersections may be needed to enhance pedestrian safety during project construction;
- Include the requirement that all open trenches be covered with metal plates at the end of each workday to accommodate traffic and access; and
- Specify the street restoration requirements pursuant to agreements with the local jurisdictions.

Mitigation Measure 3.7.1c

The appropriate Member Agency for each project component shall identify all roadway locations where special construction techniques (e.g., horizontal boring, directional drilling or night construction) will be used to minimize impacts to traffic flow.

Mitigation Measure 3.7.1d

The appropriate Member Agency for each project component shall develop circulation and detour plans to minimize impact to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone.

Mitigation Measure 3.7.1e

The appropriate Member Agency for each project component shall encourage construction crews to park at staging areas to limit lane closures in the public right-of-way.

Mitigation Measure 3.7.1f

The appropriate Member Agency for each project component shall consult with the appropriate public transit service providers at least one month prior to construction to coordinate bus stop relocations (as necessary) and to reduce potential interruption of transit service.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Obtain local road encroachment permits for roads that are affected by construction activities.	1. Incorporate permit regulations into contract specifications.	1. Member Agency 2. Member Agency 3. Member Agency 4. Contractor/ Member Agency	1. Prior to Construction 2. Prior to and During Construction	Member Agency

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<p>2. Implement a traffic control plan which includes the following measures such as identifying hours of construction and deliveries; identifying access and parking restriction, pavement markings and signage requirements; and planning for notifications; coordinating all construction activities with emergency service providers;</p> <p>3. Identify all roadway locations where special construction techniques (e.g., horizontal boring, directional drilling or night construction) will be used to minimize impacts to traffic flow.</p> <p>4. Develop circulation and detour plans to minimize impact to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone.</p> <p>5. Encourage construction crews to park at staging areas to limit lane closures in the public right-of-way.</p> <p>6. Consult with the appropriate public transit service providers at least one month prior to construction to coordinate bus stop relocations (as necessary) and to reduce potential interruption of transit service.</p>	<p>2. Incorporate traffic control plan measures into contract specifications.</p> <p>3. Incorporate techniques into contract specifications.</p> <p>4. Incorporate plans into contract specifications.</p> <p>5. Incorporate parking restrictions into contract specifications.</p> <p>6. Incorporate transit service notification into contract specifications.</p>	<p>5. Member Agency</p> <p>6. Contractor</p>	<p>3. Prior to and During Construction</p> <p>4. Prior to and During Construction</p> <p>5. During Construction</p> <p>6. Prior to Construction</p>	

Impact 3.7.2: Temporary Disruption to Access

Project construction activity would temporarily disrupt circulation patterns near sensitive land uses (schools, hospitals, fire stations, police stations, and other emergency providers).

Mitigation Measure 3.7.2a

Pipeline construction near schools shall occur when school is not in session (i.e., summer or holiday breaks). If this is not feasible, a minimum of two months prior to project construction, the appropriate Member Agency for each project component shall coordinate with the appropriate local school district to identify peak circulation periods at schools along the alignment(s) (i.e., the arrival and departure of students), and require their contractor to avoid construction and lane closures during those periods.

Mitigation Measure 3.7.2b

A minimum of two months prior to project construction, the appropriate Member Agency for each project component shall coordinate with the appropriate local school district to identify alternatives to their Safe Routes to School program, alternatives for the school busing routes and stop locations, and other circulation provisions, as part of the Traffic Control/Traffic Management Plan (see **Mitigation Measure 3.7.1a**).

Mitigation Measure 3.7.2c

Implement **Mitigation Measure 3.7.1b**.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Restrict pipeline construction near schools to times when school is not in session (i.e., summer or holiday breaks). If this is not feasible, coordinate with the appropriate local school district a minimum of two months prior to project construction to identify peak circulation periods at schools along the alignment(s) (i.e., the arrival and departure of students), and require the contractor to avoid construction and lane closures during those periods.	1. Incorporate restrictions for schools into construction schedule and construction specifications.	1. Member Agency	1. Prior to and During Construction	Member Agency

Impact 3.7.3: Temporary Disruption to Access

Project construction activity would have temporary effects on alternative transportation or alternative transportation facilities.

Mitigation Measure 3.7.3

Implement **Mitigation Measure 3.7.1f**.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Implement Mitigation Measure 3.7.1f.	1. Incorporate transit service notification into contract specifications.	1. Member Agency	1. Prior to Construction	Member Agency

Impact 3.7.4: Temporary Displacement of Parking

Project construction activity would temporarily create parking demand for construction workers and construction vehicles, and displace parking spaces.

Mitigation Measure 3.7.4

Implement **Mitigation Measure 3.7.1e**.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Implement Mitigation Measure 3.7.1e.	1. Incorporate parking restrictions into contract specifications.	1. Contractor	1. During Construction	Member Agency

Impact 3.7.5: Temporary Potential Traffic Hazards

Project construction activity would temporarily increase the potential for accidents on project roadways.

Mitigation Measure 3.7.5

Implement **Mitigation Measure 3.7.1b** through **3.7.1f**.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Implement Mitigation Measure 3.7.1b. 2. Implement Mitigation Measure 3.7.1c. 3. Implement Mitigation Measure 3.7.1d. 4. Implement Mitigation Measure 3.7.1e. 5. Implement Mitigation Measure 3.7.1f.	1. Incorporate traffic control plan measures into contract specifications. 2. Incorporate techniques into contract specifications 3. Incorporate plans into contract specifications. 4. Incorporate parking restrictions into contract specifications. 5. Incorporate transit service notification into contract specifications.	1. Member Agency 2. Contractor/ Member Agency 3. Member Agency 4. Contractor 5. Member Agency	1. Prior to and During Construction 2. Prior to and During Construction 3. Prior to and During Construction 4. During Construction 5. Prior to Construction	Member Agency

Impact 3.7.6: Road Wear

Project construction activity would increase wear and tear on the designated haul routes used by construction vehicles to access the project work sites.

Mitigation Measure 3.7.6

Roads damaged by construction shall be repaired to a structural condition equal to that which existed prior to construction activity as per conditions of the encroachment permit (see **Mitigation Measure 3.7.1a**).

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Obtain local road encroachment permits for roads that are affected by construction activities.	1. Incorporate permit regulations into contract specifications.	1. Member Agency	1. Prior to Construction	Member Agency

Air Quality

Impact 3.8.1: Temporary Construction Emissions of Criteria Pollutants

Project construction activities could result in substantial short-term criteria pollutant emissions.

Mitigation Measure 3.8.1a: Construction Fugitive Dust Control Plan

The appropriate Member Agency shall require its contractor(s) to implement a dust control plan that shall include the following dust control procedures during construction as required by the BAAQMD:

- Water all active construction areas at least twice daily, taking into consideration temperature and wind conditions.
- Cover all trucks hauling soil, sand, and other loose materials *or* require trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways, consistent with **Mitigation Measure 3.1.2, Erosion Control**.
- Replant vegetation in disturbed areas as quickly as possible.

Mitigation Measure 3.8.1b: Construction Exhaust Emissions Control Plan

The appropriate Member Agency shall require its contractor(s) to implement an exhaust emissions control plan that shall include the following controls and practices:

- On road vehicles with a gross vehicular weight rating of 10,000 pounds or greater shall not idle for longer than five minutes at any location as required by Section 2485 of Title 13,

Division 3, Chapter 10, Article 1 of the California Code of Regulations. This restriction does not apply when vehicles remain motionless during traffic or when vehicles are queuing.

- Off road equipment engines shall not idle for longer than five minutes per Section 2449(d)(3) of Title 13, Division 3, Chapter 9, Article 4.8 of the California Code of Regulations. All vehicle operators shall receive a written idling policy to inform them of idling restrictions. The policy shall list exceptions to this rule that include the following: idling when queuing; idling to verify that the vehicle is in safe operating condition; idling for testing, servicing, repairing or diagnostic purposes; idling necessary to accomplish work for which the vehicle was designed (such as operating a crane); idling required to bring the machine to operating temperature as specified by the manufacturer; and idling necessary to ensure safe operation of the vehicle.
- Off road engines greater than 50 horsepower shall, at a minimum, meet Tier 2 emissions standards. When available, higher Tier engines shall be utilized.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Implement BAAQMD Basic Dust Control Measures. 2. Include exhaust controls in contractor specifications. 3. Implement exhaust control measures.	1. Incorporate in contract specifications and Sign-off on inspection report and/ or MMRP that measures are being implemented. 2. Review contract specifications. 3. Sign-off on inspection report and/ or MMRP.	1. Contractor 2. Contractor 3. Contractor	1. During Construction 2. Design and prior to construction 3. During Construction	Member Agency

Impact 3.8.4: Long term Increase in GHG Emissions

Project construction and operation would increase GHG emissions potentially interfering with the State’s GHG reduction goals.

Mitigation Measure 3.8.1b: Construction Exhaust Emissions Control Plan

(see p. 3.8-22 above).

