Appendix A

Notices and Public Involvement

Appendix A-1
Public Scoping Report (includes NOP and NOI)

Alternative Intake Project

SCOPING REPORT

May 2005

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

CONTRA COSTA
WATER DISTRICT

Scoping Report for the Contra Costa Water District Alternative Intake Project

Prepared by:
Contra Costa Water District
1331 Concord Avenue
Concord, CA 94524
Contact: Samantha Salvia
(925) 688-8057

and

Bureau of Reclamation, Mid-Pacific Region
2800 Cottage Way, MP-152
Sacramento, CA 95825-1898
Contact: Erika Kegel
(916) 978-5081

With Technical Assistance From:
EDAW
2022 J Street
Sacramento, CA 95814
Contact: Phil Dunn
(916) 414-5800

Carollo Engineers
2700 Ygnacio Valley Road, Suite 300
Walnut Creek, CA 94598
Contact: Ken Wilkins, P.E.
(925) 932-1710

Lucy & Company
1614 19th Street
Sacramento, CA 95814
Contact: Lucy Eidam
916-491-3161

May 2005

CONTRA COSTA WATER DISTRICT
1331 Concord Avenue
P.O. Box H2O
Concord, California 94524

BUREAU OF RECLAMATION
Mid-Pacific Region
2800 Cottage Way
Sacramento, California 95825-1898

IN REPLY
REFER TO:
MP-700
PRJ-1.10

Subject: Scoping Report, Alternative Intake Project

Dear Interested Party:

Enclosed for your information is a copy of the scoping report for the Alternative Intake Project, a project proposed by Contra Costa Water District (CCWD) to protect and improve the quality of water delivered to CCWD's treated water and raw (untreated) water customers. This scoping report summarizes the scoping and public involvement process used by CCWD and the Bureau of Reclamation to identify significant issues related to the proposed Alternative Intake Project and to assist in the preparation of an environmental impact report/environmental impact statement (EIR/EIS) on the project. The document provides a summary of issues raised. These issues will be addressed in the EIR/EIS.

Scoping is an important component of the environmental review process and was undertaken in accordance with guidelines for compliance with the National Environmental Policy Act and the California Environmental Quality Act. These guidelines call for an early and open process for determining the scope of issues related to the proposed action and identification of significant issues for study in the EIR/EIS. The information in this document was obtained through three public scoping meetings and written input from various individuals and agencies. The report represents the views and concerns of the participants in those meetings and those who submitted written comments. CCWD and Reclamation will continue to involve the public in this effort throughout the environmental review process.

We would like to extend our appreciation to those who participated in, and contributed to, the public involvement effort. We urge your continued participation in these efforts. Your views and concerns are important and will be fully considered in the environmental process.

Should you have any additional comments or concerns related to the EIR/EIS or the information in this document, please feel free to contact Samantha Salvia at 925-688-8057 or Erika Kegel at 916-978-5081, email ssalvia@ccwater.com, or ekegel@mp.usbr.gov, respectively.

Sincerely,

Samantha Salvia
Principal Engineer
Contra Costa Water District

Alan R. Candlish
Regional Planning Officer
Mid-Pacific Region
Bureau of Reclamation

Enclosure

Table of Contents

Figures

Appendices

1.0 Proposed Action

Contra Costa Water District (CCWD) serves treated and raw (untreated) water to approximately 500,000 people in central and eastern Contra Costa County and is the largest urban water contractor of the Central Valley Project (CVP). CCWD's mission is to "strategically provide a supply of high-quality water at the lowest cost possible, in an environmentally responsible manner." CCWD obtains its water supply exclusively from the Delta. Water quality at CCWD's intakes declines at times, affecting CCWD's ability to provide high-quality water to its customers. In addition, federal and state drinking water regulations are becoming more stringent. The basic project purpose is to protect and improve the quality of water delivered to CCWD's raw water customers and treated water customers.

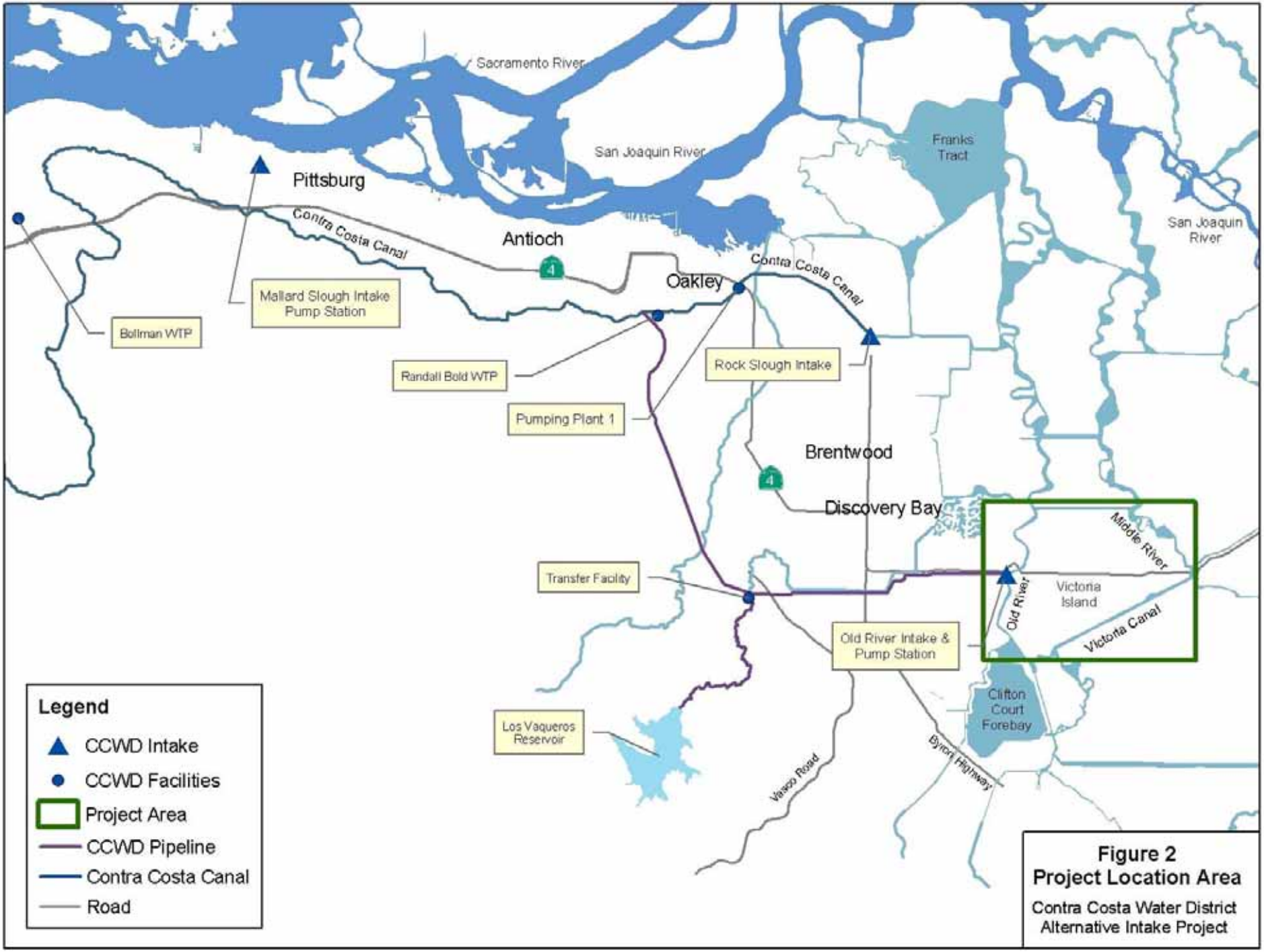
The U.S. Bureau of Reclamation (Reclamation) operates the CVP and is the largest wholesaler of water in the country. The proposed action would involve adding a new point of diversion to certain existing water rights held by CCWD and by Reclamation, and would require Reclamation's approval of an additional point of diversion pursuant to CCWD's water service contract with Reclamation, and operational changes.

CCWD and Reclamation are the lead agencies for preparation of an environmental impact report/environmental impact statement (EIR/EIS) on the proposed action.

The proposed action includes CCWD's construction of a new intake with a capacity of up to 250 cubic feet per second (cfs) and fish screen in the central Delta, a pumping plant, and an associated conveyance facility (pipeline or canal) from the new intake to CCWD's existing Old River conveyance system. The alternative intake would allow CCWD to relocate some of its diversions to a Delta location with better source water quality than is currently available at its Old River and Rock Slough intakes. Although it would change the location (and quality) of some of CCWD's existing diversions, the proposed action would not increase CCWD's total Delta diversion capacity (rate or annual quantity).

The project facilities would be located in Contra Costa and San Joaquin Counties. CCWD proposes to construct the new water intake facility and fish screens along the lower third of Victoria Canal on Victoria Island. A pipeline or canal would be constructed to convey water from the new intake and associated pumping plant approximately 2–4 miles across agricultural lands on Victoria Island toward Old River to the west, and a pipeline would be installed under Old River to convey the water to the Old River Pumping Plant and conveyance system on Byron Tract. The pipeline would either be tunneled under Old River and its levees or would cross over the top of the levees and be buried just beneath the bottom of Old River and would tie into the existing Old River facilities. Figures 1 and 2 show the project location.

Figure 1
Regional Location Map
Contra Costa Water District
Alternative Intake Project


Sacramento River
San Joaquin River
Franks Tract
San Joaquin River
Pittsburg
Contra Costa Canal
Antioch
4
Oakley
Contra Costa Canal
Mallard Slough Intake Pump Station
Bollman WTP
Randall Bold WTP
Rock Slough Intake
Pumping Plant 1
Brentwood
4
Discovery Bay
Middle River
Victoria Island
Old River
Victoria Canal
Transfer Facility
Old River Intake & Pump Station
Clifton Court Forebay
Los Vaqueros Reservoir
Vasco Road
Byron Highway
Legend
CCWD Intake
CCWD Facilities
Project Area
CCWD Pipeline
Contra Costa Canal
Road
Figure 2
Project Location Area
Contra Costa Water District
Alternative Intake Project

1.0 Proposed Action

The proposed action would meet the following key CCWD objectives:

- Improve delivered water quality, especially during drought periods.
- Protect and improve health and/or aesthetic benefits to consumers.
- Improve operational flexibility, including maintaining the benefits of the Los Vaqueros Project.
- Protect delivered water quality during emergencies.

2.0 Scoping Process

2.1 General Description and Purpose of Scoping

Scoping is an initial and critically important component of the environmental review process. Scoping is intended to assist in identifying the final range of actions, alternatives, site design options, environmental resources, and mitigation measures that will be analyzed in an environmental document. The scoping process helps ensure that problems are identified early and properly studied and also helps to eliminate from detailed study those issues that are not critical to the decision at hand.

Scoping is conducted as part of compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), but is a more formalized process under NEPA. Scoping can be conducted in various forms and may involve numerous participants, but generally involves the solicitation of input from the public and/or interested agencies to determine the scope, focus, and contents of an environmental document.

2.1.1 NEPA Requirements

NEPA requires a formal scoping process for the preparation of an environmental impact statement (EIS). Under NEPA, scoping is the process by which a lead agency for EIS preparation solicits input on the nature and extent of issues and impacts to be addressed in the EIS and the methods by which they will be evaluated. NEPA specifically requires the lead agency to consult with federal agencies having jurisdiction by law and/or special expertise on the proposed action and to solicit information from the public during EIS preparation.

The Council on Environmental Quality's NEPA guidance requires the lead agency's scoping process to:

- invite affected federal, state, and local agencies, Indian tribes, project proponents, and other interested persons to participate in the EIS process;
- determine the potential significant environmental issues to be analyzed in depth in the EIS;
- identify and eliminate issues determined to be insignificant or addressed in other documents;
- allocate assignments among the lead agency and any cooperating agencies regarding preparation of the EIS, including impact analysis and identification of mitigation measures;

- identify related environmental documents being prepared; and
- identify other environmental review and consultation requirements.

Scoping should occur as early as possible after the lead agency decides to prepare an EIS. The NEPA lead agency is required to publish a notice of intent (NOI) in the Federal Register announcing its intent to prepare an EIS. Although not specifically required by NEPA, the lead agency may also hold scoping meetings. Scoping must occur after the NOI is issued, but may occur earlier, as long as appropriate public notice is provided and enough project information is available to allow the public and relevant agencies to participate effectively. While publication of the NOI serves as the trigger for starting the scoping process, there is no equivalent activity to mark its conclusion until public release of the Draft EIS. Often, the NEPA lead agency prepares a scoping report to summarize the issues raised during the scoping process and to publicize any decisions that have been made during the scoping process. This report can serve as closure to the scoping process and an assurance that the NEPA lead agency will consider comments received during that process.

2.1.2 CEQA Requirements

Scoping is a less formalized process under CEQA, but is encouraged. As described for NEPA compliance, scoping is recognized as a means to help identify the range of actions, alternatives, environmental effects, methods of assessment, and mitigation measures to be analyzed in depth in an environmental impact report (EIR), and eliminates from detailed study those issues that are found not to be important. Scoping is also an effective way to bring together and resolve the concerns of interested federal, state, and local agencies; the proponent of the action; and other interested persons, including project opponents.

Tools used to determine the scope of an EIR include early public and inter-agency consultation, the notice of preparation (NOP) of an EIR, and scoping meetings with agencies and the public. Of these tools, only the NOP is a mandatory requirement under CEQA for the preparation of an EIR. Issuance of the NOP, similar to the NOI under NEPA, serves as the trigger for soliciting comments on the proposed project. Scoping typically ends with the release of the Draft EIR, although public involvement continues throughout the project review and approval effort.

As a result of scoping, the CEQA lead agency may limit discussion in an EIR of non-significant environmental effects to a brief explanation of why those effects are not considered potentially significant.

Formal scoping meetings are not required by CEQA when a lead agency has decided to prepare an EIR; however, many lead agencies do conduct scoping meetings to obtain input about the scope and content of an EIR. An exception to this provision is that a CEQA lead agency must hold at least one scoping meeting when either the California Department of Transportation requests such a meeting

for a proposed project that may affect facilities under its jurisdiction, or the proposed project is of statewide, regional, or areawide significance.

2.2 Public Outreach Efforts for the Alternative Intake Project

Numerous outreach efforts have been undertaken to inform stakeholders about the Alternative Intake Project and the scoping process and to solicit their input. The sources of information are described below. As detailed above, there is not a specific time period during which scoping begins and ends; however, scoping activities for the Alternative Intake Project were formally initiated with the release of the NOP and NOI in January 2005, and CCWD requested that comments be submitted by March 4, 2005.

2.2.1 Informational Notices

Notice of Intent (NOI)

Reclamation published the NOI in the Federal Register on January 25, 2005. The NOI provides a summary of the proposed action and presents information on the scoping meetings, CCWD and Reclamation contacts, and project background. Copies of the NOI were made available to scoping meeting attendees, and an electronic version of the document was posted on CCWD's project Web site (see below). The NOI is included in Appendix Section A.

Notice of Preparation (NOP)

CCWD filed the NOP with the State Clearinghouse and released it publicly on January 25, 2005. The NOP provides notice of the scoping meetings, presents an overview of the proposed action and CCWD's statement of the purpose of and need for the project, lists the issues anticipated to be addressed in the EIR/EIS, lists the public agencies that may have jurisdiction over elements of the proposed action or have responsibility for resources that could be affected by construction or operation of the project, and provides contact information. In addition to State Clearinghouse distribution to potentially interested state agencies, copies of the NOP were mailed to 40 recipients known to have an interest in CCWD operations. Copies were also made available to scoping meeting attendees. An electronic version of the document was also posted on CCWD's project Web site (see below). The NOP, CCWD's distribution list, and the State Clearinghouse acknowledgment of distribution are included in Appendix Section B.

Fact Sheet

CCWD distributed a two-page project fact sheet in a mailing to 128 stakeholders in January 2005, including the 40 recipients of CCWD's NOP mailing. The fact sheet was also made available at the public scoping meetings, and an electronic version was posted on the project Web site. The fact sheet provides an overview of the proposed action, describes CCWD's project objectives, explains potential

benefits to CCWD's customers, provides a project timeline, and solicits public input. The fact sheet is reproduced in Appendix Section C.

CCWD Newspaper Notices

CCWD placed a newspaper display advertisement and a legal notice in the *Contra Costa Times*, the primary newspaper in CCWD's service area, on the weekend of February 5–6, 2005. The weekend newspaper circulation is over 180,000. The advertisement and notice announced CCWD and Reclamation's intention to prepare an EIR/EIS, the places and times of the scoping meetings, CCWD contact information, and the availability of information on CCWD's project Web site. Appendix Section D contains copies of these notices.

Reclamation News Release

Reclamation issued a news release on January 27, 2005, announcing the scoping meetings and soliciting public input on the project. The distribution list included 48 recipients, including newspapers; radio stations; television stations; water districts; and interested agencies, groups, and organizations. Appendix Section E includes the text of the news release and the distribution list.

Web Site

CCWD maintains a project Web site for the Alternative Intake Project (www.ccwater-alternativeintake.com) that contains public documents, provides answers to frequently asked questions, lists project contact information, provides project updates, and includes an electronic question/comment submittal form. Scoping meeting information was posted on the Web site on January 25, 2005, the day on which the NOI and NOP were published.

2.2.2 Stakeholder Outreach

CCWD met with potentially interested agencies to provide an overview of the proposed project and solicit their input. Meetings were held with representatives of Reclamation District 800 (board and staff), Reclamation District 2040, the Anadromous Fish Screen Program Workgroup, and the Central Valley Fish Facilities Review Team. The Anadromous Fish Screen Program Workgroup includes representatives from Reclamation; U.S. Fish and Wildlife Service (USFWS); National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries); California Department of Water Resources (DWR); and California Department of Fish and Game (DFG). The Central Valley Fish Facilities Review Team includes representatives from these agencies and from the California Bay–Delta Authority. Additional meetings with these stakeholders are anticipated. A pre-application meeting with the U.S. Army Corps of Engineers (USACE) is scheduled for June 2005.

2.2.3 Scoping Meetings

Three scoping meetings were held the week of February 13, 2005, to provide opportunities for interested parties to learn about the proposed project and to provide input. Comment cards and copies of project documents were made available to participants. In addition, a map of the project area was displayed and

discussed. Each meeting included a presentation describing the project background, the environmental review process, and the public outreach efforts. Meeting locations, dates, and times were as follows:

- Concord (CCWD board room)—Tuesday, February 15, 2005 at 6:00 p.m.
- Sacramento (Reclamation office on Cottage Way)—Wednesday, February 16, 2005 at 10:00 a.m.
- Antioch (Veterans of Foreign Wars Hall)—Thursday, February 17, 2005 at 6:00 p.m.

A copy of the scoping presentation is included in Appendix Section F. Appendix Section G includes a summary of the meeting presentations, lists the meeting attendees, and provides a summary of oral comments and questions and answers from the meetings.

2.2.4 Scoping Report

This scoping report was created to outline the process and outcome of the scoping meetings and other activities. Specifically, this report includes an overview of scoping requirements; a list of all documents/products generated for project outreach; a summary of all comments made during the scoping process, both written and verbal; a description of the issues anticipated to be addressed in the EIR/EIS; and an appendix that includes hard copies of all written comments, summaries of the scoping meetings, and other project-related print materials used to inform interested parties about the proposed action and the EIR/EIS.

3.0 Scoping Comments

3.1 Introduction

Comments were received in written and electronic format, as well as presented orally at the scoping meetings. Notes were taken during the scoping meetings to record questions and answers and the attendees' comments. The notes are provided in Appendix Section G.

Comments from the following agencies and individuals were received by mail and electronic mail:

- Graydon Nichols, Victoria Island Farms (VIF);
- B. Sachau
- Jack Bragg, Intralox;
- John Herrick, South Delta Water Agency (SDWA);
- Margit Aramburu, Delta Protection Commission (DPC);
- Debbie Pilas-Treadway, Native American Heritage Commission (NAHC);
- Timothy C. Sable, California Department of Transportation (Caltrans);
- James A. Starr, DFG;
- Katherine F. Kelly, DWR;
- Tom Dumas, Caltrans;
- Terry L. Erlewine, State Water Contractors;
- Jon D. Rubin, Kronick, Moskovitz, Tiedmann & Girard, attorneys for San Luis & Delta-Mendota Water Authority (SL&DMWA);
- Dante John Nomellini, Central Delta Water Agency (CDWA); and
- Michael E. Aceituno, NOAA Fisheries
- Stephen L. Jenkins, State Lands Commission
- Laura Fujii, U.S. Environmental Protection Agency

The written comments are reproduced in Appendix Section H.

All comments that are relevant to the contents of the EIR/EIS and the environmental review process are summarized by major topic in Section 3.2, "Summary of Comments Received."

3.2 Summary of Comments Received

Project Purpose/Need and Project Timing

The project may be premature, given that CCWD is currently evaluating the Los Vaqueros Reservoir Expansion, which would meet the same purpose and includes accommodating the capacity of the existing Old River intake in its design and locating a new intake in Delta locations including Victoria Canal. (DFG)

The Delta Improvements Package (DIP) states that state and federal agencies will work with CCWD, if appropriate, to relocate CCWD's intake to Victoria Canal if other DIP measures do not provide acceptable continuous water quality improvements. Pursuit of CCWD's new intake is premature, given that many actions described in the DIP to improve water quality in the Delta have not yet been implemented. It is recommended that evaluation of the Alternative Intake Project be delayed to allow for the implementation of measures outlined in the DIP and the realization of their benefits, such as implementation of the Veale/Byron Tract projects and the evaluation of the Franks Tract project (DFG, DWR)

Until a preferred alternative for the South Delta Improvement Program (SDIP) is identified, including tidal barrier and Clifton Court Forebay operations, it would be premature for CCWD to begin a project that will change diversion patterns in the South Delta. The effects of the SDIP on CCWD water quality cannot be determined until the preferred alternative is selected. Should CCWD's water quality be affected, CCWD could then consider initiating its own project. The CCWD project would delay the environmental review process for the SDIP as it would have to take into account CCWD's proposed intake, further delaying selection of the preferred SDIP alternative. Also, the CALFED Franks Tract project could significantly improve CCWD's water quality. (SDWA)

Project Description, Alternatives, and Project Design

Victoria Island is within the Delta primary zone; development is restricted, and lands therefore have lower value within the primary zone, a situation that unfairly encourages their development for purposes such as utility corridors and water pipelines. The proposed pipeline could instead cross Old River at the southern tip of Victoria Island and run north on the west side of Old River. (VIF)

The Intralox fish screen would provide benefits over older fish screen technologies and should be considered for use by CCWD. (Intralox)

Any diversion located on Middle River would not be acceptable. (SDWA)

CCWD's water quality could be improved with a variety of other projects and actions undertaken as part of the CALFED Delta Improvements Program (sic) without affecting State Water Project (SWP) water quality. The EIR/EIS must consider these alternatives to a new intake project. (State Water Contractors)

The environmental review should consider the impacts associated with the Los Vaqueros Reservoir Expansion and should examine other reasonable alternatives to improve water quality in Old River at the existing CCWD intake, including improvement of the flow and water quality in the San Joaquin River; physical modifications in the Delta, such as those proposed for Franks Tract; changes in SWP and Central Valley Project operations; and intake locations farther south along the west side of Old River, including connections to Clifton Court Forebay. (CDWA)

Describe whether the proposed action would result in shutting down the Old River pump station, abandoning the Rock Slough or Mallard Slough intakes, or reducing Rock Slough pumping or would play a role in determining whether to install a fish screen at Rock Slough. (Oral comments, February 16 scoping meeting – Cimperman, DWR; Holmes, DFG; and Oppenheim, NOAA Fisheries)

Delta Hydrology/Hydraulics and Water Quality

The proposed intake could adversely affect water quality (salinity) of Victoria Island farmers' agricultural diversions. Fewer agricultural diversions will be affected the farther south the intake is located. To ensure that use of the intake will not affect agricultural water diversions, dredging of some channels will likely be required or operation of the new intake will need to be limited to times when water levels will not be measurably affected. (VIF)

The effects of the proposed diversion on Delta channel water quality, elevations, and circulation should be examined. (SDWA)

Operation of CCWD's proposed intake will affect the flow and salt loads at Vernalis. Analysis should be deferred until existing south Delta water quality/circulation and water depth needs are resolved. (SDWA)

DWR is concerned about degradation of water quality at the SWP's Clifton Court Forebay, the Central Valley Project's Tracy Pumping Plant, and local diversions for Delta agriculture as a result of the proposed intake. The EIR/EIS should explain how these potential water quality effects have been evaluated and the basis for determination of impact significance. (DWR)

The proposed intake could adversely affect SWP water quality by diverting freshwater supplies that otherwise would have reached the state pumps. The EIR/EIS must evaluate such impacts. (State Water Contractors)

Water Supply

The proposed intake could adversely affect Victoria Island farmers' ability to divert water from surrounding channels, particularly from south of the proposed intake. Currently, siphons are used for these diversions, and they will not function if water level drops too low. Agricultural water quality could also be affected. Fewer agricultural diversions will be affected the farther south the intake is located. To ensure that use of the intake will not affect agricultural water diversions, dredging of some channels will likely be required or operation of the new intake will need to be limited to times when water levels will not be measurably affected. (VIF)

Operation of CCWD's proposed intake will affect in-channel water supplies and water management in the south Delta. Analysis should be deferred until existing south Delta water supply issues are resolved. (SDWA)

The hydrologic and water quality analyses must consider impacts south of the Delta, including potential impacts on the water supply of San Luis & Delta-Mendota Water Authority member agencies. (SL&DMWA)

Drainage

To ensure that the project does not interfere with drainage and irrigation facilities, any pipeline across Victoria Island would need to be buried at least 10 feet below the ground surface and 15 feet below the invert of any canal or ditch. (VIF)

Agricultural Resources (Interference with Agricultural Operations)

Placement of the proposed pipeline could interfere with local farming operations. (SDWA)

Impacts on agriculture from a new pipeline should be minimized and mitigated. (DPC)

Levees

Placement of the proposed pipeline could affect levee protection. (SDWA)

Biological Resources

Permanent access of birds and wildlife to water must be considered. The plan should provide for species' needs. (Sachau)

Transportation/Traffic

The EIR/EIS should evaluate project impacts on state transportation facilities, particularly State Route 4. (Caltrans)

Any work or improvements within California Department of Transportation's (Caltrans') right-of-way must be evaluated. All roadway features within Caltrans right-of-way must be protected or restored if temporarily affected by the project. CCWD is encouraged to coordinate with Caltrans to address potential transportation impacts and ensure that traffic safety and quality standards are maintained on state transportation facilities. (Caltrans)

Recreation

The project should not interfere with recreation activities in the area. (DPC)

Cultural Resources

Contact the appropriate information center for a cultural resource records search to determine whether the project area has been previously surveyed, whether any resources were recorded, the probability of finding resources in the project area, and whether a survey is required. If a survey is conducted, the findings and recommendations should be detailed in a report of the records search and field survey. The Native American Heritage Commission should be contacted for a Sacred Lands File check and a list of appropriate Native American contacts. A project mitigation plan should take into account the potential for the presence of subsurface resources and should include monitoring by a certified archaeologist and a qualified Native American monitor in archaeologically sensitive areas, provisions for the disposition of recovered artifacts in consultation with appropriate Native American representatives, and provisions for the discovery of Native American human remains in accordance with relevant laws. (NAHC)

Cumulative Impacts

CCWD's proposed project should coordinate with other projects in the area, including the South Delta Improvements Program. (DPC)

Institutional/ Policy Issues

Any actions taken in the south and central Delta must meet the mutual needs of local diversions according to the priorities of California water law, including the Delta Protection Act and area of origin law. (SDWA)

The Alternative Intake Project is part of the CALFED program. As such, it must comport with the CALFED solution principles of reducing conflicts in the system, being equitable, being affordable, being durable, being implementable, and having no significant redirected impacts. The EIR/EIS should state the proposed intake will adhere to and be guided by those principles. (SL&DMWA)

Moving away from CCWD's Old River intake location toward the central Delta is another step toward abandoning protection of water quality in the Old River portion of the Delta. This is likely to result in physical and regulatory degradation. State Water Project and Central Valley Project contractors have voiced their intent to secure improved water quality in Old River. Central Delta Water Agency (CDWA) opposes the Alternative Intake Project until it is clear that Old River water quality will not be improved and that proposed measures to improve San Joaquin River water quality and reduce salinity intrusion, including possible improvements at Frank's Tract and at other locations, will not improve water quality to a reasonable degree. Preservation of the Delta as a common pool serving both export and local water needs helps maintain a common interest with exporters in protection of water quality in most of the Delta (an exception is the western Delta, including CCWD's intake at Mallard Slough). (CDWA)

Permitting and Agency Coordination

If CALFED funding is granted to help finance the proposed project, an Action Specific Implementation Plan (ASIP) will have to be completed simultaneously with the EIR/EIS. CCWD is encouraged to contact state and federal regulatory agencies to begin early consultation to initiate the ASIP process. (DFG)

Any work performed within the California Department of Transportation's right-of-way would require an encroachment permit. (Caltrans)

Federally listed and other federally protected fish species may occur in the project area, designated critical habitat exists within the proposed project area for winter-run chinook salmon, and critical habitat has been proposed in the project area for Central Valley steelhead. NOAA Fisheries recommends that Reclamation and CCWD use the informal consultation process before submitting a written request to NOAA Fisheries for formal consultation. Through informal consultation, plans may be developed to minimize any potential impacts, thus making formal consultation unnecessary. In addition to the information presented in the EIR/EIS, information that would assist NOAA Fisheries during information consultation includes a plan that integrates the operation of the proposed alternative intake with existing CCWD intakes, reducing the need for pumping during critical fish periods at the unscreened Rock Slough Intake; assessment of whether the action will require a change in the Water Level Response Plan recently completed by Reclamation for the State Water Resources Control Board; assessment of consistency with Reclamation's Operating Criteria and Plan (OCAP) for the CVP and SWP; and assessment of consistency with the South Delta Improvement Program and barrier operations. (NOAA Fisheries)

To the extent that the proposed action is located on state-owned sovereign lands, it appears to be subject to Section 6327 of the Public Resources Code. Section 6327 provides that an application for a lease from the State Lands Commission will not be required for a facility if the facility is for the procurement of fresh water from navigable waters and the applicant obtains a permit from the local reclamation district, the State Reclamation Board, USACE, or DWR. (State Lands Commission)

Schedule

The proposed environmental compliance timeline is ambitious. Several issues need to be resolved to accommodate the timeline, including landowner permission to survey the property and plant species surveys that would need to be conducted in spring and early summer. (DFG)

4.0 Conclusions

The Alternative Intake Project Draft EIR/EIS will describe the direct adverse and beneficial environmental effects of implementing the proposed action. The Draft EIR/EIS will also evaluate any indirect effects of implementing the proposed action, such as potential growth-inducing effects, and the cumulative effects of the proposed action when considered in conjunction with those of other related past, present, and reasonably foreseeable future projects. A No-Action Alternative and other project alternatives will also be evaluated, as required to comply with CEQA and NEPA.

4.1 Issues to Be Analyzed in the Draft EIR/EIS

All comments received as a part of the scoping process will be considered by CCWD and Reclamation in preparation of the Draft EIR/EIS. On the basis of preliminary consideration of the proposed action as described in the NOP and NOI, and taking into account the public and agency input received during the scoping process, CCWD and Reclamation have determined that the issues addressed in the Draft EIR/EIS will include the following:

Agriculture

- Conversion of farmland to non-agricultural use
- Potential interference with local farming operations

Air Quality

- Increases in pollutant emissions associated with construction activities or with pump operation

Cultural and Paleontological Resources

- Potential for disturbance of significant known or undiscovered cultural resources, if present

Delta Hydrology and Water Quality

- Hydraulic effects in Delta channels (elevation and circulation) and effects on Delta water quality, particularly in the south Delta
- Effects of channel modification
- CVP and SWP water quality impacts
- Effects on CCWD operations and water quality
- Effects on the salinity of local agricultural diversions

Delta Water Supply

- Local south Delta diversion effects
- CCWD water supply effects
- CVP and SWP water supply impacts

Earth Resources: Geology, Soils, and Seismicity

- Temporary erosion conditions during construction
- Risks related to the placement of facilities in areas subject to seismic activity or having unstable soils
- Effects on levee stability

Fisheries and Aquatic Resources

- Construction or operational effects on special-status fish species or their habitats, including adequacy of fish screens
- Increased flexibility to use different intakes to minimize impacts on fish and maximize fish benefits

Hazardous Materials

- Potential spills of hazardous materials or waste during construction

Land Use

- Consistency with existing land uses and zoning
- Consistency with the Delta Protection Commission's *Regional Land Use Plan* for the primary zone of the Delta

Local Hydrology, Drainage, and Groundwater

- Modification of local drainage such that agricultural practices require modification or crop production is adversely affected
- Potential impacts to local diversion capabilities (i.e., siphon operation) or discharges

Noise

- Temporary increases in ambient noise levels during construction
- Long-term increases in noise associated with operation of a new pumping plant

Recreation

- Disturbance of recreational activities in areas adjacent to construction activities

Terrestrial Biological Resources

- Disturbance of riparian vegetation, jurisdictional wetlands or other waters of the U.S., or other sensitive natural communities for the construction of project facilities
- Construction or operational effects on special-status terrestrial species or their habitats

Transportation and Circulation

- Temporary construction effects on local traffic circulation
- Impacts on the state highway system, especially State Route 4, including traffic safety

Utilities and Service Systems

- Potential disruption of service and need for the relocation of utilities
- Energy consumption during project operations

Visual Resources

- Temporary and long-term changes in scenic views or visual character of project sites, particularly from Highway 4

Cumulative Impacts/Consistency with Other Projects

- Effects of the action in combination with those of other related past, present, and reasonably foreseeable future actions
- Consistency and compatibility with proposed projects in the Delta
- Consistency with CALFED solution principles

4.2 Issues Not to Be Analyzed in the Draft EIR/EIS

On the basis of preliminary consideration of the project elements and taking into account the public and agency input received during the scoping process, no environmental impacts are anticipated for the following resource areas: mineral resources, population and housing, and public services (fire and police protection, schools, parks, and other public facilities). There are no known mineral resources in the project area. The project also would have no features that would increase population growth, displace substantial numbers of existing residences, create the need for a substantial amount of new housing, or increase demands on existing or future public services. These resource areas will not be addressed in the EIR/EIS.

4.3 Alternatives Analysis

Three preliminary action alternatives were identified in the scoping materials: two alternatives consisting of different configurations and/or conveyance facilities associated with an alternative intake in the lower third of Victoria Canal, as well as a desalination facility as a third alternative. Scoping commenters suggested some additional alternatives for analysis, including other elements of the CALFED Delta Improvements Package, such as the Franks Tract project. CCWD will proceed with alternatives screening and analysis, incorporating this input, and on the basis of the screening analysis will select alternatives to be carried forward for further development in the EIR/EIS.

A No-Action Alternative will also be evaluated, as required under NEPA and CEQA.

Appendix of Project Scoping Documents

A Notice of Intent

B Notice of Preparation, CCWD Distribution List, and State Clearinghouse Acknowledgment

C CCWD Fact Sheet

D CCWD Display Advertisement and Public Notice of Scoping Meetings

E Reclamation News Release and Distribution

F Presentation for Scoping Meetings

G Scoping Meeting Notes

H Copies of Written Comments

Section A

Notice of Intent

always the case in an exploration context. Higher exploration costs can reduce the likelihood that areas will be economically feasible to explore. Potentially productive areas that remain unexplored can prevent the nation and New Mexico from realizing the benefits of domestic energy production.[13]

Conclusion

As previously discussed, you have not identified inconsistencies with state resource related plans, policies, and programs. Neither are your recommendations for federal public lands completely consistent with the management practices on state lands with oil and gas resources. Nevertheless, I have instructed the New Mexico BLM to take steps to further strengthen its support for the state plans, policies, and programs that you have noted. Among these steps are expanded protection for potential bighorn sheep habitat and occupied black-tailed prairie dog habitat in the planning area.

Also, I have reviewed your complete recommended alternative as you requested. In short, your recommendations would place some 1,538,018 acres (75% of the planning area), either off-limits to drilling completely or under stipulations that place significant barriers to effective exploration and development. Such a plan is unbalanced. Your recommended plan does not give reasonable consideration to the federal and state interest in domestic energy exploration and production in Sierra and Otero Counties, and it adds little significant protection for other natural resources. I therefore cannot approve your recommended alternative and must deny your appeal.

The BLM proposed plan allows a reasonable opportunity for exploration and development, but the plan does not ignore the important environmental interests of the area. The plan closes the six Areas of Critical Environmental Concern (ACEC) to leasing. It also closes eight areas that have been nominated for ACEC status. As you previously recommended, the BLM proposed plan will not allow any fluid mineral leasing in the 35,790 acres of potential Aplomado falcon habitat located in the Nutt and Otero Mesa grassland areas. The broader grassland areas are subject to protective stipulations, including the 5% maximum disturbance rule. All of this is under the umbrella of the RFD-based analysis that anticipates short term disturbance from oil and gas activities of 1,589 acres throughout this nearly 2.1 million acre planning area. That disturbed area is less than one-tenth of 1% of the entire planning area. The proposed plan also includes strict landscape reclamation standards that will be applied to any areas of disturbance. I believe the BLM proposed plan offers a reasonable balance between energy needs and environmental considerations and improves the management regime found in the currently effective 1986 *White Sands RMP*. Under that plan, some 96% of the planning area would be open to leasing without any special stipulations.

Again, I thank you for your participation in the land use planning process for Sierra and Otero Counties. Your appeal is hereby denied, and I affirm the decision of the New Mexico State Director. Although I have denied this appeal, it is my hope that the New Mexico BLM and the State of New Mexico will continue to communicate and cooperate on future issues.

Sincerely,

Kathleen Clarke,

Director, Bureau of Land Management.

[FR Doc. 05–1315 Filed 1–24–05; 8:45 am]

BILLING CODE 4310–84–P

[13] For example, the unleased areas closest to the successful Bennett Ranch well location would be subject to the NSO stipulation under your alternative. Under the *Proposed RMPA/EIS* plan this area would be subject to stipulations, such as the 5% rule, that would allow for the possibility of limited exploration with both vertical and directional wells.

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[NV–952–05–1420–BJ]

Filing of Plats of Survey; Nevada

AGENCY: Bureau of Land Management.

ACTION: Notice.

SUMMARY: The purpose of this notice is to inform the public and interested State and local government officials of the filing of Plats of Survey in Nevada.

EFFECTIVE DATES: Filing is effective at 10 a.m. on the dates indicated below.

FOR FURTHER INFORMATION CONTACT: David D. Morlan, Chief, Branch of Geographic Sciences, Bureau of Land Management (BLM), Nevada State Office, 1340 Financial Blvd., P.O. Box 12000, Reno, Nevada 89520, 775–861–6541.

SUPPLEMENTARY INFORMATION:

1. The Plat of Survey of the following described lands was officially filed at the Nevada State Office, Reno, Nevada, on December 16, 2004:

The plat, in six (6) sheets, representing the dependent resurvey of a portion of the south boundary of T. 14 N., R. 25 E.; a portion of the subdivisional lines and Mineral Survey Nos. 4499, 4531, and 4778, and the subdivision of certain sections, Township 13 North, Range 25 East, Mount Diablo Meridian, Nevada, under Group No. 806, was accepted December 14, 2004. This survey was executed to meet certain administrative needs of the Bureau of Land Management.

2. The above-listed survey is now the basic record for describing the lands for all authorized purposes. This survey has been placed in the open files in the BLM Nevada State Office and is available to the public as a matter of information. Copies of the survey and related field notes may be furnished to the public upon payment of the appropriate fees.

Dated: January 13, 2005.

David D. Morlan,

Chief Cadastral Surveyor, Nevada.

[FR Doc. 05–1260 Filed 1–24–05; 8:45 am]

BILLING CODE 4310–HC–P

DEPARTMENT OF THE INTERIOR

Bureau of Reclamation

Contra Costa Water District Alternative Intake Project, Contra Costa and San Joaquin Counties, CA

AGENCY: Bureau of Reclamation, Interior.

ACTION: Notice of Intent to prepare an environmental impact statement (EIS) and notice of scoping meetings.