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Implement Mitigation Measure 3.8.1b.	1. Review contract specifications.	1. Contractor	1. Design and During Construction	Member Agency

Noise

Impact 3.9.1: Temporary construction noise

Construction activity would violate standards established in the local general plans or noise ordinances, and/or would adversely affect nearby sensitive receptors.

Mitigation Measure 3.9.1

The appropriate Member Agency shall develop and implement a Construction Noise Reduction Plan that requires, at a minimum, the following:

- The contractor shall locate all stationary noise-generating equipment, including hammer bore and drill rigs, as far as possible from nearby noise-sensitive receptors. Stationary noise sources located within 500 feet of noise-sensitive receptors shall be equipped with noise reducing engine housings, and the line of sight between such sources and nearby sensitive receptors shall be blocked by portable acoustic barriers.
- The contractor shall assure that construction equipment with internal combustion engines have sound control devices at least as effective as those provided by the original equipment manufacturer. No equipment shall be permitted to have an un-muffled exhaust.
- All construction activities within unincorporated areas shall be limited to between the hours depending upon the jurisdiction.
- Residences and other sensitive receptors within 200 feet of a construction area shall be notified of the construction schedule in writing, at least two weeks prior to the commencement of construction activities. This notice shall indicate the allowable hours of construction activities as specified by the applicable local jurisdiction or as defined by this mitigation measure. The construction contractor shall designate a noise disturbance coordinator who would be responsible for responding to complaints regarding construction noise. The coordinator shall determine the cause of the complaint and ensure that reasonable measures are implemented to correct the problem. A contact number for the noise disturbance coordinator shall be conspicuously placed on construction site fences and entrances and included in the construction schedule notification sent to nearby residences and sensitive receptors.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Develop and Implement Construction Noise Reduction Plan. 2. Appropriately locate all stationary noise-generating equipment. 3. Use appropriate equipment.	1. Incorporate into contract specifications; sign-of on inspection report and/or MMRP. 2. Incorporate into contract specifications; sign-of on inspection report and/or MMRP.	1. Contractor 2. Contractor 3. Contractor 4. Contractor 5. Contractor 6. Contractor	1. Prior to and During Construction 2. During Construction 3. During Construction 4. During Construction	Member Agency

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
4. Limit construction activities to specified work hours. 5. Notify sensitive receptors of construction schedule. 6. Designate a noise disturbance coordinator.	3. Incorporate into contract specifications; sign-of on inspection report and/or MMRP. 4. Sign-of on inspection report and/or MMRP. 5. Sign-of on inspection report and/or MMRP. 6. Incorporate into contract specifications; sign-of on inspection report and/or MMRP.		5. At least two weeks Prior to Construction 6. Prior to Construction	

Impact 3.9.2: Temporary vibration impacts

Construction activities could expose sensitive receptors to excessive ground-borne vibration levels.

Mitigation Measure 3.9.2

The appropriate Member Agency will implement the following measure:

The construction contractor shall use a trenchless technology (e.g., horizontal directional drill, lateral drilling, etc.) other than jack and bore when there are structures within 100 feet of the proposed activities. If the construction contractor provides the Member Agency with acceptable documentation indicating that alternative trenchless technology is not feasible for the crossing, the contractor shall develop and implement a Construction Vibration Mitigation Plan to minimize construction vibration damage using all reasonable and feasible means available, including siting the jack and bore as far as possible from all nearby structures. The plan shall provide a procedure for establishing thresholds and limiting vibration values for potentially affected structures based on an assessment of each structure's ability to withstand the loads and displacements due to construction vibrations. The plan should also include the development of a vibration monitoring plan to be implemented during construction of particular crossing.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Implement trenchless technology, when appropriate. 2. Develop a Construction Vibration Mitigation Plan in the event that trenchless technology is not feasible.	1. Incorporate into contract specifications. 2. Incorporate into contract specifications.	1. Contractor 2. Contractor	1. During Construction 2. Prior to and During Construction	Member Agency

Impact 3.9.3: Permanent Increases to Ambient Noise Levels

Operational activities could permanently generate noise levels above existing ambient levels in the vicinity of sensitive receptor locations.

Mitigation Measure 3.9.3

The appropriate Member Agency shall implement the following measure:

All new pump stations shall be located within enclosed structures with adequate setback and screening to achieve acceptable regulatory noise standards for industrial uses as well as to achieve acceptable levels at the property lines of nearby residences, as determine by the applicable local jurisdiction. Noise enclosures shall be designed to reduce equipment noise levels by at least 20 dBA.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Enclose pump stations with screens.	1. Incorporate into construction specifications; Sign-off inspection report and/or MMRP.	1. Contractor/ Member Agency	1. Design and Prior to Construction	Member Agency

Hazards and Hazardous Materials

Impact 3.10.1: Exposure to Hazardous Materials

Project construction could expose workers and the public to hazardous materials that could be present in the soil or shallow groundwater encountered during excavation.

Mitigation Measure 3.10.1a

Project contract specifications shall require that, in the event that evidence of potential soil contamination such as soil discoloration, noxious odors, debris, or buried storage containers, is encountered during construction, the contractor will have a contingency plan for sampling and analysis of potentially hazardous substances, including use of a photoionization detector. The required handling, storage, and disposal methods shall depend on the types and concentrations of chemicals identified in the soil. Any site investigations or remediation shall comply with applicable laws and will coordinate with the appropriate regulatory agencies,

Mitigation Measure 3.10.1b

If unknown USTs are discovered during construction, the UST, associated piping, and impacted soil shall be removed by a licensed and experienced UST removal contractor. The UST and contaminated soil shall be removed in compliance with applicable county and state requirements governing UST removal.

Mitigation Measure 3.10.1c

Prepare a project-specific Health and Safety Plan that would apply to excavation activities. The plan shall establish policies and procedures to protect workers and the public from potential hazards posed by hazardous materials. The plan shall be prepared according to federal and California OSHA regulations and submitted to the appropriate agency with jurisdiction prior to beginning site activities.

Mitigation Measure 3.10.1d

Project contract specifications shall include a Dust Abatement Program to minimize potential public health impacts associated with exposure to contaminants in soil dust.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<p>1. Require that in the event that evidence of potential soil contamination such as soil discoloration, noxious odors, debris, or buried storage containers, is encountered during construction, the contractor will have a contingency plan for sampling and analysis of potentially hazardous substances, including use of a photoionization detector. Any site investigations or remediation shall comply with applicable laws and will coordinate with the appropriate regulatory agencies.</p> <p>2. Remove USTs, associated piping, and any impacted soil discovered during construction.</p> <p>3. Prepare a project-specific Health and Safety Plan that would apply to excavation activities. The plan shall be prepared according to federal and California OSHA regulations and submitted to the appropriate agency with jurisdiction prior to beginning site activities.</p> <p>4. Implement a Dust Abatement Program.</p>	<p>1. Incorporate requirement into construction specifications.</p> <p>2. Incorporate requirement into construction specifications; Comply with applicable county and state requirements governing UST removal.</p> <p>3. Incorporate plan requirements into construction specifications.</p> <p>4. Incorporate program requirements into construction specifications.</p>	<p>1. Contractor/ Member Agency</p> <p>2. Licensed UST Removal Contractor/ Member Agency</p> <p>3. Member Agency</p> <p>4. Member Agency</p>	<p>1. During Construction</p> <p>2. During Construction</p> <p>3. Prior to and During Construction</p> <p>4. Prior to and During Construction</p>	<p>Member Agency</p>

Impact 3.10.2: Release of Hazardous Materials During Construction

Project construction could increase the potential for accidental release of hazardous materials.

Mitigation Measure 3.10.2a

Consistent with the SWPPP requirements, the construction contractor shall be required to implement BMPs for handling hazardous materials onsite. The use of construction BMPs will minimize any adverse effects on groundwater and soils, and will include, but not limited to, the following:

- Follow manufacturers' recommendations and regulatory requirements for use, storage, and disposal of chemical products and hazardous materials used in construction;
- Spill control and countermeasures, including employee spill prevention/response training;
- Avoid overtopping construction equipment fuel gas tanks;
- During routine maintenance of construction equipment, properly contain and remove grease and oils; and
- Properly dispose of discarded containers of fuels and other chemicals.

Mitigation Measure 3.10.2b

The contractor shall follow the provisions of California Code of Regulations, Title 8, Sections 5163 through 5167 for General Industry Safety Orders to protect the project area from being contaminated by the accidental release of any hazardous materials and/or wastes. The local Certified Unified Program Agency (CUPA) will be contacted for any site-specific requirements regarding hazardous materials or hazardous waste containment or handling.

Mitigation Measure 3.10.2c

Oil and other solvents used during maintenance of construction equipment shall be recycled or disposed of in accordance with applicable regulatory requirements. All hazardous materials shall be transported handled, and disposed of in accordance with applicable regulatory requirements.

Mitigation Measure 3.10.2d

In the event of an accidental release of hazardous materials during construction, containment and clean up shall occur in accordance with applicable regulatory requirements.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> 1. Implement BMPs for handling hazardous materials onsite. 2. Protect the project area from being contaminated by the accidental release of any hazardous materials and/or wastes. Contact the local CUPA agency for any site-specific requirements regarding hazardous materials or hazardous waste containment or handling. 3. Recycle or dispose of oil and other solvents used during maintenance of construction equipment in accordance with applicable regulatory requirements. 4. Contain and clean up accidental releases of hazardous materials. 	<ol style="list-style-type: none"> 1. Incorporate BMPs into construction specifications; sign-off on inspection report and/or MMRP. 2. Incorporate provisions into the construction specifications. Comply with the provisions of California Code of Regulations, Title 8, Sections 5163 through 5167 for General Industry Safety Orders. Coordinate with CUPA agency and comply with their recommendations. 3. Incorporate requirement into construction specifications; Comply with regulatory requirements. 4. Incorporate requirement into construction specifications; Comply with regulatory requirements. 	<ol style="list-style-type: none"> 1. Contractor/ Member Agency 2. Member Agency 3. Member Agency 4. Member Agency 	<ol style="list-style-type: none"> 1. During Construction 2. Prior to construction 3. During construction 4. During Construction 	<p>Member Agency</p>

Impact 3.10.4: Wildland Fire Hazard

Construction activities in grassland areas could have the potential to expose people or equipment to risk of loss, injury, or death involving wildland fires.

Mitigation Measure 3.10.4a

For applicable Member Agencies, in consultation with local fire agencies, a Fire Safety Plan will be developed for each of the service areas associated with the project. The Fire Safety Plan(s) will describe various potential scenarios and action plans in the event of a fire.

Mitigation Measure 3.10.4b

For applicable Member Agencies, during project construction, all staging areas, welding areas, or areas slated for development using spark-producing equipment will be cleared of dried vegetation or other material that could ignite. Any construction equipment that includes a spark arrestor shall

be equipped with a spark arrestor in good working order. All vehicles and crews working at the project site(s) will have access to functional fire extinguishers at all times. In addition, construction crews will be required to have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Develop Fire Safety Plan. 2. Clear all staging areas, welding areas, or areas slated for development using spark-producing equipment of dried vegetation or other material that could ignite. Equip construction equipment a spark arrestor in good working order. All vehicles and crews working at the project site(s) will have access to functional fire extinguishers at all times. Require construction crews to have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks.	1. Incorporate Fire Safety Plan into construction specifications. 2. Incorporate measures into construction specifications; sign-off on inspection report and/or MMRP.	1. Member Agency 2. Contractor/ Member Agency	1. Prior to Construction 2. During Construction	LGVSD/NMWD, Novato SD/NMWD

Public Services and Utilities

Impact 3.11.1: Temporary Effect on Response Times for Emergency Service Providers

Project construction activities could temporarily affect response times for emergency service providers.

Mitigation Measure 3.11.1

The Member Agencies will coordinate with local emergency service providers in its service area to inform them of the proposed construction activities and schedule, and provide temporary alternate access routes around construction areas as necessary.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> Coordinate with local emergency providers to inform them of the proposed construction activities and schedule. Provide alternate routes for emergency service providers around construction areas as necessary. 	<ol style="list-style-type: none"> Incorporate into contract specifications Sign-off on inspection report and/or MMRP 	<ol style="list-style-type: none"> Member Agency/ Contractor Contractor 	<ol style="list-style-type: none"> Prior to construction During Construction 	Member Agency

Impact 3.11.2: Short-term Police and Fire Assistance

Project construction activities could require short-term police and fire protection services to assist in traffic management or in the event of an accident.

Mitigation Measure 3.11.2

Public service providers shall provide, upon request, a copy of the Traffic Control Plan to the related police and fire agencies for their review prior to construction. The appropriate Member Agency shall provide 72-hour notice to the local service providers prior to construction of individual pipeline segments. Discussion on the Traffic Control Plan is provided in Section 3.7, Traffic and Circulation.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> Provide Traffic Control Plan to local emergency service providers for review. Provide notice to local fire and police agencies to notify them of construction of individual segments of pipeline. 	<ol style="list-style-type: none"> Sign-off on inspection report and/or MMRP. Sign-off on inspection report and/or MMRP. 	<ol style="list-style-type: none"> Contractor Member Agency/ Contractor 	<ol style="list-style-type: none"> Prior to Construction 72 hours Prior to Construction at each site. 	Member Agency

Impact 3.11.3: Temporary Accidental Disruption to Utility Services

Project construction could result in temporary planned or accidental disruption to utility services.

Mitigation Measure 3.11.3

The Member Agencies will identify utilities along the proposed pipeline routes and project sites prior to construction and implement the following measures:

- a. Utility excavation or encroachment permits shall be obtained as required from the appropriate agencies. These permits include measures to minimize utility disruption. The service provider and its contractors shall comply with permit conditions regarding utility disruption.
- b. Utility locations shall be verified through the use of the Underground Service Alert services and/or field survey (potholing).
- c. As necessary, detailed specifications shall be prepared as part of the design plans to include procedures for the excavation, support, and fill of areas around utility cables and pipes. All affected utility services shall be notified of construction plans and schedule. Arrangements shall be made with these entities regarding protection, relocation, or temporary disconnection of services.
- d. In areas where the pipeline would traverse parallel to underground utility lines within five feet, the project applicant shall employ special construction techniques, such as trench wall-support measures to guard against trench wall failure and possible resulting loss of structural support for the excavated areas.
- e. Residents and businesses in the project corridor shall be notified of any planned utility service disruption two to four days in advance, in conformance with county and state standards.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> 1. Acquire utility excavation or encroachment permits. 2. Verify utility locations using Underground Service Alert services and/or field survey. 3. Include procedures for excavation, support, and fill of areas around utility cables and pipes. 4. Coordinate with affected local utility services to notify them of the proposed construction activities and schedule. 5. Implement special construction techniques, as needed. 6. Notify residents and businesses in advance to inform them of proposed construction activities and schedule. 	<ol style="list-style-type: none"> 1. Comply with regulatory permit, Copies of approved permits will be available onsite. 2. Incorporate into contract specifications. 3. Incorporate in design and contract specifications 4. Incorporate into contract specifications; sign-off on inspection report and/or MMRP 5. Sign-off on inspection report and/or MMRP 6. Sign-off on inspection report and/or MMRP 	<ol style="list-style-type: none"> 1. Contractor/ Member Agency 2. Contactor 3. Contractor 4. Contractor/ Member Agency 5. Contractor 6. Contractor/ Member Agency 	<ol style="list-style-type: none"> 1. Prior to Construction 2. Prior to Construction 3. Prior to Construction 4. Prior to Construction 5. During Construction 6. Prior to Construction 	Member Agency

Cultural Resources

Impact 3.12.1: Impact to Cultural Resources/Archaeological Sites

Project construction could affect existing cultural resources or uncover unknown and/or buried archaeological materials in areas of high prehistoric archaeological sensitivity.

Mitigation Measure 3.12.1

The standard Section 106 process outlined at 36 CFR Part 800 will be completed prior to supplying Federal funds to be used for construction of any facilities for the project. This includes all construction money that involves whole or in partial financing and includes both payment in advance or in reimbursement.

If project circumstances are such that it is infeasible to implement the measures identified below, a phased identification and evaluation strategy that accounts for the individual project effects will be developed in accordance with the procedures for doing so detailed in 36 CFR Part 800.4(b)(2). The alternative procedures would provide a similar level of accounting regarding the effects to cultural resources in a manner not inconsistent with the standard process provided for at 36 CFR Part 800. The alternative procedures agreed to in the Programmatic Agreement would need to be completed prior to construction of any actions that are subsidized with Federal funds. Pursuant to the Section 106 process, the appropriate Member Agency will incorporate the following measures:

Mitigation Measure 3.12.1a: Prepare a Cultural Resources Monitoring Plan

Prior to authorization to proceed, or issuance of permits, the applicant shall prepare and submit a cultural resources monitoring plan to the appropriate jurisdiction for review and approval. Monitoring shall be required for all surface alteration and subsurface excavation work including trenching, boring, grading, use of staging areas and access roads, and driving vehicles and equipment within all areas delineated as sensitive for cultural resources. A qualified professional archaeologist (cultural resources monitor) that is approved by each Member Agency in consultation with all affected jurisdictions shall prepare the plan. The plan shall address (but not be limited to) the following issues:

- Training program for all construction and field workers involved in site disturbance;
- Person(s) responsible for conducting monitoring activities, including Native American monitors;
- How the monitoring shall be conducted and the required format and content of monitoring reports, including any necessary archaeological re-survey of the final pipeline alignment (including the need to conduct shovel-test units or auger samples to identify deposits in advance of construction), assessment, designation and mapping of the sensitive cultural

resource areas on final project maps, assessment and survey of any previously unsurveyed areas;

- Person(s) responsible for overseeing and directing the monitors;
- Schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports;
- Procedures and construction methods to avoid sensitive cultural resource areas (i.e. boring conduit underneath recorded or discovered cultural resource site);
- Clear delineation and fencing of sensitive cultural resource areas requiring monitoring;
- Physical monitoring boundaries (e.g., 200-foot radius of a known site);
- Protocol for notifications in case of encountering of cultural resources, as well as methods of dealing with the encountered resources (e.g., collection, identification, curation);
- Methods to ensure security of cultural resources sites;
- Protocol for notifying local authorities (i.e. Sheriff, Police) should site looting and other illegal activities occur during construction.