SUMMARY: Pursuant to section 102(2)(c) of the National Environmental Policy Act (NEPA), the Department of the Interior, Bureau of Reclamation (Reclamation) intends to prepare an EIS to evaluate Contra Costa Water District's (CCWD's) proposed Alternative Intake Project. The project purpose is to protect and improve water quality for CCWD's customers. The proposed action includes the construction of a new intake and fish screen in the Central Delta, a pumping plant, and an associated pipeline from the new intake to CCWD's Old River Pumping Plant on Old River. The proposed action would involve adding a new point of diversion to certain existing water rights held by CCWD and by Reclamation. In addition to the proposed action, other alternatives will be evaluated that may include different intake locations, desalination, and other treatment options. Potential Federal involvement may include the approval of an additional point of diversion pursuant to CCWD's water service contract with Reclamation, and operational changes. The EIS will be combined with an Environmental Impact Report (EIR) prepared by CCWD pursuant to the California Environmental Quality Act (CEQA).

DATES: Three public scoping meetings will be held to solicit comments from interested parties to assist in determining the scope of the environmental analysis, including the alternatives to be addressed, and to identify the significant environmental issues related to the proposed action. The meeting dates are:

- Tuesday, February 15, 6–8 p.m. in Concord, California.
- Wednesday, February 16, 10 a.m.–12 p.m. in Sacramento, California.
- Thursday, February 17, 6–8 p.m. in Antioch, California.

Written comments on the scope of the environmental document, alternatives, and impacts to be considered should be sent to Ms. Samantha Salvia at the address below. All comments are requested by March 4, 2005.

ADDRESSES: The scoping meetings will be held at:

- Concord at the CCWD Board Room, Contra Costa Water District, 1331 Concord Avenue.
- Sacramento at the Federal Building Cafeteria Conference Room C–1001, Bureau of Reclamation, 2800 Cottage Way.
- Antioch at the Veterans of Foreign Wars Hall, 815 Fulton Shipyard Road.

FOR FURTHER INFORMATION CONTACT: Ms. Samantha Salvia, Project Manager, Contra Costa Water District, P.O. Box H2O, Concord, CA 94524–2099, (925) 688–8057, *alternativeintake@ccwater.com;* or Mr. Robert Eckart, Supervisory Environmental Specialist, Bureau of Reclamation, Mid-Pacific Region, 2800 Cottage Way, MP–152, Sacramento, CA, 95825–1898, (916) 978–5051, *reckart@mp.usbr.gov.* If you would like to be included on the EIS/EIR mailing list, please contact Ms. Salvia by e-mail at *alternativeintake@ccwater.com.*

SUPPLEMENTARY INFORMATION:

Background

CCWD's mission is "to strategically provide its service area with a reliable supply of high-quality water at the lowest cost possible, in an environmentally responsible manner." CCWD relies entirely upon the Sacramento-San Joaquin Delta for its supply, which includes both Central Valley Project (CVP) water and water diverted under CCWD water rights. Water quality problems for CCWD result from elevated concentrations of salinity, minerals, bromide and organic carbon, and turbidity in Delta source water. These constituents can cause taste and odor problems for consumers and may contribute to health risks in some individuals. Water quality degradation in the Delta from increased diversions, upstream development, and runoff, have made it more difficult for CCWD to meet increasingly stringent drinking water regulations and the water quality objectives that CCWD has set for service to its customers.

To continue to protect and improve water quality delivered to its customers, CCWD is initiating a two-year planning study that will evaluate the benefits of CCWD adding a new, screened intake and conveyance system in the southwest portion of the central Delta, to access better source water quality. The study will complete project planning, alternatives analyses, a joint EIR/EIS, permitting, and preliminary engineering design by mid-2006. At that point, it will be decided whether to proceed with design and construction of the recommended project.

The proposed project would add a new intake at a location with better quality water, but would not increase CCWD's total diversion capacity (rate or annual quantity). The existing Old River Intake and Pump Station, with a current capacity of 250 cubic feet per second (cfs), would remain in place. The new up to 250 cfs intake would provide CCWD with the operational flexibility to divert water from Old River or the new intake to provide the highest water quality for CCWD customers (the total maximum diversion rate of 250 cfs would not change). A new pipeline, approximately two to four miles in length, would convey water from the new intake, in the southwest portion of the Delta, to CCWD's existing Old River conveyance system.

The proposed project would involve adding a new point of diversion to certain existing water rights held by CCWD and by Reclamation. CCWD would not seek to increase its water rights, CVP contract amounts, or Los Vaqueros Reservoir filling or release rates through this project; CCWD and Reclamation would only seek to add a new point of diversion.

If implemented, it is anticipated that the project would help protect CCWD customers' future water quality, ensure that CCWD is able to meet or exceed future drinking water regulatory requirements, and provide increased operational flexibility. The project would be developed in a way that avoids or minimizes impacts, including impacts to Delta water users and to the environment.

Additional Information

The environmental review will be conducted pursuant to NEPA, CEQA, the federal and state Endangered Species Acts, and other applicable laws, to analyze the potential environmental impacts of implementing a range of feasible alternatives. There are no known Indian Trust Assets or environmental justice issues associated with the proposed action. Public input on the range of alternatives to be considered will be sought through the public scoping process.

Our practice is to make comments, including names and home addresses of respondents, available for public review. Individual respondents may request that we withhold their home addresses from public disclosure, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold a respondent's identity from public disclosure, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public disclosure in their entirety.

Dated: January 18, 2005.

Frank Michny,

Regional Environmental Officer, Mid-Pacific Region.

[FR Doc. 05–1286 Filed 1–24–05; 8:45 am]

BILLING CODE 4310–MN–P

DEPARTMENT OF JUSTICE

[OVW Docket No. 0001]

Office on Violence Against Women; Notice of Meeting

AGENCY: Office on Violence Against Women, Justice.

ACTION: Notice of meeting.

SUMMARY: This notice sets forth the schedule and proposed agenda of the forthcoming public meeting of the National Advisory Committee on Violence Against Women (hereinafter "the Committee").

DATES: The meeting will take place on February 10, 2005, from 8:30 a.m. to 4 p.m. and on February 11, 2005, from 8:30 am to 12 noon.

ADDRESSES: The meeting will take place at the Westin Embassy Row, 2100 Massachusetts Avenue NW., Washington, DC 20008.

FOR FURTHER INFORMATION CONTACT: Jana Sinclair White, The National Advisory Committee on Violence Against Women, 810 Seventh Street, NW., Washington, DC, 20531; by telephone at: (202) 307–6026; e-mail: *Jana.S.White@usdoj.gov;* or fax: (202) 307–3911. You may also view the Committee's Web site at: *http://www.ojp.usdoj.gov/vawo/nac/welcome.html.*

SUPPLEMENTARY INFORMATION: Notice of this meeting is required under section 10(a)(2) of the Federal Advisory Committee Act. The Committee is chartered by the Attorney General, and co-chaired by the Attorney General and the Secretary of Health and Human Services (the Secretary), to provide the Attorney General and the Secretary with practical and general policy advice concerning implementation of the

Section B

Notice of Preparation

CCWD Distribution List

State Clearinghouse Acknowledgment of Receipt and Distribution

NOTICE OF PREPARATION

To: **Agencies and Interested Parties**

From: **Contra Costa Water District**

Date: **January 25, 2005**

Subject: **Announcement of: 1) Notice of Preparation of a Draft Environmental Impact Report on the Alternative Intake Project; 2) Public Scoping Meetings to be held in Concord on February 15, Sacramento on February 16, and Antioch on February 17; and 3) Scoping Comments Due by March 4, 2005**

The quality of water in the Sacramento-San Joaquin Delta, the Contra Costa Water District's (CCWD's) sole source of water, continues to deteriorate despite efforts to improve it. In order to continue to provide high-quality water for its customers and meet increasingly stringent drinking water quality standards, CCWD is proposing the Alternative Intake Project (proposed project). The proposed project includes the construction of a new intake and fish screen in the Central Delta, a pumping plant, and an associated pipeline from the new intake to CCWD's Old River Pumping Plant on Old River. This new Delta location would provide CCWD with better source water quality than is currently obtained from its Old River and Rock Slough intakes. The proposed project would provide CCWD with increased flexibility in operations, including Los Vaqueros Reservoir filling and blending operations; would protect water customers from future Delta water quality degradation; and would help ensure that CCWD can meet or exceed future drinking water regulatory requirements. The proposed project would use CCWD's existing water supply and would involve adding a new point of diversion to withdraw water under certain existing water rights held by CCWD and by the U.S. Bureau of Reclamation (Reclamation); the proposed project would not increase CCWD's total Delta diversion capacity (rate or annual quantity) but would change the location (and quality) of existing diversions.

PURPOSE OF THE NOTICE OF PREPARATION

The California Environmental Quality Act (CEQA) specifies that a public agency must prepare an environmental impact report (EIR) on any project that it proposes to carry out or approve that may have a significant direct or indirect impact on the environment (Public Resources Code Section 21100[a]). CCWD has determined that the proposed project may have significant impacts on the environment. CCWD, acting as the lead agency for CEQA compliance, intends to prepare an EIR on the proposed project. CCWD anticipates that a joint EIR and National Environmental Policy Act (NEPA) compliance document (environmental assessment [EA] and/or environmental impact statement [EIS]), with Reclamation serving as the lead federal agency, will be prepared.

The purposes of this notice are to:

1. briefly describe the proposed project and the anticipated content of the draft EIR to be prepared for the proposed project;

2. announce three public scoping meetings to facilitate public input and to be held:

    a. Tuesday, February 15, 2005, from 6:00 to 8:00 p.m. at the CCWD Board Room, Contra Costa Water District, 1331 Concord Avenue, Concord, CA;

    b. Wednesday, February 16, 2005, from 10:00 a.m. to 12:00 p.m. at the Federal Building Cafeteria Conference Room C-1001, Bureau of Reclamation, 2800 Cottage Way, Sacramento, CA; and

    c. Thursday, February 17, 2005, from 6:00 to 8:00 p.m. at the Veterans of Foreign Wars Hall, 815 Fulton Shipyard Road, Antioch, CA; and

3. solicit input by March 4, 2005, from interested agencies, organizations, and individuals about the content and scope of the draft EIR, including the alternatives to be addressed and the potentially significant environmental impacts.

PURPOSE OF AND NEED FOR THE PROPOSED PROJECT

BACKGROUND

CCWD is a public agency formed in 1936 by local Contra Costa County, California residents. CCWD serves treated and raw (untreated) water to approximately 500,000 people in central and eastern Contra Costa County. CCWD provides treated water to Clayton, Clyde, Concord, Pacheco, and Port Costa, and parts of Martinez, Pleasant Hill, and Walnut Creek. In addition, CCWD sells wholesale treated water to the city of Antioch and the California Cities Water Company in Bay Point. CCWD treats water at the Randall-Bold Water Treatment Plant in Oakley for delivery to the Diablo Water District (DWD) and the city of Brentwood. CCWD sells raw water to the cities of Antioch, Martinez, and Pittsburg, DWD in Oakley, and the California Cities Water Company in Bay Point, as well as 22 major industrial customers and a number of smaller industrial customers.

CCWD is a Central Valley Project (CVP) contractor, historically relying almost entirely on Reclamation to supply its water from the Sacramento-San Joaquin Delta. CCWD diverts Delta water at three locations: the Mallard Slough intake at Mallard Slough, the Contra Costa Canal intake at Rock Slough, and the Old River (Los Vaqueros Reservoir) intake in Old River near Highway 4. These intakes are subject to variations in water quality caused by salinity intrusion, Delta hydrodynamics, and discharges into the Delta and its tributary streams from both point and nonpoint sources. The Old River intake is used most frequently because it has the best quality water of the three locations. CCWD uses the Old River intake to capture Delta flows when water quality is high, transfer the higher-quality water into Los Vaqueros Reservoir, and later blend the

stored reservoir water with supplies obtained directly from the Delta when Delta water quality is poor. The Old River intake is also used for direct delivery to customers. Rock Slough is used as CCWD's other option for diversions, and relatively minor diversions are made from Mallard Slough in most years due to high salinity levels at this intake.

NEED FOR THE PROPOSED PROJECT

Need to Protect Water Quality

Several factors have degraded water quality at CCWD's Old River and Rock Slough intakes. First, increased salinity concentrations in water entering the Delta from upstream are exacerbated by upstream water use; increased Delta export pumping by the CVP and the State Water Project (SWP) reduces the freshwater outflow to San Francisco Bay that provides a barrier to salty San Francisco Bay water. Second, during dry conditions, the amount of runoff from the Sierra Nevada is well below normal, and water releases from storage reservoirs upstream of the Delta are also reduced. As a result, freshwater flow into the Delta is reduced further, allowing large amounts of the higher-salinity water from San Francisco Bay to intrude farther east into the Delta. Third, California's continued population growth in the Central Valley is increasing diversions of water from the Delta as well as increasing runoff and discharge from wastewater treatment plants and stormwater. Finally, agricultural runoff from the Sacramento and San Joaquin watersheds, as well as local agricultural runoff and drainage from lands surrounding the channels leading to the two existing intakes, contribute to degradation of water quality at these intakes.

The Delta is an estuary with naturally salty water that is high in organics. Concentrations of salinity, organic carbon, and other drinking water constituents of concern can vary not only temporally but spatially. CCWD's primary intake at Old River is subject to greater salinity concentrations than are present in some other channels in the Delta. As conditions in the Delta degrade, the Old River intake will not be able to consistently meet CCWD source water quality objectives as well as it can today.

Need to Improve Water Quality

CCWD's source water quality ultimately influences the quality of its treated water, as well as its ability to protect public health and meet drinking water standards and CCWD treated water quality goals. CCWD's treated water quality goals are designed to provide customers with the highest water quality that is reasonably achievable and to ensure that constituents of major health concern are kept to the lowest levels that are technically feasible and not merely at levels to meet existing regulatory limits. The U.S. Environmental Protection Agency (EPA) and California Department of Health Services (DHS) are the primary regulatory agencies charged with setting and enforcing drinking water standards to protect public health. The most important recent water quality regulations relevant to CCWD are four of EPA's Microbial/Disinfection Byproducts (DBPs) rules, promulgated in 2001 and 2003. The overall goal of this group of regulations is to balance the health risks from microbial pathogens with those from carcinogenic DBPs. The rules include new requirements for treatment efficacy and *Cryptosporidium* inactivation/removal (proposed), as well as new standards for DBPs, disinfectants, and potential contaminants. In addition to federal requirements, regulatory requirements have been

established by DHS in accordance with the California Safe Drinking Water Act and Related Laws, referred to as the "blue book." On the horizon for May 2005 are changes to the DBP Rules and the Long-Term Enhanced Surface Water Treatment Rule, which are in the regulatory review process. CCWD's commitment to protecting public health, together with the trend in increasingly more restrictive water quality requirements, necessitate that CCWD continue to strive to improve the quality of its source water so, in turn, CCWD can improve the water quality delivered to its customers. A proactive approach is proposed to ensure that CCWD water sources, facilities, and operations anticipate and meet future regulatory requirements and CCWD treated water quality goals.

PURPOSE OF THE PROPOSED PROJECT

CCWD is implementing a comprehensive water quality strategy to protect and improve source and treated water quality for its customers. CCWD's multi-pronged approach includes seeking improved water quality sources, reducing impacts of Delta agricultural drainage on source water quality, participating in collaborative research on advanced water treatment of Delta water, and supporting regulatory and legislative initiatives for source water protection. As part of this multi-pronged approach, CCWD is proposing the Alternative Intake Project to add a new intake to access source water having a higher quality than occurs at CCWD's existing intakes during certain times of the year. CCWD's existing intakes are all located in the western Delta, where water quality can be diminished due to seawater intrusion into the Delta and other reasons. An additional intake in the Delta would increase CCWD's flexibility to access better quality water than is currently available at CCWD's existing intakes during certain time periods. The basic project purpose is to protect and improve water quality for CCWD's raw water customers and treated water customers. Key objectives of CCWD's project purpose are as follows:

1. **Improve Water Quality, Especially During Drought Periods.** Improve source water quality and ensure delivered water quality remains high, particularly in late summer/fall months and during drought periods, when Delta water quality declines dramatically and source water quality is most degraded.

2. **Protect and Improve Health and/or Aesthetic Benefits to Consumers.** Enable CCWD to consistently meet or exceed current and future drinking water regulations and CCWD water quality goals to provide high-quality water and protect public health by reducing salinity and disinfection byproduct (DBP) precursors in source water.

3. **Improve Operational Flexibility.** Increase operational flexibility to help improve source water quality and maximize the benefits of Los Vaqueros Reservoir by enabling CCWD to extend the time periods during which Delta water of sufficient quality is available for: 1) filling Los Vaqueros, and 2) direct use without the need for blending with higher-quality Los Vaqueros Reservoir water to meet source water quality goals.

4. **Protect Water Quality During Emergencies.** Help protect CCWD source water quality during emergency situations by enabling CCWD to avoid diverting water from areas of the Delta affected by a levee failure, chemical or hazardous spill, or other potentially catastrophic events.

OVERVIEW OF THE PROPOSED ALTERNATIVE INTAKE PROJECT

PROJECT LOCATION

The proposed project would be located in Contra Costa and San Joaquin Counties (Figure 1). CCWD would construct a new water intake facility and fish screens in the South Central Delta vicinity. A potential location for the new intake is in the lower third portion of Victoria Canal. Additionally, a pipeline would be constructed approximately 2–4 miles across agricultural lands from the new intake to the existing Old River conveyance system to the west (Figure 2).

SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The proposed project would add a new intake at a location with better quality water, but would use CCWD's existing water supply and would not increase CCWD's total diversion capacity (rate or annual quantity). The existing Old River Intake and Pump Station, with a current capacity of 250 cubic feet per second (cfs), would remain in place. The new intake (with a capacity up to 250 cfs) and fish screen would provide CCWD with the operational flexibility to divert water from Old River or the new intake to provide the best water quality for CCWD customers (the maximum diversion rate of 250 cfs would not change). Delta water would be conveyed from the new intake approximately 2 to 4 miles across agricultural lands through a pipeline. The pipeline would cross Old River; it would either be tunneled under the river and its adjacent levees or would cross over the top of the levees and be buried just beneath the bottom of Old River. The pipeline would tie into the existing Old River conveyance facilities.

The proposed project would involve adding a new point of diversion for withdrawal of water under certain existing water rights held by CCWD and by Reclamation. CCWD would not seek to increase its water rights, contract amounts, or reservoir filling or release rates through this project; CCWD would only seek to add a new point of diversion.

TYPE OF CEQA DOCUMENT

The Alternative Intake Project will be analyzed in a project-specific EIR. The EIR will examine the environmental impacts of the proposed project and several alternatives, focusing primarily on the changes in the environment that would result from project implementation. A joint EIR/EIS or EIR/EA is anticipated because NEPA compliance will also be required for implementation of the proposed project.

ISSUES TO BE ADDRESSED IN THE EIR

The Alternative Intake Project EIR will describe the direct adverse and beneficial environmental effects of implementing the proposed project. The EIR will also evaluate any indirect effects of implementing the project, such as potential growth-inducing effects, and the cumulative effects of the project when considered in conjunction with those of other related past, present, and

reasonably foreseeable future projects. The EIR will evaluate a No-Project Alternative and other project alternatives as required to comply with CEQA.

On the basis of preliminary consideration of the project, CCWD has determined that implementing the proposed project could result in significant or potentially significant environmental impacts as summarized below. These issues will be evaluated in the EIR:

- **Aesthetics**. Temporary and long-term changes in scenic views or visual character of project sites.
- **Agricultural Resources**. Conversion of farmland to non-agricultural use.
- **Air Quality**. Temporary increases in pollutant emissions associated with construction activities or pump operation.
- **Biological Resources**. Disturbance of riparian vegetation, jurisdictional wetlands, or other sensitive natural communities for the construction of project facilities; construction or operational effects on special-status terrestrial or fish species or their habitats; and evaluation of fish screen design and operation.
- **Cultural Resources**. Potential for disturbance of significant known or undiscovered cultural resources, if present.
- **Geology and Soils**. Temporary erosion conditions during construction, risks related to the placement of facilities in areas subject to seismic activity or having unstable soils.
- **Hazards and Hazardous Materials**. Potential spills of hazardous materials or waste during construction.
- **Hydrology and Water Quality**. Modification of local drainage, hydraulic effects in Delta channels, effects on Delta water quality, and effects on CCWD operations.
- **Land Use**. Conflicts with existing land uses and zoning, if any.
- **Noise**. Temporary increases in ambient noise levels during construction, long-term increases in noise associated with operation of a new pumping plant.
- **Recreation**. Temporary disturbance of recreational activities in areas adjacent to construction activities.
- **Transportation/Traffic**. Temporary construction effects on local traffic circulation.
- **Utilities and Service Systems**. Potential disruption of service and need for the relocation of utilities, energy consumption during project operations.