Mitigation Measure 3.12.1b: Archaeological and Native American Monitoring

If an intact archaeological deposit is encountered, all soil disturbing activities in the vicinity of the deposit shall cease until the deposit is evaluated. The appropriate Member Agency, as necessary, shall retain the services of a Native American monitor and a qualified archaeological consultant that has expertise in California prehistory to monitor ground-disturbing within areas designated as being sensitive for buried cultural resources. The archaeological monitor shall immediately notify the appropriate Member Agency of the encountered archaeological deposit. The monitors shall, after making a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit, present the findings of this assessment to NBWRA and the appropriate Member Agency. During the course of the monitoring, the archaeologist may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources.

If a Member Agency, in consultation with the monitors, determines that a significant archaeological resource is present within their jurisdiction and that the resource could be adversely affected by the NBWRP, the Member Agency shall:

- Re-design the NBWRP to avoid any adverse effect on the significant archaeological resource; *or*,
- Implement an archaeological data recovery program (ADRP) (unless the archaeologist determines that the archaeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible). If the circumstances warrant an archaeological data recovery program, an ADRP shall be conducted. The project

archaeologist and the Member Agency shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the appropriate Member Agency for review and approval. The ADRP shall identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ADRP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, shall be limited to the portions of the historic property that could be adversely affected by NBWRP. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.

Mitigation Measure 3.12.1c: Cultural Resources Assessment for Staging Areas

When locations for staging are defined the areas of potential effect should be subject to a cultural resources investigation that includes, at a minimum:

- An updated records search at the Northwest Information Center;
- An intensive survey of all areas within the lots;
- A report disseminating the results of this research; and,
- Recommendations for additional cultural resources work necessary to mitigate any adverse impacts to recorded and/or undiscovered cultural resources.

Mitigation Measure 3.12.1d: Inadvertent Discoveries

If discovery is made of items of historical or archaeological interest, the contractor shall immediately cease all work activities in the area (within approximately 100 feet) of discovery. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. After cessation of excavation the contractor shall immediately contact the NBWRA and appropriate Member Agency. The contractor shall not resume work until authorization is received from the appropriate Member Agency.

- In the event of unanticipated discovery of archaeological indicators during construction, the Member Agency shall retain the services of a qualified professional archaeologist to evaluate the significance of the items prior to resuming any activities that could impact the site.
- In the case of an unanticipated archaeological discovery, if it is determined that the find is unique under the National Historic Preservation Act (NHPA) and/or potentially eligible for listing in the National Register, and the site cannot be avoided, appropriate Member

Agency shall provide a research design and excavation plan, prepared by an archaeologist, outlining recovery of the resource, analysis, and reporting of the find. The research design and excavation plan shall be submitted to NBWRA and appropriate Member Agency and approved by the appropriate Member Agency prior to construction being resumed.

Mitigation Measure 3.12.1e: Project-level Cultural Resources Assessment

When project-level plans are completed for the Basic System; the Partially Connected System; and the Fully Connected System, NBWRA the appropriate Member Agency will conduct a cultural resources investigation for the APE that includes, at a minimum:

- An updated records search at the Northwest Information Center (NWIC);
- An intensive cultural resources survey of the Area of Potential Effect (APE);
- A report disseminating the results of this research; and,
- Recommendations for additional cultural resources work necessary to mitigate any adverse impacts to recorded and/or undiscovered cultural resources.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Prepare Cultural Resources Monitoring Plan. 2. Monitor predetermined culturally sensitive areas; cease work if cultural artifacts or humans remains are discovered. 3. Conduct cultural resources investigation for staging areas. 4. Cease work within 100 feet of a find and inform the appropriate Member Agency in the event of an inadvertent discovery of cultural resources. 5. Conduct a project-level Cultural Resources Assessment for program-level areas.	1. Incorporate into contract specifications. 2. Incorporate into contract specifications, and make recommendations for design modification if necessary. 3. Incorporate into contract specifications. 4. Copies of DPR 422 or 523 shall be retained in Member Agency files; incorporate recommendations for design modification if necessary. 5. Incorporate into contract specifications, and make recommendations for design modification if necessary.	1. Qualified Archaeologist 2. Qualified Archaeologist and Native American Monitor 3. Qualified Archaeologist 4. Contractor/ Member Agency 5. Qualified Archaeologist	1. Prior to Construction 2. During Construction 3. Prior to Construction 4. During Construction 5. Following Project Design; Prior to Construction	Member Agency

Impact 3.12.2: Discovery of Human Remains

Project construction could result in damage to previously unidentified human remains.

Mitigation Measure 3.12.2: Discovery of Human Remains

If potential human remains are encountered, the appropriate Member Agency shall halt work in the vicinity of the find and contact the county coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner shall contact the Native American Heritage Commission (NAHC). As provided in Public Resources Code Section 5097.98, the NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. In the event of discovery of human remains, cease work and contact county coroner and NAHC if necessary.	1. Sign-off on inspection report and/ or MMRP; coordinate with NAHC.	1. Contractor/ Member Agency	1. During Construction	Member Agency

Recreation

Impact 3.13.1: Temporary Disturbance

Project construction could result in short-term disturbance adjacent to recreational facilities.

Mitigation Measure 3.13.1a

The appropriate Member Agency shall coordinate with the appropriate local and regional agencies to identify detour routes for the bikeways and trails during construction where feasible, as part of the Traffic Control/Traffic Management Plan (see **Measure 3.11.1a**).

Mitigation Measure 3.13.1b

Implement Mitigation Measures 3.8-1a through 3.8.1b, and Mitigation Measures 3.9-1 through 3.9-3.

Mitigation Measure 3.13.2

Before beginning construction, the contractor will develop, in consultation with the appropriate representative(s) of the affected park's managing agency, a plan indicating how public access to the park will be maintained during construction. If needed, flaggers will be stationed near the

construction activity area to direct and assist members of the public around the activity areas while maintaining access to the parks.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> 1. Identify and establish detours for disrupted bikeways and trails. 2. Maintain public access; station flaggers to assist in directing public. 3. Implement Mitigation Measure 3.8.1a. 4. Implement Mitigation Measure 3.8.1b. 5. Implement Mitigation Measure 3.9.1. 6. Implement Mitigation Measure 3.9.2. 7. Implement Mitigation Measure 3.9.3. 	<ol style="list-style-type: none"> 1. Coordination with local and regional agencies. 2. Coordination with local and regional agencies. 3. Incorporate in contract specifications and Sign-off on inspection report and/ or MMRP that measures are being implemented. 4. Review contract specifications. 5. Incorporate into contract specifications; sign-off on inspection report and/or MMRP. 6. Incorporate into contract specifications. 7. Incorporate into contract specifications; sign-off on inspection report and/or MMRP. 	<ol style="list-style-type: none"> 1. Contractor/ Member Agency 2. Contractor/ Member Agency 3. Contractor 4. Contractor 5. Contractor 6. Contractor 7. Contractor/ Member Agency 	<ol style="list-style-type: none"> 1. Prior to and During Construction 2. Prior to and During Construction 3. Design and Prior to Construction 4. Design and prior to Construction 5. Prior to and During Construction 6. Prior to and During Construction 7. Design and Prior to Construction 	Member Agency

Aesthetics

Impact 3.14.1: Temporary Impact to Scenic Vistas

NBWRP construction activities could temporarily affect scenic vistas or corridors in the NBWRP area.

Mitigation Measure 3.14.1a

Following construction activities, disturbed areas shall be restored to baseline conditions, including repaving roadways, replanting trees, and/or reseeding with a native seed mix typical of the immediately surrounding area.

Mitigation Measure 3.14.1b

Berms around constructed reservoirs shall be vegetated with native seed mixes to soften the visual effect of the reservoirs from adjacent roadways.

Mitigation Measure 3.14-1c

Design elements shall be incorporated to enhance visual integration of the booster pump station and distribution pump station with their surroundings. Proposed facilities shall be painted low-glare earth-tone colors that blend with the surrounding terrain. Highly reflective building materials and/or finishes shall not be used in the designs for proposed facilities.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> Restore disturbed areas to baseline conditions by repaving, replanting, and reseeding land. Incorporate buffers, integrate natural design elements, and use appropriate building materials. 	<ol style="list-style-type: none"> Inspect final site conditions after construction and verify its condition is it equivalent to that prior to construction. Incorporated into construction specifications. Review construction specifications. 	<ol style="list-style-type: none"> Contractor/ Member Agency Contractor 	<ol style="list-style-type: none"> After Construction Design and During Construction 	Member Agency

Impact 3.14.2: Impact to Views Along Scenic Roadways

Implementation of NBWRP could affect views along eligible or designated Caltrans Scenic Highways, or locally-defined scenic routes.

Mitigation Measures

The appropriate Member Agency will implement the following measures:

Mitigation Measure 3.14.1a

Mitigation Measure 3.14.1b

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
<ol style="list-style-type: none"> Implement Mitigation Measure 3.14.1a. Implement Mitigation Measure 3.14.1b. 	<ol style="list-style-type: none"> Review construction specifications. Review construction specifications and landscape design. 	<ol style="list-style-type: none"> Contractor/ Member Agency Contractor 	<ol style="list-style-type: none"> After Construction Design and During Construction 	Member Agency

Impact 3.14.3: Source of Light or Glare

NBWRP components could introduce new sources of light and glare on the project sites.

Mitigation Measures

The appropriate Member Agency will implement the following measures:

Mitigation Measure 3.14.3a: The exterior lighting installed around the operational and capacity storage reservoirs, distribution pump station, storage tanks, and booster pump station shall be of a minimum standard required to ensure safe visibility. Lighting also shall be shielded and directed downward to minimize impacts of light and glare.

Mitigation Measure 3.14.3b: All exterior lighting is directed downward and oriented to insure that limited light source is directly visible from neighboring residential areas. If necessary, landscaping would be provided around proposed facilities. The vegetation would be selected, placed, and maintained to minimize off-site light and glare onto surrounding areas.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Incorporate shielded, downward-oriented, low intensity light sources in design. 2. Plant vegetation to act as a natural buffer around areas that require lighting.	1. Review construction specifications. 2. Review construction specifications.	1. Member Agency 2. Member Agency	1. During Design 2. During Design and After Construction	Member Agency

Impact 3.14.4: Long-term Impact to Aesthetic Character

Development of the proposed facilities, particularly pump stations and storage reservoirs, would permanently alter the aesthetic character of the project area.

Mitigation Measures

The appropriate Member Agency will implement the following measures:

Mitigation Measure 3.14.4a: After construction of any facility that is above grade and visible to sensitive receptors, visual screening and vegetation measures will be implemented to reduce impacts to scenic views. Trees or other suitable vegetation along the fenceline of the facility should be incorporated to reduce the industrial appearance of the structures. Similarly, berms for new storage ponds or pond reconfiguration will be re-vegetated to reduce the barren appearance of the berms.

Mitigation Measure 3.14.4b: Dark colored, non-reflective building materials should be used for project components that cause potentially significant impact from glare to visual resources.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Install screens and vegetation, and trees along fenceline; seed reconfigured berms with native grasses. 2. Integrate natural design elements, and use appropriate building materials.	1. Review construction specifications and landscape design. 2. Review construction specifications.	1. Contractor/ Member Agency 2. Contractor/ Member Agency	1. Design and After Construction 2. Design and During Construction	Member Agency

Cumulative Impacts

Impact 4.1. Construction-related Cumulative Impacts.

Concurrent construction of several projects within the Sonoma, Napa, and Marin County areas could result in cumulative short-term impacts associated with construction activities. If implemented at the same time as other construction projects, construction of facilities under all three of the alternatives could contribute to potential short-term cumulative effects associated with erosion, cultural resource disturbance, disturbance of adjacent land uses, traffic disruption, dust generation, construction noise, aesthetics, air quality, biological resources, hazardous materials, water quality, public services and utilities. However, construction-related impacts would not result in long term alteration of the environment, and could be mitigated to less than significant levels through the use of mitigation measures identified throughout Chapter 3.

Mitigation Measure

The appropriate Member Agency will implement the following measure:

Mitigation Measure 4.1a: Member Agencies shall coordinate construction activities along selected alignments to identify overlapping pipeline routes, project areas, and construction schedules. To the extent feasible, construction activities shall be coordinated to consolidate the occurrence of short-term construction-related impacts.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Coordinate construction activities to identify overlapping routes and construction schedules.	1. Incorporate into contract specifications.	1. Member Agency	1. Prior to Construction	Member Agency

Impact 4.5

Concurrent construction of NBWRP with other projects proposed in the Sonoma, Napa, and Marin County area, and other water and wastewater infrastructure projects, could result in cumulative long-term impacts to biological resources.

Mitigation Measures

Mitigation Measures in Section 3.5.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Implement Mitigation Measure 3.5.1.	1. Comply with regulatory permit; Sign-off on inspection report and/ or MMRP.	1. Member Agency/ Contractor	1. Prior to and During Construction	Member Agency
2. Implement Mitigation Measure 3.5.2.		2. Member Agency/ Contractor	2. Prior to and During Construction	
3. Implement Mitigation Measure 3.5.3.	2. Comply with regulatory permit; Sign-off on inspection report and/ or MMRP.	3. Member Agency/ Contractor	3. Prior to and During Construction	
4. Implement Mitigation Measure 3.5.5.		4. Member Agency/ Contractor	4. Prior to and During Construction	
5. Implement Mitigation Measure 3.5.6.	3. Comply with regulatory permit; Sign-off on inspection report and/ or MMRP.	5. Member Agency/ Contractor	5. Prior to and During Construction	
6. Implement Mitigation Measure 3.5.9.	4. Comply with regulatory permit; Sign-off on inspection report and/ or MMRP.	6. Contractor/ Qualified Biologist	6. Prior to and During Construction	
	5. Comply with regulatory permit; Sign-off on inspection report and/ or MMRP.			
	6. Incorporate into contract specifications.			

Growth Inducement and Secondary Effects of Growth

Impact 5.1. Direct and Indirect Impacts on Growth.

NBWRP would provide recycled water for urban, agricultural, and environmental uses, and as such, would contribute to the provision of adequate water supply to support a level of growth that is consistent with the amount planned and approved within the General Plans of Marin, Sonoma and Napa Counties. No appreciable growth in population or employment would occur as a direct result of construction or operation of the proposed facilities. However, development under the General Plans accommodated by the proposed project would result in secondary environmental

effects, which include effects that would be significant and unavoidable. No additional impacts are anticipated beyond those identified in General Plan EIRs for each County.

Mitigation Measure 5.1a

In order to maintain consistency with the Napa County General Plan, Napa County and Napa SD will approve the MST Local Options 1 and/or 2. This will provide approximately 530 AFY of recycled water that would be available for the existing users in the MST area. Trunk facilities may accommodate service of up to 1,400 AFY of service to existing agricultural irrigators only. Any expansion of service beyond the 1,400 AFY or provision of service to new land uses would be subject to approval by the County Planning Department and the Napa County Board of Supervisors.

Implementation Procedure	Monitoring and Reporting Actions	Monitoring Responsibility	Monitoring Schedule	Responsible Agency
1. Conduct additional land use and CEQA analysis prior to service to un-irrigated parcels or beyond above 1400 AFY.	1. CEQA approval process.	1. Napa County and Napa SD	1. Prior to Project Approval	Napa County/ Napa SD

CHAPTER 6

Statement of Overriding Considerations

6.1 Summary of Overriding Considerations

Section 15093 of the CEQA Guidelines establishes the following requirements for a Statement of Overriding Considerations:

- (a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”
- (b) When the decision of the public agency allows the occurrence of significant effects that are identified in the Final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. This statement may be necessary if the agency also makes a finding under Section 15091(a)(2) or (a)(3).
- (c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination.

Pursuant to Public Resources Code Section 21081 and CEQA *Guidelines* Section 15093, Novato Sanitary District (Novato SD) adopts and makes the following Statement of Overriding Considerations regarding the remaining unavoidable impacts from the Novato North Service Area and Novato Central Service Area Projects, which are a part of Phase 1 of the North Bay Water Recycling Program and the anticipated economic, legal, social, technological, environmental, and other benefits.

In considering the proposed project, Novato SD has weighed the benefits of the NBWRP against its unavoidable environmental risks and potentially significant adverse impacts. Novato SD hereby determines that the benefits of the NBWRP outweigh its unavoidable environmental risks and unmitigated adverse impacts. Novato SD finds that to the extent that the identified significant or potentially significant adverse impacts have not been avoided or substantially lessened, there are specific economic, legal, social, technological or other considerations that support approval of NBWRP.

6.2 Adoption of Overriding Considerations

Novato SD specifically adopts this Statement of Overriding Considerations and finds that: a) as part of the approval provisions, the Proposed Project has eliminated or substantially lessened all significant effects on the environment where feasible; b) the remaining unavoidable impacts of the Proposed Project are acceptable in light of the environmental, economic, legal, social, technological, and other considerations set forth herein, because the benefits of the NBWRP outweigh the significant and adverse impacts of the NBWRP, as noted below.

Novato SD finds that each of the overriding considerations set forth below constitutes a separate and independent ground for finding that the benefits of the NBWRP outweigh its significant adverse environmental impacts and is an overriding consideration warranting approval of the NBWRP. Novato SD finds that substantial evidence in the record supports its findings in this regard.