On the basis of preliminary consideration of the project elements, no environmental impacts are anticipated for the following resource areas: mineral resources, population and housing, and

public services (fire and police protection, schools, parks, and other public facilities). There are no known mineral resources in the project area. The project also would have no features that would increase population growth, displace substantial numbers of existing residences, create the need for a substantial amount of new housing, or increase demands on existing or future public services.

PROJECT SCOPING AND AGENCY ROLES/RESPONSIBILITIES

PROJECT SCOPING

Scoping is an initial and critically important component of CEQA and of the proposed project. Scoping will assist in identifying the final range of actions, alternatives, site design options, environmental resources, and mitigation measures that will be analyzed in the EIR. The scoping process will help to eliminate from detailed study those issues that are not critical to the decision at hand. Scoping is also an effective way to bring together and resolve the concerns of interested federal, state, and local agencies; specific stakeholder groups; and the general public.

ROLE OF CONTRA COSTA WATER DISTRICT

As the local agency for CEQA compliance, CCWD will continue to coordinate with CEQA responsible and trustee agencies, the relevant federal agencies, and other interested parties. CCWD will be principally responsible for conducting the environmental review process, including scoping, preparing appropriate environmental documentation, and deciding whether to certify the EIR and approve the proposed project.

OTHER AGENCY ROLES

Reclamation has a major role serving as the federal lead agency for NEPA. The following other public agencies may have jurisdiction over elements of the proposed project or have responsibility for resources that could be affected by construction or operation of the project:

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries)
- California State Water Resources Control Board
- California Department of Water Resources
- California Department of Boating and Waterways
- California Department of Fish and Game
- California Department of Health Services
- California Environmental Protection Agency

- California Regional Water Quality Control Board, Central Valley Region (5)
- State Lands Commission
- The Reclamation Board and local reclamation districts
- California State Office of Historic Preservation
- California Department of Transportation
- Contra Costa and San Joaquin Counties
- Bay Area and/or San Joaquin Valley Air Quality Management District
- Delta Protection Commission

SCOPING MEETINGS

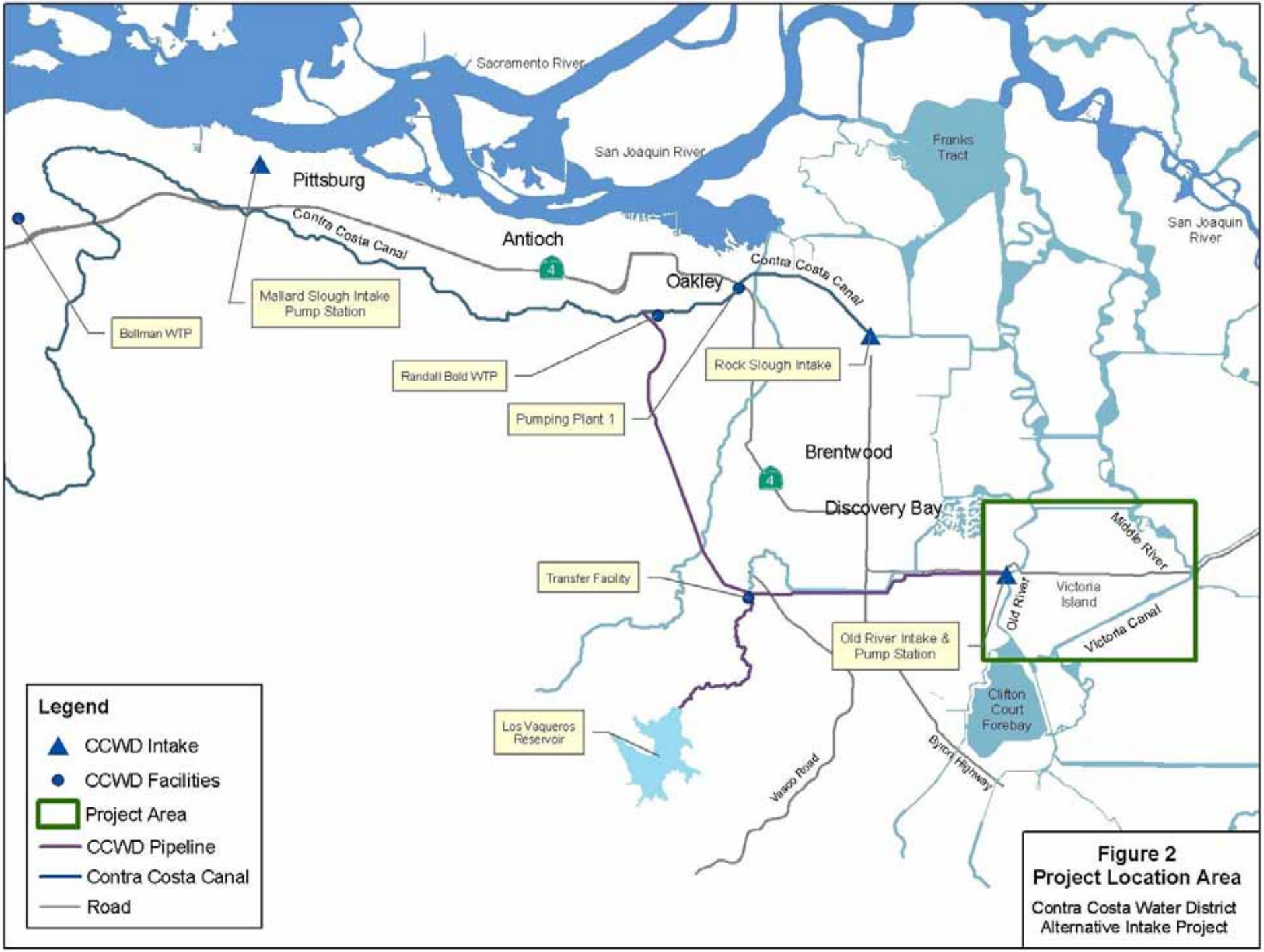
Three public scoping meetings on the proposed Alternative Intake Project will be held as specified above under "Purpose of the Notice of Preparation." The objectives of the meetings are to brief interested parties on the proposed project, and obtain the views of agency representatives and the public on the scope and content of the draft EIR, including the alternatives to be addressed and the potentially significant environmental impacts.

PROVIDING COMMENTS ON THE NOP

Interested parties are encouraged to provide comments on the NOP at the scoping meetings described above or provide CCWD with written comments. Because of time limits mandated by state law, written comments must be provided to CCWD no later than 5 p.m. on March 4, 2005. Agencies that will need to use the EIR when considering permits or other approvals for the proposed project should provide CCWD with the name of a contact person. Please send all written comments to:

Ms. Samantha Salvia, Project Manager
Contra Costa Water District
2411 Bisso Lane
P.O. Box H2O
Concord, CA 94524-2099
Telephone: (925) 688-8057
Fax: (925) 686-2187
Email: alternativeintake@ccwater.com
Website: www.ccwater-alternativeintake.com

Figure 1
Regional Location Map
Contra Costa Water District
Alternative Intake Project


Sacramento River
San Joaquin River
Franks Tract
San Joaquin River
Pittsburg
Contra Costa Canal
Antioch
4
Oakley
Contra Costa Canal
Mallard Slough Intake Pump Station
Bollman WTP
Randall Bold WTP
Rock Slough Intake
Pumping Plant 1
Brentwood
4
Discovery Bay
Middle River
Victoria Island
Old River
Victoria Canal
Transfer Facility
Old River Intake & Pump Station
Clifton Court Forebay
Los Vaqueros Reservoir
Vasco Road
Byron Highway
Legend
CCWD Intake
CCWD Facilities
Project Area
CCWD Pipeline
Contra Costa Canal
Road
Figure 2
Project Location Area
Contra Costa Water District
Alternative Intake Project

Contra Costa Water District

NOP Mailing List - Alternative Intake Project

Mailed on January 25, 2005

Sal.	First	Last	Title	Organization
Mr.	Michael	Aceituno	Supervisor, Sacramento Area	NOAA Fisheries, Southwest Division
Ms.	Margrit	Aramburu	Executive Director	Delta Protection Commission
Mr.	Dennis	Barry	Community Development Director	Contra Costa County
Mr.	Victor	Carniglia	Deputy Director	City of Antioch Planning Department
Mr.	Jeff	Conway	District Manager	Reclamation District 800
Mr.	Gary	Darling	General Manager	Delta Diablo Sanitation District
Mr.	Bob	Eckart	Environmental Affairs	U.S. Bureau of Reclamation
Ms.	Ann	Farrell	Director of Engineering	Central Contra Costa Sanitary District
Mr.	Michael	Finan		U.S. Army Corps of Engineers
Mr.	Rob	Floerke	Regional Manager, Central Coast Region	California Department of Fish and Game
Mr.	Jim	Forsberg	Director of Planning & Economic Development	City of Concord Planning Department
Mr.	Rick	Gilmore	General Manager	Byron Bethany Irrigation District
Mr.	Jeremy	Graves	Director	City of Clayton Planning Department
Mr.	Roger	Guinee	Supervisor, Water Operations	US Fish and Wildlife, Sacramento Office
Mr.	Bill	Guthrie		U.S. Army Corps of Engineers
Mr.	Mike	Healey		California Department of Fish and Game
Mr.	John	Herrick	Counsel	South Delta Water Agency
Mr.	Alex	Hildebrand	Farmer/Engineer	South Delta Water Agency
Mr.	Randy	Jerome		City of Pittsburg Planning Department
Ms.	Kathy	Kelly	Chief, Office of SWP Planning	California Department of Water Resources
Mr.	Russel	Knight		Western Area Power Administration
Mr.	Virgil	Koehne	General Manager	Discovery Bay Municipal Advisory Council
Mr.	Ken	Landau	Assistant Executive Officer	Central Valley Region Water Quality Control Board (CVRWQCB)
Mr.	Mike	Leana	Planning Department	City of Brentwood Planning Department
Mr.	Dick	Leonard	Superintendent	California Cities Water
Mr.	Casey	McCann	Deputy Director	City of Pleasant Hill Planning Department
Ms.	Sandra	Meyer	Planning Manager	City of Walnut Creek Planning Department
Mr.	Mike	Monroe		US Environmental Protection Agency
Mr.	Chris	Neudeck	District Engineer	Reclamation District 2040 Kjeldsen, Sinnock & Neudeck
Mr.	Chris	Neudeck	District Engineer	Reclamation District 800 Kjeldsen, Sinnock & Neudeck
Mr.	Graydon	Nichols	Business Manager	Victoria Island Farms
Mr.	Dante	Nomellini, Sr.	General Manager and Co-Counsel	Central Delta Water Agency Nomellini, Grilli & McDaniel
Mr.	Dante	Nomellini, Sr.	Attorney	Reclamation District 2040 Nomellini, Grilli & McDaniel
Mr.	Tim	Raney	Interim Director	City of Oakley Planning Department

Contra Costa Water District

NOP Mailing List - Alternative Intake Project

Mailed on January 25, 2005

Sal.	First	Last	Title	Organization
Mr.	Dwight	Sanders	Division Chief, Environmental Planning	California State Lands Commission
Mr.	Kerry	Sullivan	Community Development Director	San Joaquin County
Ms.	Dina	Tasini	Deputy Director	City of Martinez Planning Department
Mr.	Tom	Williams	General Manager	Ironhouse Sanitary District
Mr.	Greg	Wilson	Division of Water Rights	California State Water Resources Control Board
Ms.	Carolyn	Yale		US Environmental Protection Agency
Mr.	Mike	Yeraka	General Manager	Diablo Water District

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Jan Boel
Acting Director

Notice of Preparation

January 27, 2005

To: Reviewing Agencies

Re: Alternative Intake Project
SCH# 2005012101

Attached for your review and comment is the Notice of Preparation (NOP) for the Alternative Intake Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Samantha Salvia
Contra Costa Water District
P.O. Box H20
2411 Bisso Lane
Concord, CA 94524-2099

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Senior Planner, State Clearinghouse

Attachments
cc: Lead Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2005012101
Project Title Alternative Intake Project
Lead Agency Contra Costa Water District

Type NOP Notice of Preparation

Description Construction of a new intake and fish screen at a site along the lower third of Victoria Canal (in the south-central part of the Delta), a pumping plant, and an associated pipeline across Victoria Island from the new intake to CCWD's Old River Pumping Plant. The project would provide CCWD with better source water quality than is currently obtained from its existing intakes. The project would provide CCWD with increased flexibility in operations; project water customers from future Delta water quality degradation; and help ensure that CCWD can meet or exceed future drinking water regulatory requirements. The project would not increase CCWD's total Delta diversion capacity (rate or annual quantity), but would change the location (and quality) of existing diversions.

Lead Agency Contact

Name Samantha Salvia
Agency Contra Costa Water District
Phone (925) 688-8057 **Fax**
email
Address P.O. Box H20
2411 Bisso Lane
City Concord **State** CA **Zip** 94524-2099

Project Location

County Contra Costa, San Joaquin
City Brentwood
Region
Cross Streets
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways
Airports
Railways
Waterways Old River, N. Victoria Canal, Victoria Canal, Middle River, Italian Slough
Schools Discovery Bay Elementary
Land Use General Agriculture and Open Space, Resource Conservation

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Public Services; Recreation/Parks; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Boating and Waterways; Department of Conservation; Department of Parks and Recreation; Reclamation Board; Department of Water Resources; Department of Fish and Game, Region 2; Department of Fish and Game, Region 3; Department of Fish and Game, Marine Region; Department of Health Services; Delta Protection Commission; Native American Heritage Commission; State Lands Commission; Caltrans, District 4; Caltrans, District 10; State Water Resources Control Board, Division of Water Quality; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Bd., Region 5 (Sacramento)

Date Received 01/25/2005 **Start of Review** 01/25/2005 **End of Review** 03/04/2005

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOP Distribution List

County: Contra Costa / San Joaquin

Resources Agency

- **Resources Agency**
  Nadell Gayou
- **Dept. of Boating & Waterways**
  David Johnson
- **California Coastal Commission**
  Elizabeth A. Fuchs
- **Colorado River Board**
  Gerald R. Zimmerman
- **Dept. of Conservation**
  Roseanne Taylor
- **California Energy Commission**
  Environmental Office
- **Dept. of Forestry & Fire Protection**
  Allen Robertson
- **Office of Historic Preservation**
  Wayne Donaldson
- **Dept of Parks & Recreation**
  B. Noah Tilghman
  Environmental Stewardship Section
- **Reclamation Board**
  DeeDee Jones
- **Santa Monica Mountains Conservancy**
  Paul Edelman
- **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou

Fish and Game

- **Depart. of Fish & Game**
  Scott Flint
  Environmental Services Division
- **Fish & Game Region 1**
  Donald Koch
- **Fish & Game Region 2**
  Banky Curtis
- **Fish & Game Region 3**
  Robert Floerke
- **Fish & Game Region 4**
  William Laudermilk
- **Fish & Game Region 5**
  Don Chadwick
  Habitat Conservation Program
- **Fish & Game Region 6**
  Gabrina Gatchel
  Habitat Conservation Program
- **Fish & Game Region 6 I/M**
  Tammy Allen
  Inyo/Mono, Habitat Conservation Program
- **Dept. of Fish & Game M**
  George Isaac
  Marine Region

Other Departments

- **Food & Agriculture**
  Steve Shaffer
  Dept. of Food and Agriculture
- **Depart. of General Services**
  Public School Construction
- **Dept. of General Services**
  Robert Sleppy
  Environmental Services Section
- **Dept. of Health Services**
  Veronica Rameriz
  Dept. of Health/Drinking Water

Independent Commissions,Boards

- **Coachella Valley Mountains Conservancy**
- **Delta Protection Commission**
  Debby Eddy
- **Office of Emergency Services**
  Dennis Castrillo
- **Governor's Office of Planning & Research**
  State Clearinghouse
- **Native American Heritage Comm.**
  Debbie Treadway
- **Public Utilities Commission**
  Ken Lewis
- **San Gabriel & Lower LA Rivers**
- **San Joaquin River Conservancy**
- **State Lands Commission**
  Jean Sarino
- **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Business, Trans & Housing

- **Caltrans - Division of Aeronautics**
  Sandy Hesnard
- **Caltrans - Planning**
  Terri Pencovic
- **California Highway Patrol**
  John Olejnik
  Office of Special Projects
- **Housing & Community Development**
  Lisa Nichols
  Housing Policy Division

Dept. of Transportation

- **Caltrans, District 1**
  Mike Eagan
- **Caltrans, District 2**
  Don Anderson
- **Caltrans, District 3**
  Jeff Pulverman
- **Caltrans, District 4**
  Tim Sable
- **Caltrans, District 5**
  David Murray
- **Clatrans, District 6**
  Marc Bimbaum
- **Caltrans, District 7**
  Cheryl J. Powell
- **Caltrans, District 8**
  John Pagano
- **Caltrans, District 9**
  Gayle Rosander
- **Caltrans, District 10**
  Tom Dumas
- **Caltrans, District 11**
  Mario Orso
- **Caltrans, District 12**
  Bob Joseph

Cal EPA

Air Resources Board

- Airport Projects
  Jim Lerner
- Transportation Projects
  Kurt Karperos
- Industrial Projects
  Mike Tollstrup

- **California Integrated Waste Management Board**
  Sue O'Leary
- **State Water Resources Control Board**
  Jim Hockanberry
  Division of Financial Assistance
- **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- **State Water Resouces Control Board**
  Steven Herrera
  Division of Water Rights
- **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- **Department of Pesticide Regulation**

Regional Water Quality Control Board (RWQCB)

- **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- **RWQCB 3**
  Central Coast Region (3)
- **RWQCB 4**
  Jonathan Bishop
  Los Angeles Region (4)
- **RWQCB 5S**
  Central Valley Region (5)
  - **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- **RWQCB 6**
  Lahontan Region (6)
  - **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- **RWQCB 7**
  Colorado River Basin Region (7)
- **RWQCB 8**
  Santa Ana Region (8)
- **RWQCB 9**
  San Diego Region (9)

- **Other** _____

Last Updated on 9/16/04

Section C

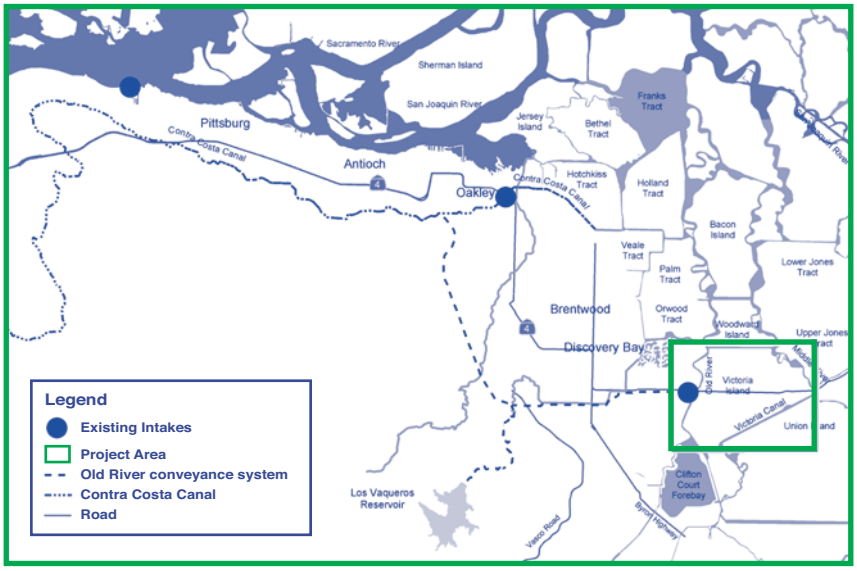
CCWD Fact Sheet

CONTRA COSTA
WATER DISTRICT

Alternative Intake Project

FACT SHEET

The quality of water in the Delta, the Contra Costa Water District's (District) sole source of water, continues to deteriorate despite efforts to improve it. Delta water quality problems are being compounded by increased water use and greater wastewater, stormwater and agricultural discharges from statewide development and growth. In order to continue to provide high quality water for its customers and meet increasingly stringent drinking water quality standards, the District has initiated the Alternative Intake Project (project).