6.3 Unavoidable Environmental Risks of Proposed Project

The NBWRP will have certain significant effects that are identified in the Final EIR/EIS but will not be fully mitigated. These effects include secondary impacts related to the implementation of approved General Plans within the Novato SD service area, such as conflicts with agricultural land use or other existing land uses, consistency with air quality regulations, permanent loss of sensitive species or habitat, alteration of drainage patterns, impacts to water supply and water quality within unincorporated Marin County; and displacement of wetlands, operation of highways at unacceptable levels of service, and increased emergency service demand and impacts to emergency service response time within the City of Novato, as well as also described in Chapter 5, Growth Inducing Effects and Secondary Effects of Growth, of the Draft EIR/EIS. The project has been modified to provide a level of recycled water supply consistent with the assumptions of the approved *Marin County General Plan* and the *City of Novato General Plan*. As noted in, and consistent with, the Board's approval of the General Plan, some of these impacts will be reduced by identified mitigation measures, but the impacts may not be reduced to a less than significant level.

6.4 Benefits of Proposed Project

Phase 1 Implementation Plan – Novato North Service Area and Novato Central Service Area Projects

The Novato SD Board of Directors has carefully considered the NBWRP described in the EIR/EIS and the unavoidable adverse environmental impacts associated with it and hereby identifies the following environmental, economic, legal, social, technological, and other benefits of the project:

1. Implementing the Proposed Project would provide potable offset of urban and agricultural demands on potable supplies, including surface and groundwater supplies.
2. Implementation of the Proposed Project would reduce the amount of treated effluent discharged to North San Pablo Bay.
3. Implementation of the Proposed Project would be consistent with State and local policies regarding the implementation of recycled water to provide potable water supply offset.
4. Implementation of the Proposed Project would be consistent with recycled water polices identified in approved General Plans within the proposed service area.
5. Implementation of the Proposed Project would provide a reliable local water supply source for dilution of existing bittern ponds in the Napa River Marsh, providing for long-term restoration of wetland marsh areas. Provision of recycled water as a dilution source is consistent with the Napa River Marsh Restoration Project.
6. Implementation of the Proposed Project would reduce groundwater depletion in the MST Area by providing an alternative source of water for irrigation. Reducing groundwater depletion will benefit other users of area water, and help ensure the long-term viability of existing agricultural, residential, open space, and other uses in the Project area.
7. Implementing the Proposed Project would reduce peak demand for water in the summer months. Reducing peak demand will benefit other users of water in the summer months, including threatened and endangered species.
8. The proposed project will be implemented under Reclamation's Title XIV program, which provides funding for recycled water programs that have demonstrated regional coordination and provide multiple benefits.

The Novato SD Board of Directors has weighed the above benefits of the project against its unavoidable environmental risks and the adverse environmental effects that are described in the Final EIR/EIS and hereby determines that the above benefits outweigh the risks and adverse effects. The Board of Supervisors, therefore, determines that these risks and adverse environmental effects are acceptable.

North Bay Water Reuse Authority

Sustainability Through Cooperative Water Recycling

NBWRA North Bay Water Recycling Program



**Novato Sanitary District Board Meeting
Marin County
December 14, 2009**



Overview

- Project Description Overview
- Final EIR/EIS Overview
- Board Consideration:
 - Responsible Agency Under CEQA
 - Resolution for Approval of the joint project with NMWD and the Findings
 - Findings and Statement of Overriding Considerations



The North San Pablo Bay Region





North Bay Water Recycling Program

- Project Objectives
 - Offset urban and agricultural demands on potable supplies
 - Enhance local and regional ecosystems
 - Improve local and regional water supply reliability
 - Maintain and protect public health and safety
 - Promote sustainable practices
 - Give top priority to local needs for recycled water
 - Implement facilities in economically viable manner



CEQA Process

- **NOP Comment Period**

- July 25, 2008 to August 25, 2008

- **Draft DEIR/EIS Circulated May 5, 2009**

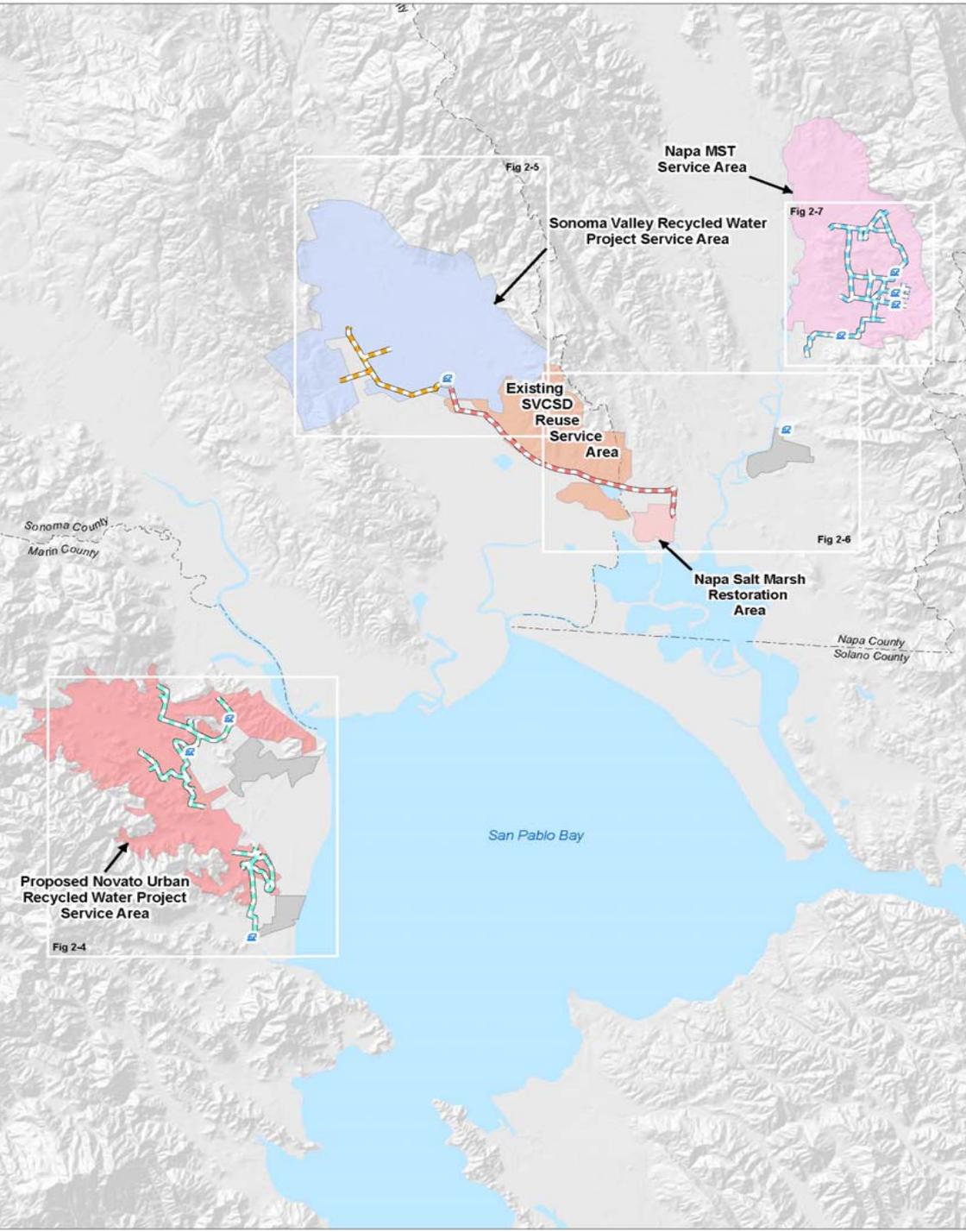
- **45-Day Public Review Period**

- May 5, 2009 to June 26, 2009,
 - Extended through July 20, 2009
 - Public Hearings on June 9, 10, 11, 2009

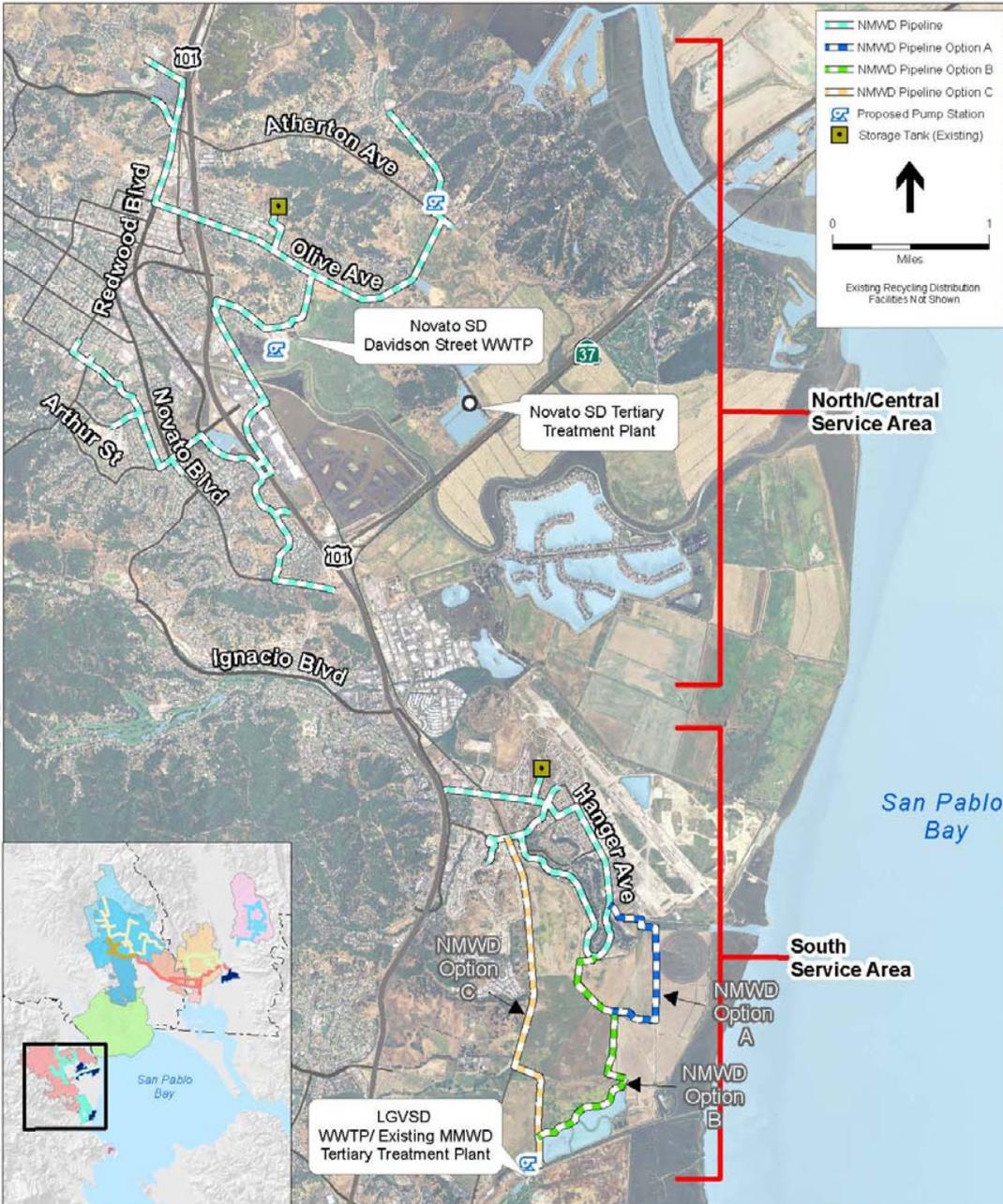
- **Final EIR/EIS**

- Response to Written Comments
 - Circulated November 20, 2009





Phase 1 of Alternative 1 Projects



Marin County Phase 1 Projects



Project Components Under District Jurisdiction

Novato North and Central Service Area Projects

- Provides 542 AFY of recycled water for irrigation
- 1.2 mgd tertiary treatment upgrade
- new booster pump stations
 - 259 HP
- 9.8 miles of pipeline for distribution



Response to Comments and Final EIR/EIS

- **31 Written and Oral Comments**
 - 7 Agencies, 8 Organizations, 16 Individual
- **7 Master Responses Prepared to Address Common or Similar Issue Areas**



NBWRA EIR Certification

- Final EIR/EIS certified by SCWA as CEQA Lead Agency on December 8, 2009
 - EIR completed in compliance with CEQA
 - EIR reflects the Lead Agency's independent judgment and analysis



NBWRA Phase 1 Approvals

- NBWRA Member Agencies consider project approval
 - Las Gallinas Valley San Dist- 12/10
 - Novato Sanitary District -12/14
 - North Marin Water Dist. & Napa County - 12/15
 - Napa Sanitation District 12/16
- US Bureau of Reclamation completes ROD
- Project Design and Construction



Phase 1 Project Approval

- Provides access to federal funding for implementation of tertiary treatment plant
- Provides for recycled water use in partnership with NMWD



Requested Board Action

- Approve NBWRP Projects within Jurisdiction as CEQA Responsible Agency
- Findings Regarding Impacts and Mitigation
- Statement of Overriding Considerations
- Adopt Mitigation Monitoring and Reporting Program (MMRP)
- File Notice of Determination
 - Starts 30-day Statute of Limitations provided for under CEQA



Questions and Board Consideration

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: North Bay Water Reuse Authority Financial Capability Resolution	MEETING DATE: 12/14/2009 AGENDA ITEM NO. : 8.b.
RECOMMENDED ACTION: Approve a Resolution establishing the financial commitment to NBWRA recycled water projects under its jurisdiction.	
SUMMARY AND DISCUSSION: <p>The US Bureau of Reclamation has requested a demonstration of the local project sponsor's willingness to pay for the local share of the NBWRA Recycled Water Project as part of their financial capability analysis. The North Marin Water District has committed to fund 67% of the local share of the Alternative 1, Phase 1 projects that would provide recycled water to Northern and Central Novato assuming that sufficient State and Federal funding is available. The estimated non-federal share cost is \$15,116,000. The Novato Sanitary District local share would be \$5,039,000 of which some may be eligible for State grants through Propositions 50 or 84 or the new Water Bonds.</p> <p>District staff recommends that the Board of Directors adopt the attached Resolution confirming their support of the NBWRA project and authorizing the Manager-Engineer to apply for SRF loans to fund the Novato Sanitary District share of the project cost.</p>	
ALTERNATIVES: None.	
BUDGET INFORMATION: This does not have any immediate impact on the District budget. Depending on the availability of State and Federal Grants this project may proceed in the next five years. It is included in the District's five year Capital Plan.	
DEPT. MGR. :	MANAGER'S APPROVAL:

Novato Sanitary District
Resolution No. _____

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE NOVATO SANITARY DISTRICT CONSIDERING THE NORTH BAY WATER RECYCLING PROGRAM, ESTABLISHING FINANCIAL COMMITMENT TO PROJECTS UNDER ITS JURISDICTION IDENTIFIED IN THE NBWRP PHASE 1 IMPLEMENTATION PLAN

WHEREAS, the District wishes to expand the beneficial use of recycled water in Marin County and to work cooperatively with other agencies within the North Bay region, including Sonoma and Napa Counties, to promote the conservation of limited surface water and groundwater resources; and

WHEREAS, the District is a Member Agency of the North Bay Water Reuse Authority, which has been formed to promote the use of recycled water within the region; and

WHEREAS, the District has participated in the development and preparation of the North *San Pablo Reuse and Restoration Phase 3 Engineering and Economic/ Financial Analysis Report*, which has incorporated projects identified by the District, in partnership with North Marin Water District, for treatment and distribution of recycled water to reduce demands on potable supplies, referred to as the Novato North and Central Service Area Projects, and shown in Draft EIR/EIS Figure 2-4; and

WHEREAS, on December 8, 2009, the Sonoma County Water Agency, as CEQA Lead Agency, certified that the Final EIR/EIS has been: completed in compliance with CEQA; was presented to the decision making body of the Lead Agency, and that the decision making body reviewed and considered the information contained in the EIR; and that that final EIR reflects the lead agency's independent judgment and analysis

WHEREAS, North Marin Water District is strongly committed to continuing to support the use of recycled water in Novato and has confirmed their commitment to pay 67% of the local share of the local Alternative 1, Phase 1 project entitled, "NMWD North and NMWD Central", with a total estimated cost of \$20,142,000 and a local share cost of \$15,116,000.

NOW, THEREFORE, IT IS HEREBY RESOLVED that the foregoing recitals are true and correct and are incorporated herein by reference.

BE IT FURTHER RESOLVED, based on the record of this proceeding and the foregoing findings and determinations, the Board of Directors of the Novato Sanitary District does hereby take the following actions:

1. The Board of Directors confirms its commitment to secure funding for 33% of a local share cost of \$15,116,000 of the Alternative 1, Phase 1 project entitled, "NMWD North and NMWD Central", and will confirm its commitment prior to accepting any Bureau of Reclamation funds.
2. Authorizes the Manager-Engineer to apply for State Revolving Fund loans to fund the local share of the Alternative 1, Phase 1 project entitled "NMWD North and NMWD Central",

3. Authorizes the Manager-Engineer to dedicate a portion of recycled water revenues, service fees, and connection charges to repay the State Revolving Fund loan.

PASSED AND ADOPTED by the Board of Directors of Novato Sanitary District, Marin County, California, at a meeting thereof duly held on the 14th day of December, 2009, by the following vote:

AYES, Members:
NOES, Members:
ABSENT, Members:

Secretary
Novato Sanitary District

APPROVED:

President

APPROVED AS TO FORM:

Kenton L. Alm, District Counsel

1331954v2



**NORTH MARIN
WATER DISTRICT**

999 Rush Creek Place
P.O. Box 146
Novato, CA 94948

PHONE

415.897.4133

FAX

415.892.8043

EMAIL

info@nmwd.com

WEB

www.nmwd.com

December 4, 2009

Michael DiGiorgio, President
Novato Sanitary District
500 Davidson St.
Novato, CA 94945

RE: North Bay Water Reuse Authority Funding Participation, U.S. Bureau of
Reclamation Financial Capability Report
NMWD File 1 6900.22

Dear Mr. DiGiorgio:

As a supporting agency to the North Bay Water Reuse Authority (NBWRA), the North Marin Water District is strongly committed to continue to support NBWRA activities. Assuming environmental phase clearance and successful 25% federal match grant funds, it is NMWD's intent to pay a portion of the anticipated cost to construct the local Alternative 1, Phase 1 project entitled, "NMWD North and NMWD Central", with a total project cost of \$20,142,000 and a local share cost of \$15,116,000. Of this total local share cost, NMWD anticipates paying for 67% of the total cost with the NSD paying 33% of the total cost.