The new intake will divert water from a new central Delta location and convey it via a new pipeline to the existing 250 cubic-feet-per-second Old River conveyance system.

Project Overview

The project will evaluate adding a new drinking water intake for the District in the central Delta. This intake will access better quality water than CCWD's current Delta intakes and improve water quality for its customers, especially during long droughts. The project will tie into the District's existing Old River intake and conveyance system and be limited to the existing system's capacity of 250 cubic-feet-per-second. This will allow the District to divert higher quality water while not increasing the amount of water pumped from the Delta. The intake, located at an alternative site in the Delta, will provide CCWD the operational flexibility it needs to obtain the best Delta water available for its customers.

Project Purpose

The project will protect and improve water quality for CCWD customers. Because water quality varies widely throughout the Delta, a new intake located further east will allow CCWD to divert water of higher quality during dry periods, including droughts. This new option for obtaining consistently higher quality water for CCWD's customers will help the District address deteriorating Delta water quality and meet the stricter drinking water quality regulations anticipated in the future.

Why the Project is Necessary

The Delta is an estuary with naturally salty water that is high in organics. This, combined with seasonally fluctuating freshwater inflows from the Sacramento and San Joaquin Rivers, makes it challenging for the District to obtain high quality water from its existing intakes year round.

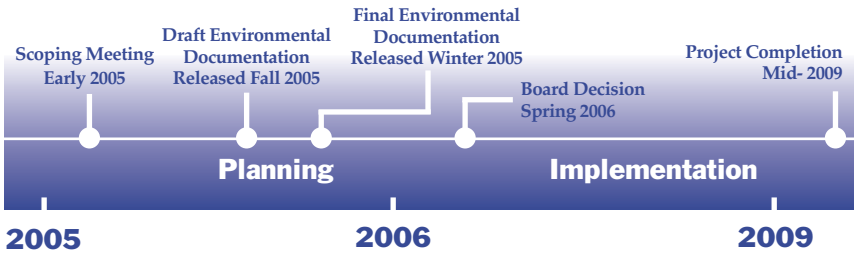
The Delta also is an area of competing interests; serving as a drinking water source to two-thirds of the state's residents, an agricultural irrigation supply, habitat for fisheries and other wildlife, and a recreation area. The District has been actively working to improve Delta water quality through CALFED (a consortium of state and federal agencies working to improve the Delta) and other arenas for many years. Despite these efforts, water quality at CCWD intakes has degraded, particularly in the fall. Since the late eighties, the average salinity concentrations at District's intakes have steadily increased. The state is projected to have an additional 12 million people by 2030 and this statewide growth will continue to make problems worse.

CCWD must take steps to ensure its customers are protected. The District has a multi-pronged approach to improve water quality that includes reducing impacts of Delta agriculture drainage; participating in collaborative research on advanced water treatment;

and supporting regulatory and legislative initiatives for source water protection.

As part of this approach, CCWD is studying the feasibility of adding a new intake. By proactively working to improve its water quality, CCWD can protect its raw and treated water customers without relying on other Delta projects that are outside of its control. If the District's recommended project is not implemented, CCWD will need to pursue other methods of improving water quality that could be more expensive and less effective at meeting CCWD's water quality goals.

Project Timeline



The planning phase includes an environmental analysis to comply with federal and state requirements (NEPA and CEQA). CCWD expects to release a draft environmental report for public comment as early as Fall 2005. The District Board of Directors will consider whether to proceed with the project in Spring 2006. If the project moves forward, construction will be complete by mid-2009.

Potential Benefits to Customers

The project will provide several benefits for CCWD customers:

- Ensure customers' water quality remains high, especially during droughts and in late summer and fall.
- Protect the health of customers by ensuring CCWD consistently meets or exceeds current and future drinking water quality standards.
- Help maximize CCWD customers' $450 million investment in the Los Vaqueros Reservoir by using it to store available higher quality water for use during long droughts.
- Help protect drinking water quality during emergencies such as Delta levee failures. An alternate intake location could help CCWD avoid areas of the Delta affected by an emergency.

Project Funding

CCWD budgeted up to $8 million to complete the planning phase of the project, including environmental analyses, initial permitting and preliminary engineering design. Design and construction will be funded through a local, state and federal funding partnership. CCWD has prudently budgeted funds through its capital improvement program for this purpose so that it will not cause a rate impact.

Avoiding Impacts to Other Delta Water Users

The project will avoid or minimize impacts to other Delta water users. The proposed intake will use the District's existing water supply and will not divert additional water out of the Delta; it will simply allow the District to shift the location and timing of pumping from the Old River Intake to a new location. Specifically, CCWD will not seek to increase its water rights, contract amounts, or reservoir filling or release rates through this project. CCWD will operate the project in a way that does not adversely affect water levels or water quality in nearby channels.

Protecting Environmental Resources

CCWD recognizes the Delta is a valuable environmental resource that supports several important and threatened fish species. By having an additional intake, the District will create benefits for Delta fisheries because of increased operational flexibility.

Public Input

The District welcomes public input during the planning phase of the project and will consider all comments received when preparing the environmental report. The District's public input process includes public meetings, written updates and a project web site.

For More Information

Samantha Salvia
Project Manager
(925) 688.8057
alternativeintake@ccwater.com
www.ccwater-alternativeintake.com

Section D

CCWD Display Advertisement
Public Notice of Scoping Meetings

PUBLIC SCOPING MEETINGS

CONTRA COSTA WATER DISTRICT
Alternative Intake Project

To protect and improve water quality for its customers over the long term, the Contra Costa Water District (CCWD) is proposing to construct an alternative water intake in the central Delta. CCWD, with the U.S. Bureau of Reclamation (Reclamation), will evaluate the proposed project in a joint Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The Notice of Preparation of an EIR and Notice of Intent to prepare an EIS have been published and are available on the project Web site at **www.ccwater-alternativeintake.com**.

CCWD and Reclamation are hosting a set of public scoping meetings prior to developing the EIR/EIS for the project. The public is invited to attend the scoping meetings and provide input about the proposed project and alternatives. The comment period following the scoping meetings will close on March 4, 2005; however, comments are welcome throughout the duration of project planning. Public workshops will also be held in late 2005/early 2006, after publication of the draft EIR/EIS.

There will be three opportunities to attend the public scoping meetings, at the following locations* and times:

Concord
Tues., Feb. 15, 2005
6:00 to 8:00 p.m.
CCWD Board Room
Contra Costa Water District
1331 Concord Avenue
Concord, CA

Sacramento
Wed., Feb. 16, 2005
10:00 a.m. to 12:00 p.m.
Federal Building Cafeteria
Conference Room C-1001
U.S. Bureau of Reclamation
2800 Cottage Way
Sacramento, CA

Antioch
Thurs., Feb. 17, 2005
6:00 to 8:00 p.m.
Veterans of Foreign Wars Hall
815 Fulton Shipyard Road
Antioch, CA

*CCWD facilities and meetings comply with the Americans with Disabilities Act. If special accommodations are needed for you to participate, please contact the Project Manager as soon as possible, but preferably at least two days prior to the meeting.

Please visit our website at **www.ccwater-alternativeintake.com**; e-mail **alternativeintake@ccwater.com**; or contact Samantha Salvia, Project Manager, at 925-688-8057 with your questions or for more information.

Notice of Public Scoping Meetings
Contra Costa Water District -- Alternative Intake Project

The Contra Costa Water District (District), acting as lead agency for California Environmental Quality Act compliance, has published a Notice of Preparation of an Environmental Impact Report (EIR) on its proposed construction of an alternative intake project (project) in the central Delta. Likewise, in accordance with the National Environmental Policy Act, the U.S. Bureau of Reclamation, as the lead federal agency, has published a Notice of Intent for preparation of an Environmental Impact Statement (EIS). The District will hold a set of three public scoping meetings to describe the proposed project, entertain questions and comments from the public, and obtain input on the proposed project, alternatives to the proposed project, and potential environmental issues. The public meetings will be held at the following locations: **Concord** Tues., Feb. 15, 2005, 6 p.m. to 8 p.m., Contra Costa Water District, 1331 Concord Avenue Concord, CA; **Sacramento** Wed., Feb. 16, 2005, 10 a.m. to Noon, Federal Building, Cafeteria Conference Room C-1001, Bureau of Reclamation, 2800 Cottage Way Sacramento, CA; **Antioch** Thurs., Feb. 17, 2005, 6 p.m. to 8 p.m., Veterans of Foreign Wars Hall, 815 Fulton Shipyard Road Antioch, CA. Interested agencies, organizations, and individuals are invited to attend the meetings and provide input. Comments received by end of day March 4, 2005, will be considered in the development of the draft EIR/EIS. For more information, please visit the project Web site at **www.ccwater-alternativeintake.com**; e-mail **alternativeintake@ccwater.com**; or contact **Samantha Salvia, Project Manager, at (925) 688-8057**.

Section E

Reclamation News Release Distribution List

Mid-Pacific Region
Sacramento, CA

MP-05-009

Media Contact: Jeffrey McCracken 916-978-5100
jmccracken@mp.usbr.gov

For Release On: January 27, 2005

Public Scoping Meetings Scheduled on Preparation of Environmental Document for Contra Costa Water District Alternative Intake Project

The Bureau of Reclamation and the Contra Costa Water District (CCWD) have scheduled three public scoping meetings to seek public input on the preparation of an Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) on the CCWD Alternative Intake Project. Reclamation is the National Environmental Policy Act lead agency and CCWD is the California Environmental Quality Act lead agency.

The public scoping meetings will be held to solicit input on issues and alternatives that should be addressed in the EIS/EIR. They will be held in:

Concord	**Sacramento**	**Antioch**
Tuesday, February 15, 2005	Wednesday, February 16, 2005	Thursday, February 17, 2005
6 – 8 p.m.	10 a.m.–12 p.m.	6 – 8 p.m.
Board Room	Federal Building Cafeteria	Veterans of Foreign Wars Hall
Contra Costa Water District	Conference Room C-1001	815 Fulton Shipyard Road
1331 Concord Avenue	2800 Cottage Way	

The project purpose is to protect and improve water quality for CCWD's customers. The proposed action includes the construction of a new intake and fish screen in the Central Delta, a pumping plant, and an associated pipeline from the new intake to CCWD's Old River Pumping Plant on Old River.

The proposed action would involve adding a new point of diversion to certain existing water rights held by CCWD and by Reclamation. In addition to the proposed action, other alternatives will be evaluated that may include different intake locations, desalination, and other treatment options. Potential Federal involvement may include the approval of an additional point of diversion pursuant to CCWD's water service contract with Reclamation and operational changes.

-MORE-

Written comments on the scope of the environmental document are requested by close of business on Friday, March 4, 2005, and should be sent to Ms. Samantha Salvia, Contra Costa Water District, P.O. Box H2O, Concord, CA 94524-2099, or e-mailed to alternativeintake@ccwater.com. For more information, contact Ms. Salvia at 925-688-8057, Mr. Robert Eckart, Bureau of Reclamation, Mid-Pacific Region, at 916-978-5051, or via email at reckart@mp.usbr.gov, or visit the CCWD Alternative Intake Project website at www.ccwater-alternativeintake.com.

###

Reclamation is the largest wholesale water supplier and the second largest producer of hydroelectric power in the United States, with operations and facilities in the 17 Western States. Its facilities also provide substantial flood control, recreation, and fish and wildlife benefits. Visit our website at http://www.usbr.gov.

Distribution List for Reclamation Press Release

Media
Stockton Record
KRAK Radio, Sacramento
KXPR Radio, Sacramento
Copley News Service
Capitol Press
Folsom Telegraph
Entercom Radio
KSFM Sacramento
Sacramento Bee
Associated Press - Sacramento
KCRA - TV Sacramento
KXTV - TV Sacramento
KOVR - TV Sacramento
KMAX - TV Sacramento
KFBK Radio Sacramento
KXTL TV Sacramento
Ag Alert Sacramento
Bakersfield Californian
Wall Street Journal Sacramento
LA Times Sacramento
Capitol TV News Service
Oakland Tribune
Contra Costa Times
Capitol Business Journal
Capitol Public Radio
San Francisco Chronicle
Fresno Bee
Water Strategist

Regulatory Agencies
CALFED Bay-Delta Program
California Department of Fish and Game
California Department of Water Resources
NOAA Fisheries
State Water Resources Control Board
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service

Water Districts
Contra Costa Water District
East Bay Municipal Utility District
Kern County Water Agency
Metropolitan Water District of Southern California
Westlands Water District

Organizations/Associations
California Farm Water Association
California Waterfowl Association
CVP Water Association
Environmental Defense Fund
Friant Water Users
Friends of the River
Sierra Club
Water Education Foundation

Section F

Presentation for Scoping Meetings

Agenda

I. Introductions and Meeting Format, Lucy Eidam, Outreach Manager, Lucy & Company

II. Project Overview, Samantha Salvia, Project Manager, CCWD

III. Environmental Overview, Phil Dunn, Environmental Manager, EDAW

IV. Public Input, Lucy Eidam

V. Closing

Contra Costa Water District

The Mission of the Contra Costa Water District is to strategically provide a reliable supply of high quality water at the lowest cost possible, in an environmentally responsible manner.

- Serves central and eastern Contra Costa County
- CVP's largest urban contractor
- One of the largest urban water districts in California and a leader in drinking water treatment technology and source water protection

CCWD Service Area Map

RECLAMATION
Managing Water in the West

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

- Federal Agency within Department of the Interior
- Largest wholesaler of water in the country
- Operates Central Valley Project

U.S. Department of the Interior
Bureau of Reclamation

CVP Map

RECLAMATION

Alternative Intake Project
Project Overview

Project Purpose

To protect and improve water quality for CCWD's raw water customers and treated water customers over the long-term.

Project Benefits

- Improve CCWD water quality
- Improve operational flexibility
- Protect public health
- Protect CCWD water quality during emergencies

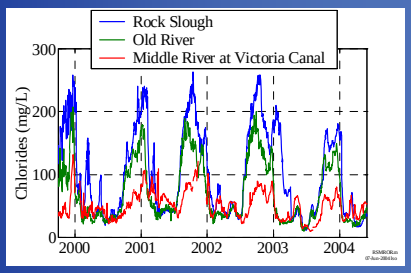
9

Project Map

10

Water Quality at Intakes

An alternative intake could provide better water quality during key periods than is available at CCWD's existing intakes at Rock Slough and Old River.



11

Project summary

The Alternative Intake would:

- **Be up to 250 cfs and tie into CCWD's existing facilities at Old River**
- **Relocate the point of diversion, but not increase the total diversion capacity**
- **Give CCWD increased operational flexibility to protect and improve water quality**
- **Be owned and operated by CCWD**

12

Delta Water Users

CCWD would develop and operate the project in a way that does not adversely affect water levels and water quality for other water users.

- **Operations and water quality modeling**
- **Water quality monitoring**
- **Close coordination with stakeholders**

13

Protecting Environmental Resources

- No net increase in CCWD diversions
- Improved operational flexibility
- State-of-the-art fish screens

Fish Screens at Old River Pump Station

14

Alternative Intake Project Environmental Overview

15

Environmental Review Requirement

- Project subject to both state and federal environmental review
  - CEQA lead agency: CCWD
  - NEPA lead agency: Reclamation
- Joint EIR/EIS will be prepared

16

Overall CEQA and NEPA Objectives

- Disclose impacts
- Identify alternatives and mitigation to reduce significant effects
- Identify impacts that cannot be mitigated or avoided
- Enhance public participation
- Foster intergovernmental coordination

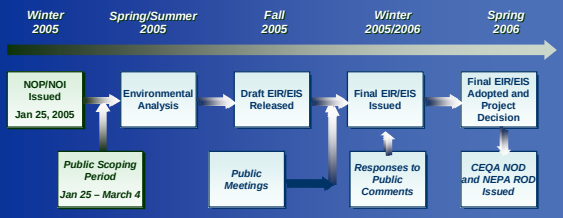
17

Purposes of Scoping: Why Are We Here?

- Inform public and agencies early
- Receive public/agency input early
- Help identify final range of alternatives and environmental issues to evaluate
- Help identify assessment methods

18

CEQA/NEPA Key Steps and Timeline



19

Issues to be Addressed in EIR/EIS

- Aesthetics
- Agricultural Resources
- Air Quality/Noise
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Socio-economics
- Hydrology/Hydraulics
- Delta and CCWD Water Quality
- Land Use
- Drainage
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

20

EIR/EIS Preliminary Alternatives

- No Action
- Alternative Intake conveyance options
- Desalination Plant
- Other alternatives developed during scoping

How Do I Participate?

- Present your views or written comments tonight
- Comment in writing to Samantha Salvia (CCWD) by close of scoping on March 4, 2005
- Your comments become part of public record
- Comment on the Draft EIR/EIS in Fall
- Attend public meetings in Fall
- Contact CCWD or Reclamation throughout the process

Contact Information

Please send written comments by March 4, 2005 to:

Samantha Salvia, Project Manager
Contra Costa Water District
P.O. Box H2O
Concord, CA 94524-2099
Fax: (925) 686-2187
Email: alternativeintake@ccwater.com

OR

Robert Eckart, Supervisory Environmental Specialist
Bureau of Reclamation, Mid-Pacific Region
2800 Cottage Way, MP-152
Sacramento, CA 95825-1898
Fax: (916) 978-5055
Email: reckart@mp.usbr.gov

Section G

Scoping Meeting Notes

CONTRA COSTA WATER DISTRICT
ALTERNATIVE INTAKE PROJECT
SCOPING MEETING NOTES
Prepared by Contra Costa Water District March 2, 2005

INTRODUCTIONS AND OVERVIEWS OF THE PROPOSED PROJECT AND ENVIRONMENTAL PROCESS

Each meeting began with the following introduction, project overview, and environmental overview.

INTRODUCTIONS

Lucy Eidam of Lucy & Company commenced each meeting by introducing the project team, providing meeting ground rules, and giving a brief overview of Contra Costa Water District (CCWD) and the U.S. Bureau of Reclamation (Reclamation). CCWD provides water to about 500,000 people in central and east Contra Costa County and is the largest urban water contractor of the Central Valley Project. Reclamation is the largest wholesaler of water in the country and operates the Central Valley Project.

PROJECT OVERVIEW

Samantha Salvia of CCWD provided an overview of the Alternative Intake Project (proposed action). The overview included the following:

- CCWD background: CCWD is entirely reliant upon the Delta for its water supply, and drinking water quality is its primary concern.
- Project purpose: To protect and improve water quality for CCWD's raw water customers and treated water customers.
- Potential project benefits: Improved CCWD water quality, improved operational flexibility, protection of public health, and protection of CCWD water quality during emergencies.
- A project map, highlighting the project area and CCWD's three existing intakes.
- Discussion of water quality at existing intakes and proposed alternative intake location.
- A project summary highlighting key aspects of the project: The alternative intake would have a capacity of up to 250 cubic feet per second (cfs) and would tie into CCWD's existing facilities at Old River. The proposed action would relocate the point of diversion without increasing CCWD's total diversion capacity, would give CCWD increased operational flexibility and improved water quality, and would be owned and operated by CCWD.
- The project would be developed and operated in a way that does not adversely affect water levels and water quality for other water users. CCWD would accomplish this through operations and water quality modeling, water quality monitoring, and close coordination with stakeholders.
- The project would protect environmental resources. The project would include no net increase in CCWD diversions, improve operational flexibility, and incorporate state-of-the-art fish screens.

ENVIRONMENTAL OVERVIEW

Phil Dunn of EDAW provided an overview of the environmental review process for the Alternative Intake Project. Highlights included the following:

- Introduction: The project is subject to both state and federal environmental review, with CCWD acting as the lead agency for California Environmental Quality Act (CEQA) compliance and Reclamation serving as the lead for National Environmental Policy Act (NEPA) compliance. A joint environmental impact report and environmental impact statement (EIR/EIS) will be prepared.

- Purpose: The objectives of CEQA and NEPA include disclosing impacts of the proposed action; identifying alternatives and mitigation to reduce significant effects of the proposed action, including impacts that cannot be mitigated or avoided; enhancing public participation; and fostering intergovernmental coordination.

- Scoping overview: The purposes of scoping meetings are to inform the public and agencies of the project early, receive public/agency input on the project early in the project review process, help identify a final range of project alternatives and environmental issues to evaluate, and help identify assessment methods for the environmental review.

- A timeline of key steps for the planning phase of the project.

- A list of issues expected to be addressed in the EIR/EIS.

- Summary of alternatives: Preliminary EIR/EIS alternatives include no action, alternative intake conveyance options, a desalination plant, and any other reasonably feasible alternatives developed during the scoping process.

- Comment timeline: Scoping comments are requested by March 4, 2005.

- Contact information for Samantha Salvia at CCWD and Bob Eckart at Reclamation.

Attendees and public input from each of the three meetings are summarized below.

FEBRUARY 15, 2005 SCOPING MEETING, CONCORD

CCWD BOARD ROOM

ATTENDEES

Chris Hentz, Montgomery Watson Harza
Art Kroeger, Customer
Jerry Coburn, Intralox

PROJECT TEAM

Samantha Salvia, Contra Costa Water District
Rachel Martin, Contra Costa Water District
Lucy Eidam, Lucy & Company
Josh Newcom, Lucy & Company

Phil Dunn, EDAW
Jan Davel, Carollo Engineers
Bob Eckart, U.S. Bureau of Reclamation
Erika Kegel, U.S. Bureau of Reclamation

PUBLIC INPUT

There were no questions or comments at the February 15 meeting. A representative of Intralox provided a brochure and information about the Intralox fish screen and requested that it be considered as the project moves forward with intake design.

FEBRUARY 16, 2005 SCOPING MEETING, SACRAMENTO

U.S. BUREAU OF RECLAMATION OFFICES

ATTENDEES

J. Carl Dealy, U.S. Bureau of Reclamation
Michelle Light, U.S. Bureau of Reclamation
Patricia Roberson, U.S. Bureau of Reclamation
Stephen Cimperman, California Department of Water Resources
Robert DuVall, California Department of Water Resources
Ala Ng, California Department of Water Resources
Bruce Oppenheim, National Oceanographic and Atmospheric Administration Fisheries
Anna Holmes, California Department of Fish and Game
Ron Ott, California Bay-Delta Authority
Bernie Sullivan, Friant Water Authority
Jen Johnson, Environmental Science Associates

PROJECT TEAM

Samantha Salvia, Contra Costa Water District
Greg Gartrell, Contra Costa Water District
Rachel Martin, Contra Costa Water District
Lucy Eidam, Lucy & Company
Josh Newcom, Lucy & Company
Jereme Fromm, Lucy & Company
Phil Dunn, EDAW
Jan Davel, Carollo Engineers
Bob Eckart, U.S. Bureau of Reclamation
Erika Kegel, U.S. Bureau of Reclamation

PUBLIC INPUT

Q: Robert DuVall asked for an explanation of the preliminary alternative labeled “Alternative Intake conveyance options” on one of the presentation slides.

A: Samantha Salvia explained that the alternative refers to the proposed action and will include evaluation of different intake sites, conveyance options, and operations.

Q: Anna Holmes asked how the Alternative Intake Project would coordinate with an expanded Los Vaqueros Reservoir.

A: Samantha Salvia stated that the Alternative Intake Project is a stand-alone project from the CALFED Los Vaqueros Reservoir Expansion (LVE) Studies and can provide benefits independent of LVE. She noted that the two projects are on very different timelines; LVE is on a much longer timeline than the intake project. She noted that the two projects have different purposes. She confirmed that the projects will be coordinated such that the proposed Alternative Intake Project would be compatible with an expanded Los Vaqueros Reservoir. She noted that the Alternative Intake Project neither commits CCWD to move forward with the expansion nor precludes the future expansion of the reservoir.

Q: Anna Holmes followed by asking whether the two projects would duplicate efforts, and whether a future expansion of Los Vaqueros Reservoir would require a second disturbance to the same land.

A: Samantha Salvia stated that the LVE Studies would consider the Alternative Intake Project plans as they move forward.

Q. Robert DuVall asked whether the alternative intake would be expandable because he understands that the LVE Studies are examining much larger intakes (500 or 1000 cfs?).

A: Samantha Salvia said that there are currently no plans to evaluate alternative intake capacities larger than 250 cfs. She noted that the LVE Studies are looking at a variety of options for intake sizes and locations, including the addition of multiple intakes.

Comment: R. DuVall commented that to reduce costs, CCWD should avoid duplication of efforts that may occur between studies of the Los Vaqueros Project and the proposed Alternative Intake Project, and should design the Alternative Intake Project to facilitate possible future expansion if the Los Vaqueros Reservoir Expansion moves forward.

Q: Stephen Cimperman noted that some of the Alternative Intake Project materials refer to intake relocation, while others call it an intake alternative. He asked whether the old pump station would be shut down or whether CCWD had plans to open another pump station.

A: Samantha Salvia explained that the project is an alternative intake that would relocate some of CCWD's pumping. She stated that CCWD would not abandon the Old River Pump Station because there are periods when water quality is better at the Old River intake than at locations in the central Delta. She explained that CCWD is seeking flexibility through the project and would have the ability to choose between the two intakes.

Q: Stephen Cimperman asked for clarification of whether there would be a change in the amount of diverted water.

A: Samantha Salvia stated that there would be no additional capacity or supply associated with the Alternative Intake Project. The overall capacity of the Old River conveyance system would remain 250 cfs.

Q: Stephen Cimperman noted that the fact sheet states that funding for design and construction of the project would come from a combination of local, state, and federal funds. He asked whether funding was determined for the project.

A: Samantha Salvia replied that funding has not been determined for the project, but was being sought from several sources, including CALFED. CCWD would provide substantial local funding.

Comment: Stephen Cimperman commented that the Alternative Intake Project seems like a local project that should be locally funded.

A: Samantha Salvia stated that continuous improvement of Delta water quality is a CALFED objective and that protection of CCWD's water quality was necessary in part due to water quality degradation in the Delta over the past 15 years and because of future stresses on the Delta. She noted that the federal CALFED authorization legislation passed in October 2004 authorized the intake project for design and construction on a timeframe consistent with the permanent barriers program in the south Delta. She noted that the project would involve substantial local funding.

Q: Anna Holmes asked whether the Rock Slough or Mallard Slough intakes would be abandoned.

A: Samantha Salvia stated that CCWD would not abandon any of its existing intakes. The Alternative Intake Project would provide CCWD with the flexibility to relocate some of the pumping from the existing Old River Intake to a new location during certain periods of the year to obtain better water quality. The combined capacity of the Old River conveyance system would remain 250 cubic feet per second. Both the Rock Slough and Mallard Slough Intakes would continue to provide a portion of CCWD's water supply in a manner similar to their current operations.

Q: Robert DuVall stated that water quality in the Delta is a zero sum game. He asked how CCWD could realize water quality benefits without affecting other projects, such as the pumping at Banks.

A: Samantha Salvia noted the comment and stated that modeling analyses to evaluate the effects of the project would be an important part of the project planning. CCWD believes the project can be developed in a way that does not adversely affect water quality or water levels for Delta users. She noted that the size of CCWD's diversions are an order of magnitude smaller than the diversions at the south Delta export pumps and that CCWD does not plan to draw more water from the Delta.

Comment: Robert DuVall commented that the alternative intake would divert water at critical times for the SWP and that small impacts may be important to the state. He also said that the location of the intake on Victoria Canal was in the "pseudo-peripheral canal" of the Delta.

Q: Bruce Oppenheim asked whether pumping at Rock Slough would be reduced and whether the Alternative Intake Project would play a role in determining whether to install a fish screen at Rock Slough.

A: Samantha Salvia stated that the capacity at Rock Slough would still be needed because the Alternative Intake Project would not provide any added capacity to CCWD's overall system. She said there may be a small reduction in use of Rock Slough because of some of the operational flexibility the intake could create, but that for the most part both the Rock Slough and Mallard Slough Intakes would continue to provide a portion of CCWD's water supply in a manner similar to their current operations. She also noted that the fish screen at Rock Slough is a requirement of the Central Valley Project Improvement Act for Reclamation and that CCWD is working with Reclamation on the issue.

Q: Anna Holmes noted that the timeframe given in the project documents indicates a quick turnaround of the environmental documents. She asked for information on when biological studies would take place and when the project would start coordinating with the fisheries agencies.

A: Samantha Salvia stated that the project team has already started coordinating with the fisheries agencies, including attending an Anadromous Fish Screening Program workgroup meeting to introduce the project and get initial input. She noted that biological studies would begin in the upcoming months as access to the project area becomes available.

Q: A. Holmes asked who would conduct the biological surveys.

A: Phil Dunn said that EDAW would perform the terrestrial biological resource studies and Hanson Environmental would do the fish studies.

Q: Bruce Oppenheim asked whether the pipe crossing Old River would go under or over the river.

A: Samantha Salvia stated that the project is looking at both options and would be working closely with the potentially affected reclamation districts to determine which method would be employed. She noted that tunneling under the river initially appears to be the better option.

Comment: Robert DuVall asked whether CCWD is considering the effects of different Delta projects and stated that different projects, such as in-Delta storage, could affect the hydrology and water quality in the Delta.

A: Samantha Salvia noted the comment and stated that understanding the interactions of the various projects under consideration in the Delta is a complex problem all Delta projects are currently facing. The analyses for the intake project will need to include a cumulative impacts assessment. The project team will need to work with other Delta stakeholders to develop the modeling assumptions and analysis for the project.

Comment: Robert DuVall commented that the current modeling being done by other Delta agencies may need to examine CCWD's Alternative Intake Project for their future cases.

FEBRUARY 17, 2005 SCOPING MEETING, ANTIOCH

VETERANS OF FOREIGN WARS HALL

ATTENDEES

Graydon Nichols, Victoria Island Farms
James Jerkovich, Victoria Island Farms
Christopher H. Neudeck, RD 800/2040, Kjeldsen Sinnock Neudeck, Inc.

PROJECT TEAM

Samantha Salvia, Contra Costa Water District
Lucy Eidam, Lucy & Company
Josh Newcom, Lucy & Company
Phil Dunn, EDAW
Bob Eckart, U.S. Bureau of Reclamation
Erika Kegel, U.S. Bureau of Reclamation

PUBLIC INPUT

Q: Graydon Nichols asked the size of the existing pipeline at Old River and whether the proposed Alternative Intake Project would alter that size.

A: Samantha Salvia answered that the capacity of the existing pipeline from Old River to the transfer station is 250 cfs and that the Alternative Intake Project would not include expansion of that pipeline.

Q: Christopher Neudeck asked whether CCWD would need to go to the State Water Resources Control Board in order for the project to move forward.

A: Samantha Salvia answered that CCWD and Reclamation would need to go to the State Water Resource Control Board to add a point of diversion to certain existing water rights held by CCWD and by Reclamation.

Q: Graydon Nichols asked whether CCWD would be able to maintain its proposed schedule for the project.

A: Phil Dunn responded that although the schedule is rigorous, he believes the schedule is possible to meet and that CCWD is committed to maintaining it.

Q: Christopher Neudeck asked what sort of endangered species consultations would be part of the project and how major issues like endangered species would be addressed.

A: Phil Dunn responded that CCWD has begun meeting with regulatory agencies, including attending a recent meeting of the Anadromous Fish Screen Program workgroup and has an upcoming meeting with the U.S. Army Corps of Engineers. He explained that the project team will initiate early consultations where possible, but that there will be certain environmental permits that cannot be pursued until the Final EIR/EIS is completed.

Q: Christopher Neudeck asked about the desalination alternative and the source of water CCWD was proposing to desalinate.

A: Samantha Salvia answered that the exact details of the alternatives analysis are still being developed. She indicated that the desalination alternative will likely involve an existing western Delta/Bay intake site such as CCWD's existing intake at Mallard Slough or a power plant intake. She explained that desalination is considered a project alternative because the project purpose is to protect and improve water quality, including salinity, for CCWD customers, and desalination is one of the only treatment options to remove salinity.

Q: Christopher Neudeck asked whether CCWD is looking at alternative locations for the intake along Victoria Canal and not just at one location.

A: Samantha Salvia confirmed that CCWD is evaluating other potential intake location sites.

Comment: Christopher Neudeck requested that the November 3, 2004 letter submitted to CCWD by Victoria Island Farms be considered as Victoria Island Farms' official comments for the scoping period. He noted that the letter describes the concerns of Victoria Island Farms associated with the proposed project and that those concerns have not changed.

Comment: Christopher Neudeck commented that both Reclamation District 800 (Byron Tract) and Reclamation District 2040 (Victoria Island Farms) are very interested in where the project will be located. He stated that both reclamation districts want the project planning to be a collaborative process that involves the reclamation districts. He noted that the reimbursement agreements that are being developed between CCWD and the Reclamation Districts acknowledge both parties' desire to work together.

A: Samantha Salvia confirmed that CCWD shares the reclamation districts' desire to collaborate and that CCWD wants to work closely with the reclamation districts throughout the project to receive their input and learn from their experience in the Delta.

Section H

Copies of Written Comments:

1. Graydon Nichols, Victoria Island Farms
2. B. Sachau
3. Jack Bragg, Intralox
4. John Herrick, South Delta Water Agency
5. Margit Aramburu, Delta Protection Commission
6. Debbie Pilas-Treadway, Native American Heritage Commission
7. Timothy C. Sable, California Department of Transportation
8. James A. Starr, California Department of Fish and Game
9. Katherine F. Kelly, California Department of Water Resources
10. Tom Dumas, California Department of Transportation
11. Terry L. Erlewine, State Water Contractors
12. Jon D. Rubin, Kronick, Moskovitz, Tiedmann & Girard, attorneys for San Luis & Delta-Mendota Water Authority
13. Dante John Nomellini, Central Delta Water Agency
14. Michael E. Aceituno, National Oceanic and Atmospheric Administration, National Marine Fisheries Service
15. Stephen L. Jenkins, State Lands Commission
16. Laura Fujii, U.S. Environmental Protection Agency

VICTORIA ISLAND FARMS
P. O. BOX 87
HOLT, CALIFORNIA 95234

November 3, 2004

Greg Gartrell
Contra Costa Water District
1331 Concord Avenue
P. O. Box H20
Concord, CA 94524

Re: Relocation of the Intake for Los Vaqueros

Dear Sir:

This letter is written in response to your request for access to our property on Victoria Island for investigations relating to the above. We are prepared to grant an appropriate temporary access permit to address your needs, however, we would like to reach some form of agreement with your District as to some guiding principles and provisions in the event our land is impacted by the proposed relocation. We are basically farmers and Victoria Island has been held by our family for over thirty-seven (37) years. Victoria Island is served by a common levee system, drainage canals and three (3) pumping plants operated by Reclamation District No. 2040. Although from time to time we lease portions of our land to other farmers, we basically farm the island as a unit. Our preference is that we not be impacted in any way by your plans and operations, but we recognize your District's desire to best serve your constituents.

Water diversion facilities and drainage

It is our concern that the proposed intake will adversely impact our ability to divert water from the surrounding channels, particularly at those locations southerly of the proposed intake. Our present diversions are by way of siphons and the water is used for agricultural purposes. Water levels in the channels affect the rate at which water will flow through our siphons and if the water level is allowed to drop too low the siphons will not function. Water quality is also a concern, particularly with regard to salinity. The farther south you locate your intake, the fewer of our diversions will be impacted. We understand that your District is willing to assure us that the intake location will be limited to the southerly one-third of Victoria Canal and that there will be no degradation of water quality or lowering of water levels at our diversion points resulting from the proposed project. This will likely require enlargement of some channels by dredging and or limiting operations to times when water levels will not be measurably impacted.

Additionally, in order not to interfere with the present and future drainage and irrigation

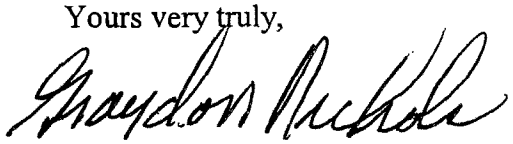
facilities, we would like assurance in advance that the pipeline will be sufficiently buried so as to provide at least ten (10) feet of cover below the ground surface and fifteen (15) feet below the invert of any canal or ditch.

Reduction of impact on lands within the Primary Zone of the Delta Protection Commission

Victoria Island is within the Primary Zone of the Delta Protection Commission and because development is restricted will likely have a lower value than lands outside the Primary Zone. This lower value unfairly encourages developing areas to use the lands within the Primary Zone for a variety of purposes including utility corridors and in this case water pipelines. The route of your pipeline could easily run to the south on the west side of Old River within your own county and if necessary could then cross Old River and connect to Victoria Canal at the southerly tip of Victoria Island. We would like to establish some agreed upon mechanism to assure that our lands are not being decimated to secure lower costs and therefore greater profits for development in other areas. We would like to secure an agreement with your District that would provide us with the option to require at any time after construction commences on Victoria Island that your District purchase the portion of our land lying south of any of your facilities constructed or to be constructed on Victoria Island. The price to be paid per acre would be equal to the average per acre fair market value of the land on Byron Tract lying south of Hwy. 4.

Your consideration of our concerns would be appreciated.

Yours very truly,



GRAYDON NICHOLS

-----Original Message-----
From: jean public [mailto:jeanpublic@yahoo.com]
Sent: Sunday, January 30, 2005 10:16 AM
To: Alternative Intake Project
Cc: reckart@mp.usbr.gov
Subject: public comment on federal register of 1/25/05 vol 70 no 15 pg 3557

usdoi bureau reclamation - contra costa water district

i want the interests of wildlife and birds for access to water permanently to receive full consideration here. i see no reason why human profiteers should restrict 100% of water to only themselves without providing full access to water fro birds/wildlife. Provision for these species must be accomplished in this plan.

b. sachau
15 elm st
florham park nj 07932

3

From: Jack.Bragg@Intralox.com
Sent: Friday, February 04, 2005 7:20 AM
To: Alternative Intake Project
Subject: Intralox Fish Screens

Ms. Salvia,

I'm contacting you regarding the Alternative Intake Project planned for the Contra Costa Water District. I am interested in having our product considered for the Alternative Intake Project. Our company, Intralox, offers the Contra Costa Water District a new innovative cost-effective solution for filtering water while screening out protected species of fish. Intralox is the inventor and world market leader for modular plastic belting. We have developed and patented the S 1800 Fish Screen belt that meets the optimum criteria of the National Marine Fisheries Service. The fish screen material is made of very strong, lightweight injection molded UV resistant plastic. It is impact and corrosion resistant, and requires less civil and structural work than older technologies. Installation and repairs are easy to make on-site due to the modular construction of the belt. The belt is self-cleaning thereby! significantly reducing on going maintenance costs.

See link below for more information on our fish screens as well as U S Bureau of Reclamation test results for Intralox fish screens:

www.intralox.com/fishscreens.htm

I will follow up with a phone call to learn more about the planned project and to discuss the benefits of our technology over older existing technologies.

Best regards,

Jack Bragg
Team Leader, Water Screens
Intralox, LLC.
Office - 386-462-5852
Cell - 352-514-6904
Voice - 800-344-5106 x 7432
e-mail - jack.bragg@intralox.com

SOUTH DELTA WATER AGENCY

4255 PACIFIC AVENUE, SUITE 2
STOCKTON, CALIFORNIA 95207
TELEPHONE (209) 956-0150
FAX (209) 956-0154
E-MAIL Jherrlaw@aol.com

Directors:
Jerry Robinson, Chairman
Robert K. Ferguson, Vice-Chairman
Natalino Bacchetti
Jack Alvarez

Engineer:
Alex Hildebrand
Counsel & Manager:
John Herrick

February 3, 2005

Ms. Samantha Salvia, Alternative Intake Project Manager
Contra Costa Water District
1331 Concord Avenue
P. O. Box H20
Concord, CA 94524

Dear Ms. Salvia:

Thank you for the opportunity to comment on the public scoping of your Alternative Intake Project.

Through the UOP discussions which followed the Napa Agreement, our agency (SDWA), Central Delta Water Agency (CDWA) and CCWD discussed the issue of relocating the Los Vaqueros intake to a place within the boundaries of the CDWA. At that time, SDWA and CDWA expressed their concerns regarding such a change in location and cautioned that it was premature to develop a project with that goal.

At this time SDWA is closely involved with DWR in finalizing a preferred alternative for the South Delta Improvement Program's DEIR/S. As you know, the SDIP is a high priority item for CALFED because it also includes increasing exports at the State Banks' Pumping Plant up to 8500 cfs. SDIP will hopefully mitigate for not only ongoing export and CVP operations, but also for the increase in adverse effects resulting from the increased export rate. Until such time as an agreeable preferred alternative is developed, we believe it would be premature to embark upon a project that changes how and where diversions in the South Delta operate. Until the preferred alternative is completed, the effects of the SDIP, and thus the resulting water quality needs of CCWD cannot be determined. Adding your proposed project at this time will only serve to delay finalization of the SDIP as the environmental document would thus be required to examine the effects of your proposed project in its treatment of cumulative effects.

Once the SDIP DEIR/S has been released, we can then determine if the project results in any significant adverse effects to CCWD and if mitigation is necessary. Any such mitigation

may or may not include the proposed change in location of the Los Vaqueros intake. As you know, CALFED's proposed Frank's Tract project may significantly improve CCWD's water quality.

If you do proceed to scope the proposed project, you should eventually include an examination of the effects of a 250 cfs diversion from any proposed South or Central Delta channel, including the effects on the water quality, elevation and circulation. In addition, how and where the resulting pipeline is placed raises question about levee protection and interference with local farming operations. Our prior discussion made it clear that any new diversion on Middle River would not be acceptable. As stated above, until the final configuration and operation of the SDIP (including tidal barrier and Clifton Court Forebay operations) is determined, it is premature to begin an analysis of a change in diversion location.

It remains the SDWA's position that any actions in the South and Central Delta must be done in a way that meets the mutual needs of local diversions according to the priorities of California water law, including the Delta Protection Act and area of origin law. We hope the SDIP can first be resolved before further projects such as the one CCWD proposes are undertaken.

There is of course an interrelation between the effect of your intake on South Delta in-channel water supplies and the water management within the South Delta, the schedule on which water is taken into Clifton Court, and the flow and salt load at Vernalis. We would like you to be aware that at this time, DWR and USBR still have no plan that adequately addresses the water supply, water quality/circulation, and water depth needs throughout the South Delta. Those agencies have not accepted SDWA's proposal for resolving these issues. We attach a copy of our January 31 letter to Mr. Gerald Johns of DWR. Until this is resolved, your analyses should be deferred.

Please call me if you have any questions or comments.

Very truly yours,

JOHN HERRICK

JH/dd
Enclosure
cc: Dante J. Nomellini, Esq.
Mr. Alex Hildebrand
Mr. Paul Marshall

SOUTH DELTA WATER AGENCY

4255 PACIFIC AVENUE, SUITE 2
STOCKTON, CALIFORNIA 95207
TELEPHONE (209) 956-0150
FAX (209) 956-0154
E-MAIL Jherrlaw@aol.com

Directors:
Jerry Robinson, Chairman
Robert K. Ferguson, Vice-Chairman
Natalino Bacchetti
Jack Alvarez

Engineer:
Alex Hildebrand
Counsel & Manager:
John Herrick

January 31, 2005

Mr. Gerald E. Johns
Deputy Director
Department of Water Resources
1416 Ninth Street, Room 1115-9
Sacramento, CA 95814 Mr. Gerald Johns

Re: SDIP

Dear Jerry:

We are pleased with the cordial relations and the earnest good faith effort with which we are working together to develop a water management plan that will protect the in-channel water supply throughout the South Delta from impacts of CVP and SWP operations. We think it may be helpful at this time to recapitulate our technical understanding of the nature of the impacts involved, the fundamental technical requirements for correcting them, the technical proposals for addressing some impacts, and the issues which do not yet have defined solutions.

The impacts to be addressed include the following:

1) Operation of CVP export pumps draws down water levels and depths throughout South Delta channels and throughout the tidal cycle and in proportion to the export rate.

2) Operation of SWP pumps also draws down these water levels, but the magnitude and duration of the drawdown during the tidal cycle depends on the schedule with which water is taken into Clifton Court.

3) CVP's upstream diversions are a substantial cause of reduced flow at Vernalis in most years.

4) The CVP has greatly increased the salt load at Vernalis by importing salt via the DMC to the westside service area which then drains into the San Joaquin River.

5) The water yield of the San Joaquin watershed, and of the Stanislaus tributary watershed in particular, is seriously over committed in large part because of CVP and CVP-IA operations.

6) Pre-CVP water salinity in South Delta channels was much lower than is now required by the Vernalis salinity standard. That standard was set to only marginally protect crop yields in the South Delta. That same marginal level of protection is needed throughout South Delta channels.

Basic technical requirements for protecting the South Delta's water supply include the following in addition to the installation of four permanent operable barriers:

a) The salt load entering at Vernalis must be flushed through the South Delta without exceeding the Vernalis salinity standard. In order that no portion of these channels is allowed to become a salt sump this means that there must be an adequate net daily unidirectional flow (i.e., no stagnant zone) in each major channel and an adequate net downstream flow through South Delta channels as a group.

b) Operation of the barriers and adjustment of the intake schedule to Clifton Court must combine with other measures to assure that the barriers can capture enough water to meet local diversions upstream of the barriers at all times and also provide adequate net daily unidirectional flow at all locations. To the extent that this also requires inflow at the head of Old River from the San Joaquin channel, there must be assurance that that inflow will always be available during low Vernalis flows. The Vernalis flow was only about 1000 cfs all last summer, and it may drop to about 500 cfs in future years unless a minimum Vernalis flow is provided.

c) To a limited degree the capture of water by the barriers can be enhanced by dredging South Delta channels and altering some local diversion facilities so that channel operating levels can be low. However, this requires that there also be a provision for an on going depth maintenance program such as exists in the ship channels.

d) When Vernalis flows drop toward 1000 cfs the water depth in the tidal channel downstream of Vernalis becomes inadequate for local diversions. This problem is exacerbated if water capture by the barriers is enhanced by dredging to permit low operating levels west of the head of Old River, and if the water level at the head of Old River is lowered in order to induce flow into Old River.

e) The salinity of the flow at Vernalis rises as the flow goes downstream due to crop use of water and to urban and other waste discharges. This salinity rise is substantial during low flows. In order to maintain salinity downstream of Vernalis toward Stockton there must either be a source of downstream dilution water or the salinity at Vernalis must be lower than the standard.

The DWR has proposed that the above described protections be provided in Old River, Middle River, and Grant Line by

1) Dredging and local diversion facility alterations to permit operating at a level of 0.0 datum upstream of the barriers and west of the head of Old River. However, the dredging is not yet designed to allow a margin of error and does not include a future depth maintenance program.

2) Operating the intake to Clifton court on a "priority three" schedule. That schedule takes water into Clifton Court, with consequent level drawdown, during the low-high tide but allows the high-high tide to reach full height (exclusive of CVP drawdown) for a brief period. DWR modeling indicates that this will permit capture of sufficient water upstream of the tidal barriers and west of the head of Old River, providing an adequate inflow is available into the had of Old River and except for about four days during neap tides in each lunar month. We assume that on those days the intake will be per "priority 2" as needed.

It appears that under this operation the salinity need will also be met in Old River, Grant Line, and Middle River. At any channel location it appears that the daily source of local diversion will blend enough export quality water from downstream of the barriers with degraded water entering the head of Old River to maintain salinity. This is not yet verified.

3) DWR has not yet proposed a credible method of meeting salinity needs from Vernalis to Stockton, or of assuring that enough water is available to flow into Old River per DWR's proposal, or providing enough depth for local diversions from Vernalis to Mossdale.

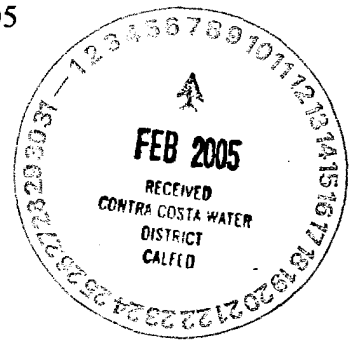
We hope you will either propose dependable solutions to these three problems or reconsider the use of low head pumps to solve them as we have proposed.

Sincerely,

Alex Hildebrand

DELTA PROTECTION COMMISSION
14215 RIVER ROAD
P.O. BOX 530
WALNUT GROVE, CA 95690
Phone (916) 776-2290
FAX (916) 776-2293
E-Mail: dpc@citlink.net Home Page: www.delta.ca.gov

February 3, 2005



Contra Costa Water District
1331 Concord Avenue
P.O. Box H2O
Concord, CA 94524

Attention: Samantha Salvia, Project Manager

Subject: Contra Costa County Alternative Intake Project; Notice of Public Scoping Meetings

Dear Ms Salvia:

Thank you very much for the fact sheet and information about public scoping meetings for the Alternative Intake Project dated January 27, 2005. The information states that the proposed project is evaluation of an added new drinking water intake in the Central Delta. The purpose of the new intake is to access better quality water with no change in the amount of water diverted from the Delta. The project location is described as the lower third portion of Victoria Canal with a two to four mile long pipeline across agricultural lands on Victoria Island from the new intake to the existing Old River conveyance system to the west. The proposed location for the new intake and the pipeline are located in the Primary Zone of the Delta.

As you are aware, the Delta Protection Commission has been charged with development of a regional land use plan for the Primary Zone of the Delta and the Commission has a limited appeal authority over certain local government actions regarding land uses in the Primary Zone.

However, the Delta Protection Act (Public Resources Code Section 29723(b)) exempts certain activities from the appeal authority of the Commission including "planning, approval, construction, operation, maintenance, reconstruction, alteration, or removal by a state agency or local agency of any water supply facilities or mitigation or enhancement activities undertaken in connection therewith."

Of course the Commission would urge the District to ensure that its proposed intake and fish screen not interfere with recreation activities in the area, that this project is coordinated with other proposed projects in the area including the South Delta Improvements Project, and that impacts to agriculture from a new pipeline would be minimized and mitigated.

The proposed project will be added to the Commission's informational Pending Projects Memo, which is updated regularly and distributed monthly. Please keep the Delta Protection Commission on the interested party mailing list for your planning process, and mail or email any staff reports and meeting agendas. Additional information about the Commission, its Land Use Plan and the Delta Protection Act are available on the Commission's web site: www.delta.ca.gov.

Please feel free to call if you have any questions regarding the Commission and its interests in the Delta Primary Zone.

Sincerely,

Margit Aramburu
Executive Director

Cc: Chairman Mike McGowan
Supervisor Mary Piepho
Supervisor Leroy Ornellas

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390

February 17, 2005

Samantha Salvia
Contra Costa Water District
PO Box H20
2411 Bissco Lanr
Concord, CA 94524-2099

RE: SCH# 2005012101 – Alternative Intake Project, Contra Costa County

Dear Ms. Salvia:

The Native American Heritage Commission has reviewed the above mentioned NOP. To adequately assess and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

1. Contact the appropriate Information Center for a record search. The record search will determine:
   - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
   - If any known cultural resources have already been recorded on or adjacent to the APE.
   - If the probability is low, moderate, or high that cultural resources are located in the APE.
   - If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
   - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
   - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
3. Contact the Native American Heritage Commission for:
   - A Sacred Lands File Check. Requests must be made in writing with the County, Quad map name, township, range and section.
   - A list of appropriate Native American Contacts for consultation concerning the project site and to assist in the mitigation measures.
4. Lack of surface evidence of archeological resources does not preclude their subsurface existence.
   - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
   - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
   - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5 (e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

If you have any questions, please contact me at (916) 653-4038.

Sincerely,

Debbie Pilas-Treadway
Environmental Specialist III

CC: State Clearinghouse

DEPARTMENT OF TRANSPORTATION
111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5505
FAX (510) 286-5559
TTY (800) 735-2929

Flex your power!
Be energy efficient!

February 10, 2005

CC004815
CC-4-R44.37
SCH2005012101

Ms. Samantha Salvia
Contra Costa Water District
P.O. Box H2O
2411 Bisso Lane
Concord, CA 94524-2099

Dear Ms. Salvia:

Alternative Intake Project – Notice of Preparation

Thank you for including the California Department of Transportation in the early stages of the environmental review process for the proposed project. We have reviewed the Notice of Preparation for the Alternative Intake Project Draft Environmental Impact Report and offer the following comment:

The California Department of Transportation is primarily concerned with impacts to the State Highway system. Please ensure that the environmental analysis evaluates the proposed project's impacts on State transportation facilities, specifically to State Route 4.

Should you require further information or have any questions regarding this letter, please call Lisa Carboni of my staff at (510) 622-5491.

Sincerely,

TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Scott Morgan (State Clearinghouse)

State of California – The Resources Agency ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov

Central Valley Bay-Delta Branch
4001 N. Wilson Way
Stockton, California 95205-2486
(209) 948-7800

March 3, 2005

Ms. Samantha Salvia, Project Manager
Contra Costa Water District, Alternative Intake Project
1331 Concord Avenue
P.O. Box H20
Concord, CA 94524

Dear Ms. Salvia,

The Department of Fish and Game (Department) appreciates the opportunity to comment on your proposed Alternative Intake Project (Project) currently in the public scoping phase. We understand that your purpose for the project is to "...continue to provide high quality water for your customers despite continued deterioration of Delta water quality and to meet increasingly stringent drinking water quality standards." Based on your purpose and the proposed Project, the Department has the following comments.

Comments:

Project Purpose

This project may be premature, since the Contra Costa Water District is currently working on the Los Vaqueros Reservoir Expansion (LVR) which will meet the same purposes that are outlined in the public scoping sessions. Implementation of this Project, under the current schedule, will have a completion date that is within one quarter of a year of the LVR project timeline. In addition, the relocation of the proposed Los Vaqueros expansion describes that it will accommodate the capacity of the existing Old River intake in its design. Finally, LVR is evaluating placement of the new intake along Victoria Canal, as well as other locations in the Delta.

The Delta Improvements Package (DIP), dated August 12, 2004, describes a series of measures that the State and federal agencies will undertake to advance the CALFED Bay-Delta Program goals in the areas of water supply reliability, water quality, ecosystem restoration, Delta levee integrity, and science. Specifically Measures H, on page 5 of the DIP, states that *"if water quality improvements from the above measures do not provide acceptable continuous improvements in Delta water quality, the State and federal agencies will evaluate, and if appropriate, work with Contra Costa Water District to relocate their intake to the lower part of Victoria Canal."* Many of the actions described in the DIP to improve the water quality in the Delta have not been implemented and as such, it is our opinion that sufficient time has not passed, as of the date of this letter, to warrant the pursuit of a new intake location to meet your project purpose.

Project Timeline

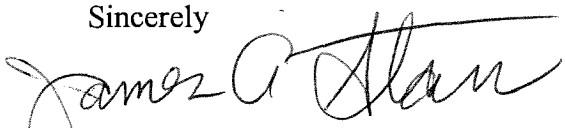
The proposed timeline for completing the environmental compliance portion of this project is ambitious. It appears that several outstanding issues need to be resolved to accommodate this timeline. The first is that landowner permission to survey the property has yet to be obtained (as of the February 16, 2005 meeting) and second the survey for plant species will need to be conducted in the spring and early summer to identify the species that may be present.

During the public scoping meeting on February 16, 2005, the presentation stated that CALFED funding will be pursued to help finance the cost of the Alternative Intake Project. If CALFED funding is granted, an Action Specific Implementation Plan (ASIP) will have to be completed concurrently with the EIR/EIS. The ASIP process involves early coordination with the resource agencies (CDFG, NOAA Fisheries, and USFWS) to establish a project description that incorporates the preferred alternative, avoidance measures, mitigation, and environmental enhancements.

This concludes the DFG's comments. We recommend that your agency should consider delaying implementation this project to allow the measures outlined in the August 12, 2004 Delta Improvements Package an opportunity to be implemented and their benefits realized. If the Contra Costa Water District board decides to proceed with this project I would encourage you to consider contacting both the State and federal regulatory agencies to begin early consultation to initiate the ASIP process.

If you have any questions about these comments contained in this letter, or would like to begin early consultation on this process, please feel free to contact Ms. Anna Holmes of my staff at (209) 948-7800 or email her at aholmes@delta.dfg.ca.gov.

Sincerely



James A. Starr
Senior Biologist

Department of Fish and Game
Sacramento, California
Dr. Diana Jacobs
Mr. Jim White

Stockton, California
Dr. Perry Herrgesell, Chief
Mr. Frank Wernette
Ms. Anna Holmes

Mr. Jeff Stuart
National Oceanic and Atmospheric Administration
Sacramento, California

Mr. Ryan Olah
U.S. Fish and Wildlife Service
Sacramento, California

JS05C002.wpd/cc

STATE OF CALIFORNIA -- THE RESOURCES AGENCY
ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

9

March 4, 2005

Ms. Samantha Salvia
Alternative Intake Project Manager
Contra Costa Water District
1331 Concord Avenue
Post Office Box H2O
Concord, California 94524

Dear Ms. Salvia:

Thank you for your January 24, 2005 letter providing a fact sheet on Contra Costa Water District's (CCWD) proposed Alternative Intake Project and information on the public scoping meetings and the process for preparing a joint Environmental Impact Statement/Report (EIS/R) for the project.

As you know, the Department of Water Resources (DWR) fully supports the joint State/Federal program (CALFED) to develop and implement projects to improve water supply reliability, water quality, levee integrity, and fish and wildlife diversification and abundance in the Sacramento-San Joaquin Delta. We fully appreciate CCWD's participation and interest in this same process.

The implementation plan of the Delta Improvements Package, adopted by California Bay-Delta Authority in August 2004, indicates that the Alternative Intake Project will be evaluated after other actions related to Delta water quality are taken. Specifically, the implementation of the Veale/Byron Tract projects and the evaluation of the Franks Tract project (see Section H, page 5 of the Plan). The Alternative Intake Project now appears to be under a faster schedule and not contingent upon implementation of these other projects. It would be worthwhile for us to discuss the implementation plan for the alternative intake and the program plan for the Franks Tract project to make sure they are consistent. My office will call to schedule a time for us to meet.

Regarding the scope of the analyses for the Alternative Intake Project, DWR is concerned about any adverse effects (degradation) of water quality at the State Water Project's Clifton Court Forebay, the Central Valley Project's Tracy Pumping Plant, and local diversions for Delta agriculture that could occur as a result of the proposed project. We request that the EIR/S prepared for the project provide a thorough explanation of how such potential effects have been evaluated and the basis for any determination of the significance of the effects be clearly explained.

Thank you for the opportunity to provide these comments. I look forward to continuing the collaboration between our agencies on this project, and others, in which we have shared interests and concerns.

If you have any questions, please contact me at (916) 653-1099.

Sincerely,

Katherine F. Kelly, Chief
Bay-Delta Office

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
P.O. BOX 2048 STOCKTON, CA 95201
(1976 E. CHARTER WAY/1976 E. DR. MARTIN
LUTHER KING JR. BLVD. 95205)
TTY: California Relay Service (800) 735-2929
PHONE (209) 941-1921
FAX (209) 948-7194

Flex your power!
Be energy efficient!

March 4, 2005

10-SJ-4
Post Mile 4.4
SCH 2005012101
CCWD Alt Intake Proj

Samantha Salvia
Contra Costa County Water District
P.O. Box H20
2411 Bisso Lane
Concord, CA 94524-2099

Dear Ms. Salvia:

The California Department of Transportation (Department) appreciates the opportunity to have reviewed the Notice of Preparation for the proposed new water intake, pumping plant and pipeline near State Route 4 (SR-4) and Middle River. The Department has the following comments:

- Any work performed within the Department's right of way will require an encroachment permit. For those portions of the project within the Department's right of way, the permit application must be stated in both English and Metric units (Metric first, with English in parentheses). Additional information regarding encroachment permits may be obtained by contacting our Permits Office at (209) 948-7891. Early coordination with our agency is strongly advised for all encroachment permits.

- Furthermore, if a developer proposes any work or improvements within the Department's right of way, the projects environmental studies must include such work. The developer is responsible for quantifying the environmental impacts of the improvements (project level analysis) and completing all appropriate mitigation measures for the impacts. The indirect effects of any mitigation within Department right of way must also be addressed. The developer will also be responsible for procuring any necessary permits or approvals from the regulatory and resource agencies for the improvements.

- All roadway features (signs, pavement delineation, roadway surface et cetera) within Department right of way must be protected or maintained in a temporary condition and restored.

- We suggest that the Water District continue to coordinate and consult with the Department to identify and address potential transportation impacts that may occur from this project. This will assist us in ensuring that traffic safety and quality standards are maintained for the traveling public on existing and future state transportation facilities.

If you have any questions or would like to discuss our comments in more detail, please contact Dan Brewer at (209) 948-7142 (e-mail: dan.brewer@dot.ca.gov) or me at (209) 941-1921.

Sincerely,

for

TOM DUMAS, Chief
Office of Intermodal Planning

C: SMorgan CA Office of Planning & Research

State Water Contractors

455 Capitol Mall, Suite 220 • Sacramento, CA 95814-4409
Terry L. Erlewine - General Manager (916) 447-7357 • FAX 447-2734

March 4, 2005

Ms. Samantha Salvia
Contra Costa Water District
P.O. Box H20
Concord, CA 94524-2099

Re: CCWD's Alternative Intake Project Proposal

Dear Ms. Salvia:

I am writing on behalf of the State Water Contractors (SWC) regarding the Contra Costa Water District's (CCWD) proposed Alternative Intake Project. As you know, the SWC represents 27 of the 29 public agencies[1] that have water supply contracts with the State of California for the delivery of water from the State Water Project (SWP). These public agencies provide drinking water from the State Water Project to more than 20 million Californians throughout the state.

We are concerned that the proposed new intake, which would be intended to produce an improvement in CCWD's water quality, could do so at the expense of the SWP's water quality by diverting fresh water supplies that would otherwise have reached the SWP pumps. To the extent the new intake could have water quality impacts on the SWP, those impacts must be evaluated in the EIS/EIR. We also believe that CCWD's water quality could be improved with a variety of other projects and actions that will be undertaken as part of the CalFed Delta Improvements Program, without imposing any degradation of water quality on the SWP. The EIR/EIS must fully consider these alternatives to a new intake project as a means of meeting CCWD's water quality goals. Please keep us on the list of interested parties as you move forward on this project.

Sincerely yours,

Terry L. Erlewine
General Manager

[1] Alameda County Zone 7 Water Agency, Alameda County Water District, Antelope Valley-East Kern Water Agency, Casitas MWD on behalf of the Ventura County Flood Control District, Castaic Lake Water Agency, Central Coast Water Authority on behalf of the Santa Barbara FC&WCD, City of Yuba City, Coachella Valley Water District, County of Kings, Crestline-Lake Arrowhead Water Agency, Desert Water Agency, Dudley Ridge Water District, Empire West-Side Irrigation District, Kern County Water Agency, Littlerock Creek Irrigation District, The Metropolitan Water District of Southern California, Mojave Water Agency, Napa County FC&WCD, Oak Flat Water District, Palmdale Water District, San Bernardino Valley MWD, San Gabriel Valley MWD, San Gorgonio Pass Water Agency, San Luis Obispo County FC&WCD, Santa Clara Valley Water District, Solano County Water Agency, and Tulare Lake Basin Water Storage District.

KRONICK
MOSKOVITZ
TIEDEMANN
&GIRARD
A PROFESSIONAL CORPORATION

JON D. RUBIN

March 4, 2005

Ms. Samantha Salvia
Project Manager
Contra Costa Water District
2411 Bisso Lane
P.O. Box H2O
Concord, CA 94524-2099

Mr. Robert Eckart
Supervisory Environmental Specialist
United States Bureau of Reclamation
Mid-Pacific Region
2800 Cottage Way, MP–152
Sacramento, CA, 95825–1898

Re: Contra Costa Water District's Alternative Intake Project

Dear Ms. Salvia and Mr. Eckart:

I am writing on behalf of the San Luis & Delta-Mendota Water Authority (Authority). The Authority provides the following comments on the Alternative Intake Project, pursuant to the January 25, 2005, notice of intent to prepare an environmental impact statement (EIS), and notice of preparation of an environmental impact report (EIR).

The Authority is a joint powers authority comprised of 32 water agencies representing approximately 2,100,000 acres of federal and exchange water service contractors within the western San Joaquin Valley, San Benito and Santa Clara counties. The Authority's member agencies maintain contracts with the United States for Central Valley Project (CVP) water. The rights held by the member agencies entitle them to up to approximately 3,000,000-acre feet of water. Of this amount, 2,500,000 acre-feet are delivered to highly productive agricultural lands, 150,000 to 200,000-acre feet for municipal and industrial uses, and between 250,000 to 300,000 acre-feet are delivered to wildlife refuges for habitat enhancement and restoration. The Authority maintains an interest in Contra Costa Water District's Alternative Intake Project because of the potential for that project to affect operation of the CVP and thus the water supply of the Authority's member agencies.

As described in the notice of intent and notice of preparation, the purposes of the Alternative Intake Project is to protect and improve water quality for the customers of Contra Costa Water District (CCWD). The Authority supports that purpose and the efforts by United States Bureau of Reclamation (Reclamation), CCWD and others to improve the quality of drinking water throughout California. That purpose and those efforts, however, must be pursued in a manner that will not have significant, adverse impacts on the use of water by others.

The Authority presents the following two comments (1) to ensure that the Alternative Intake Project is developed consistent with the larger, statewide effort to develop and implement a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta System, and (2) to ensure Reclamation and CCWD perform analyses that identify potential impacts to other water users and that, if there are any such impacts and the impacts are significant and adverse, they are fully mitigated.

I. Alternative Intake Project as an Element of the CalFED program

It is beyond reasonable dispute that the Alternative Intake Project is part of the CalFED program. The CalFED record of decision establishes "[r]elocat[ion of] diversion intakes to locations with better source water quality", as a means "[t]o mitigate for potential effects of implementation of the Preferred Program Alternative on water quality". ROD at A-1 to A-2. CCWD recently recognized this point in a letter it sent to the California State Water Resources Control Board, which provides:

> The project will both offset water quality degradation caused by increased Delta pumping and help meet CALFED drinking water quality improvement goals. The Alternative Intake Project is a key water quality element of the CALFED Delta Improvement Package. The Alternative Intake Project was authorized for design and construction in the recent federal CALFED legislation (Public Law 108-361 §103 (f)(1)(E)).

Letter from Richard A. Denton, Water Resources Manager for CCWD to Ms. Debbie Irvin, Clerk to the State Water Resources Control Board, dated February 14, 2005, a copy of which is attached hereto.

As a result of the Alternative Intake Project being part of the CalFED program, it must comport with the CalFED solution principles. Those are:

- *Reduce Conflicts in the System* Solutions will reduce major conflicts among beneficial uses of water.

- *Be Equitable* Solutions will focus on solving problems in all problem areas. Improvements for some problems will not be made without corresponding improvements for other problems.

- *Be Affordable* Solutions will be implementable and maintainable within the foreseeable resources of the Program and stakeholders.

- *Be Durable* Solutions will have political and economic staying power and will sustain the resources they were designed to protect and enhance.

- *Be Implementable* Solutions will have broad public acceptance and legal feasibility, and will be timely and relatively simple to implement compared with other alternatives.

KRONICK MOSKOVITZ TIEDEMANN & GIRARD
400 CAPITOL MALL, 27TH FLOOR
SACRAMENTO, CA 95814-4416
TEL: (916) 321-4500
FAX: (916) 321-4555

- *Have No Significant Redirected Impacts* Solutions will not solve problems in the Bay-Delta system by redirecting significant negative impacts, when viewed in their entirety, within the Bay-Delta or to other regions of California.

ROD at 9. The EIS/EIR should state explicitly that the Alternative Intake Project will adhere to and the alternative screening process will be guided by those principles.

II. Need to Consider Impacts of the Alternative Intake Project on Water Supply for all Water Users

The notice of intent and the notice of preparation indicate that the EIS/EIR for the Alternative Intake Project will consider the potential impacts on hydrology and water quality. In particular, the notice of preparation explains that the EIR will evaluate: "[m]odification of local drainage, hydraulic effects in Delta channels, effects on Delta water quality, and effects on CCWD operations." The hydrologic and water quality analyses, however, must be broader than that. They must consider the potential hydrologic and water quality impacts of the Alternative Intake Project beyond impacts in the Delta or to CCWD. The impact analyses must consider the potential impact south of the Delta, including the potential water supply impacts to the Authority's member agencies.

Thank you very much for your consideration.

Sincerely,

KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD
A Professional Corporation

Jon D. Rubin
Attorneys for the San Luis & Delta-Mendota Water Authority

cc: Daniel Nelson
Thomas Birmingham

790259.1

KRONICK MOSKOVITZ TIEDEMANN & GIRARD
400 CAPITOL MALL, 27TH FLOOR
SACRAMENTO, CA 95814-4416
TEL: (916) 321-4500
FAX: (916) 321-4555

13

CENTRAL DELTA WATER AGENCY
235 East Weber Avenue • P.O. Box 1461 • Stockton, CA 95201
Phone 209/465-5883 • Fax 209/465-3956

February 25, 2005

Samantha Salvia
Alternative Intake Manager
Contra Costa Water District
P. O. Box H20
Concord, CA 94524

Re: Public Scoping for Contra Costa Water District's Alternative Intake Project

Dear Samantha:

The Central Delta Water Agency has the following concerns regarding the above.

We view moving away from the Old River intake location towards the central Delta as just another step towards abandoning protection of water quality in the Old River portion of the Delta pool. Both physical and regulatory degradation are likely to result. While we recognize that water quality at the Contra Costa Water District intake at Mallard Slough and in more recent years at Rock Slough is degraded as a result of the export operations of the CVP and SWP, representations have been made by the SWP and CVP export contractors that their intent is to secure improved water quality in Old River including the area of the present intake to Los Vaqueros. Until such time that it is clear that Old River water quality will not be improved, we oppose the alternative intake. If the proposed measures to improve San Joaquin River quality and to reduce salinity intrusion including possible physical improvements of Frank's Tract and other locations will not improve water quality to a reasonable degree, we would not oppose an alternate intake for the existing Los Vaqueros operation in the southerly one-third of Victoria Canal or southerly therefrom provided that such will not result in degradation of water levels or water quality.

Our agency has always been opposed to any proposals similar to the southern one-third of the Peripheral Canal or the proposed pipeline connection from Clifton Court Forebay to the proposed Delta Wetlands Reservoir on Bacon Island. Although not perfect, preservation of the Delta as a common pool serving both export and local water needs helps maintain a common interest with exporters in protection of water quality in most of the Delta. We recognize that the common pool has not resulted in satisfactory protection of water quality in the western Delta including the water quality at Mallard Slough since the exporters' interest is focused on the quality of water at the export pumps.

The environmental review should consider the impacts associated with an enlarged Los Vaqueros alternative and should examine other reasonable alternatives to improve water quality in Old River at the existing CCWD intake including improvement of the flow and water quality in the San Joaquin River, physical modifications in the Delta such as those proposed for Frank's Tract, changes in SWP and CVP operations and alternative intake locations farther south along the west side of Old River including connections to Clifton Court Forebay.

Yours very truly,

DANTE JOHN NOMELLINI
Manager and Co-Counsel

DJN:ju

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Sacramento Area Office
650 Capitol Mall, Suite 8-300
Sacramento, California 95814-4706

March 15, 2005

In response reply to:
151422 SWR2005SA20268:BFO

Mrs. Samantha Salvia, Project Manager
Contra Costa Water District
241 Bisso Lane
P.O. Box H20
Concord, California 94524-2099

Dear Ms. Salvia:

Thank you for the opportunity to comment on the "Notice of Preparation" (NOP) of a joint environmental impact report/environmental impact statement (EIS/EIR) between the U.S. Bureau of Reclamation (Bureau) and Contra Costa Water District (CCWD) on the proposed Alternative Intake project.

NOAA's National Marine Fisheries Service (NMFS) is responsible for the management, conservation, and restoration of anadromous fish species listed as threatened or endangered under the Endangered Species Act (ESA) of 1973, as amended. In addition, the Magnuson-Stevens Fisheries Conservation Act require Federal agencies to consult with the NMFS regarding any action or proposed action that may adversely affect Essential Fish Habitat (EFH) for Federally managed marine fish.

Available information indicates that the following federally listed fish species may occur in the proposed project area:

Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*) - endangered
Central Valley spring-run Chinook salmon (*O. tshawytscha*) - threatened
Central Valley steelhead (*O. mykiss*) - threatened
Central Valley fall/late fall-run Chinook salmon (*O. tshawytscha*) – candidate

In addition, designated critical habitat occurs within the proposed project area for winter-run Chinook salmon and has been proposed for Central Valley steelhead. Proposed spring-run Chinook critical habitat does not include the proposed project area.

Regarding EFH, the proposed action is located in areas of the Delta occupied by various life stages of fish species Federally managed under the Pacific Salmon, Pacific Groundfish, and Coastal Pelagic Fisheries Management Plans. For more information on EFH and species distribution, please see our website at http://swr.nmfs.noaa.gov/sac/index.htm.

For the above proposed action, NMFS recommends that the Bureau and CCWD utilize the informal consultation process (50 CFR § 402.13) prior to submitting a written request to NMFS for formal consultation. Through informal consultation, NMFS and the Bureau may exchange information, analyze effects of the proposed action, and develop plans to avoid and minimize any potential impacts. If the impacts of the project can be avoided or minimized such that salmon and steelhead will not be adversely affected, it would not be necessary to initiate formal consultation.

In addition to the information provided in the EIS/EIR, the following information would assist NMFS during the informal consultation:

- a detailed design of the fish screens be provided as early as possible
- a description of the specific area that may be affected by the action
- CALSIM modeling on the effect of the action on State and Federal pumping plant operations in the South Delta
- a plan that integrates the operation of the proposed alternative intake with existing CCWD intakes, reducing the need for pumping during critical fish periods at the unscreened Rock Slough Intake
- a detailed analysis of effects on South Delta water level elevations, especially in the fall, and if the action will require a change in the Water Level Response Plan recently completed by the Bureau for the State Water Resource Control Board
- consistency with the Bureau's operation, plan, and criteria (OCAP) for the Central Valley Project and State Water Project
- consistency with the South Delta Improvement Program (SDIP) and barrier operations

If the Bureau makes a finding prior to or during informal consultation that the proposed action "may affect, but is not likely to adversely affect" listed species or critical habitat, the Bureau may request written concurrence from NMFS for this finding. NMFS will usually response within 30 calendar days when possible. If a finding of "not likely to adversely affect" cannot be made by the Bureau, or NMFS is unable to concur with the Bureau's finding, formal consultation is required.

Informal consultation can be initiated by written request to:

Rodney R. McInnis
Regional Administrator, Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

Please provide a copy of your letter requesting consultation and all supporting documents to the NMFS Sacramento Office at 650 Capitol Mall, Suite 8-300, Sacramento, California 95814. The

contact person in the Sacramento Area Office for this project is Mr. Bruce Oppenheim. Mr. Oppenheim may be reached by telephone at (916) 930-3603, or by fax at (916) 930-3629.

Sincerely,

Michael E. Aceituno
Supervisor, Sacramento Area Office

cc: NMFS-PRD, Long Beach, CA
Steve Thomas, NMFS, Santa Rosa
Chet Bowling and Carl Torgersen, USBR, 3310 El Camino Ave, Suite 300, Sacramento, CA 95821
Carl Dealy, USBR, Tracy Office, 16650 Kelso Road, Byron CA 94514-1909
Mark Holderman, DWR, Bay-Delta Office, PO Box 942836, Sacramento CA 94236

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

PAUL D. THAYER, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
California Relay Service From TDD Phone **1-800-735-2922**
from Voice Phone **1-800-735-2929**

Contact Phone: **(916) 574-1862**
Contact FAX: **(916) 574-1885**

April 4, 2005

File Ref: SCH 2005012101

Ms. Samantha Salvia
Contra Costa Water District
P.O. Box H20
2411 Bisso Lane
Concord, CA 94524-2099

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report for the Alternative Intake Project, Contra Costa and San Joaquin Counties

Dear Ms. Salvia:

Staff of the California State Lands Commission (CSLC) has reviewed the subject document. The CSLC is a Responsible under the California Environmental Quality Act.

To the extent the proposed project involving the proposed Contra Costa Water District's Alternative Intake Project is located on State-owned sovereign lands, it appears that is subject to Section 6327 of the Public Resources Code.

Section 6327 of the Public Resources Code provides that if a facility is of the "procurement of fresh-water from and construction of drainage facilities into navigable rivers, streams, lakes, and bays," and if the applicant obtains a permit from the local reclamation district, State Reclamation Board, the U.S. Army Corps of Engineers, or the Department of Water Resources, then an application shall not be required by the Commission. Since the proposed project appears to fall within this section, you will not need to obtain a lease from the Commission, provided you obtain one of the above-listed permits. Please forward a copy of that permit to Ms. Diane Jones, Public Land Manager, once it has been obtained. If you have any questions, she can be reached at (916) 574-1843.

This action does not constitute, nor shall it be construed as, a waiver of any right, title or interest by the State of California in any lands under its jurisdiction.

Sincerely,

Stephen L. Jenkins, Asst. Chief
Division of Environmental Planning
and Management

cc: Diane Jones

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

3/25/05

March 23, 2005

Mr. Robert Eckart
Supervisory Environmental Specialist
Bureau of Reclamation, Mid-Pacific Region
2800 Cottage Way, MP-152
Sacramento, CA 95825-1898

Dear Mr. Eckart:

The Environmental Protection Agency (EPA) has reviewed the Notice of Intent to prepare an environmental impact statement (EIS) for the **Contra Costa Water District Alternative Intake Project, Contra Costa and San Joaquin Counties, CA.** Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

EPA has no formal comments on the Notice of Intent at this time. Please send three copies of the Draft EIS (DEIS) to this office at the same time it is officially filed with our Washington D.C. Office. If you have any questions, please call me at (415) 972-3852.

Sincerely,

Laura Fujii

Laura Fujii
Environmental Review Office
Communities and Ecosystems Division

Hi Bob, Please note the new Office & Division name changes. Laura Fujii

Appendix A-2
CCWD Notice of Completion and Public Notice of Draft EIR

Notice of Completion & Environmental Document Transmittal

Appendix C

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2005012101

Project Title: Alternative Intake Project

Lead Agency: Contra Costa Water District | Contact Person: Samantha Salvia

Mailing Address: 2411 Bisso Lane, P.O. Box H20 | Phone: (925) 688-8057

City: Concord, CA | Zip: 94524-2099 | County: Contra Costa

Project Location:

County: Contra Costa & San Joaquin | City/Nearest Community: Brentwood, Discovery Bay

Cross Streets: N/A | Zip Code: N/A

Assessor's Parcel No.: numerous | Section: N/A | Twp.: N/A | Range: N/A | Base: N/A

Within 2 Miles: State Hwy #: 4 | Waterways: Old River, N. Victoria Canal, Victoria Canal, Middle River, Italian Slough

Airports: | Railways: | Schools: Discovery Bay Elementary

Document Type:

CEQA: ☐ NOP ☒ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.)
☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☐ Other

NEPA: ☐ NOI ☐ EA ☒ Draft EIS ☐ FONSI

Other: ☒ Joint Document ☐ Final Document ☐ Other

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other Alternative Water Intake

Development Type:

☐ Residential: Units Acres
☐ Office: Sq.ft. Acres Employees
☐ Commercial: Sq.ft. Acres Employees
☐ Industrial: Sq.ft. Acres Employees
☐ Educational
☐ Recreational
Total Acres (approx.)

☒ Water Facilities: Type Intake, pump, & pipeline ~~MGD~~ up to 250 cfs
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type MW
☐ Waste Treatment: Type MGD
☐ Hazardous Waste: Type
☐ Other:

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☒ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☒ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☒ Geologic/Seismic
☐ Minerals
☒ Noise
☐ Population/Housing Balance
☒ Public Services/Facilities
☐ Recreation/Parks
☐ Schools/Universities
☐ Septic Systems
☐ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☐