Sincerely,

Chris DeGabriele
General Manager

cc: Beverly James, Manager/Engineer, NSD

CD:redb
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NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Wastewater Treatment Facility Operation	MEETING DATE: December 14, 2009
AGENDA ITEM NO.: 9.a.	
RECOMMENDED ACTION: Authorize execution of an agreement with Aerotek E&E for an amount not to exceed \$120,000.	
SUMMARY AND DISCUSSION: <p>On November 23, 2009, the District was notified that Veolia Water West Operating Services was regretfully having to suspend the agreement to operate and maintain the District's Wastewater Treatment Facilities. This leaves the District short-handed during the critical start up period for the new treatment plant.</p> <p>District staff contacted Aerotek E&E which is an employment agency specializing in providing temporary technical staff. They provided the temporary staff to Camp Dresser McKee which had the contract to start up the new Petaluma Treatment Plant. Aerotek E&E has identified a certified Grade II Operators with a Mechanical Maintenance Certificate available to start January 1, 2010.</p> <p>Staff recommends the Board authorize an agreement for Aerotek to provide up to two Operation and Maintenance Techs for up to six months to assist in the start up and operation of the existing and new treatment plant for an amount not to exceed \$120,000.</p>	
ALTERNATIVES: 1. Hire temporary employees. 2. Operate short-staffed.	
BUDGET INFORMATION: This work will be funded from the budget for "Other Operational Assistance which currently is budgeted for \$77,602. This will need to be amended along with other budget items to account for the suspension of the contract operations agreement.	
DEPT.MGR.:	MANAGER:

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Pump Station Improvements; Project No. 72403	MEETING DATE: December 14, 2009 AGENDA ITEM NO. : 10.a.
RECOMMENDED ACTION: Approve a contract amendment in the amount of \$120,000.00 with Nute Engineering on a time and materials basis.	
SUMMARY AND DISCUSSION: <p>In January, 2008 the Board of Directors approved a Proposal from Nute Engineering in the amount of \$228,500 to prepare plans and specifications, and provide bid and construction phase engineering services for rebuilding the 14 Gorman-Rupp pump stations due to safety issues.</p> <p>During the course of design several unforeseen or unexpected conditions were found in the original design of some of the pump stations that would increase design costs and are as follows:</p> <ul style="list-style-type: none"> ◆ Six of the pump stations' wet wells were undersized which required a redesign of the wet wells for the six pump stations. ◆ Six of the pump stations' sites were undersized and each required unique site designs in lieu of a "cookie cutter" design which would have kept design costs lower. ◆ Four of the pump stations have single phase power. Nute Engineering made applications to PG&E and incorporated PG&E requirements into the project which was not part of the original proposal and added costs to the design. ◆ Two of the pump stations electrical services are 3 phase 208 volt. The District has standardized on 3 phase 240 volt pumps so these sites will require an additional transformer and require a unique design. ◆ Because of the design complications listed above, the project was divided into four projects so the pump stations requiring a more extensive design do not hold up the simple designs. Breaking up the projects adds costs for additional plan sheets and separate specifications but staff believes that by bidding projects sooner rather than later the bids will be lower due to the current bidding climate. It also allows the replacement of some of the pump stations sooner relieving safety concerns. <p>Nute has completed a revised estimate to cover the additional work and to provide engineering services during construction. This work includes construction staking, submittal review, consultation and preparation of as-built drawings. Nute Engineering's estimate for added elements to the original project at \$120,000.00. Staff has reviewed the estimated and believes they are reasonable and accurate. The engineering cost per pump station is still a very reasonable \$24,900.</p> <p>The District is currently bidding the first two groups of pump stations. Staff expects to bid the last two groups by the end of February, 2010.</p>	
ALTERNATIVES: None.	
BUDGET INFORMATION: This work will be funded from Project 72403, Pump Station Rehabilitation Projects. The FY09-10 budget includes \$2,000,000.00 for the project.	
DEPT. MGR. :	MANAGER'S APPROVAL:

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Pump Station Rehabilitation Project; Project Unit 1, Rush Creek & Deer Island Pump Stations; Project No. 72403	MEETING DATE: December 14, 2009 AGENDA ITEM NO.: 10.b.																
RECOMMENDED ACTION: Review bids received and authorize contract award to the lowest responsive bidder.																	
SUMMARY AND DISCUSSION: At its November 9 th meeting the District Board made CEQA findings and authorized staff to advertise for bids for the project. On December 8 th , 8 bids were received as follows:																	
<table style="width: 100%; border: none;"> <tr> <td style="padding-left: 40px;">WR Forde & Associates</td> <td style="text-align: right;">\$687,000.00</td> </tr> <tr> <td style="padding-left: 60px;">Cats 4U</td> <td style="text-align: right;">\$727,980.00</td> </tr> <tr> <td style="padding-left: 40px;">Michael Paul Company</td> <td style="text-align: right;">\$741,000.00</td> </tr> <tr> <td style="padding-left: 60px;">Team Ghilotti</td> <td style="text-align: right;">\$745,896.00</td> </tr> <tr> <td style="padding-left: 40px;">Maggiora & Ghilotti</td> <td style="text-align: right;">\$768,768.00</td> </tr> <tr> <td style="padding-left: 40px;">Nationwide Construction</td> <td style="text-align: right;">\$833,833.00</td> </tr> <tr> <td style="padding-left: 40px;">Water Works Construction</td> <td style="text-align: right;">\$862,601.00</td> </tr> <tr> <td style="padding-left: 60px;">Pacific Infrastructure</td> <td style="text-align: right;">\$874,000.00</td> </tr> </table>		WR Forde & Associates	\$687,000.00	Cats 4U	\$727,980.00	Michael Paul Company	\$741,000.00	Team Ghilotti	\$745,896.00	Maggiora & Ghilotti	\$768,768.00	Nationwide Construction	\$833,833.00	Water Works Construction	\$862,601.00	Pacific Infrastructure	\$874,000.00
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WR Forde & Associates of Richmond submitted the lowest responsive bid of \$687,000.00 or \$37,000.00 (5%) below the estimate of probable construction cost in the amount of \$724,000.00 for this work and \$40,980.00 (6%) below the next highest bidder. WR Forde's bid documents have been reviewed and they are in order. WR Forde's references have also been contacted and they have all provided positive feedback.																	
The FY09-10 budget includes \$2,000,000 for the Pump Station Rehabilitation Projects. To date, \$539,724.00 has been expended. Accordingly, at this time, it is recommended that the Board award the Unit 1 – Rush Creek & Deer Island Pump Stations of the Pump Stations Rehabilitation Project to WR Forde & Associates with a bid of \$687,000.00.																	
ALTERNATIVES: None																	
BUDGET INFORMATION: This work will be funded from the budget for Pump Station Rehabilitation Projects, Project 72403, which has a current FY09-10 budget balance of \$1,460,276.																	
DEPT.MGR.:	MANAGER:																

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Staff Report: Health and Dental Plan Premium Modifications	MEETING DATE: 12/14/09 AGENDA ITEM NO. : 11.a.
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RECOMMENDED ACTION: Information Only

SUMMARY AND DISCUSSION:

Notification of 2010 health and dental plan premiums for the following District policies:

Delta Dental Plan (sub-group of the County of Marin):

	2009 Rates	2010 Rates
Subscriber Only	62.59/mo.	64.41/mo.
Family Rate	155.07/mo.	159.61/mo.

2.9% increase over last year. 10% increase was projected in the 2009-10 budget.

Board Member Kaiser Health Plan (sub-group of the County of Marin):

	2009 Rates	2010 Rates
Subscriber Only	518.19/mo.	571.28/mo.
Subscriber + 1	1,036.38/mo.	1,142.55/mo.
Family Rate	1,378.39/mo.	1,519.00/mo.

An increase of 10.25% over last year. The 2009-10 budget projected an increase of 10%.

PERS Health Plan (Kaiser North rates):

	2009 Rates	2010 Rates
Subscriber	508.30/mo.	532.56/mo.
Subscriber + 1	1,016.60/mo.	1,065.12/mo.
Family Rate	1,321.58/mo.	1,384.66/mo.

This represents an increase of approximately 4.8% as projected in the fiscal year 2009-10 budget.

ALTERNATIVES: Information only.

BUDGET INFORMATION: Health and dental plan premiums should be approximately \$2,000 less than budgeted.

DEPT. MGR. :

MANAGER'S APPROVAL: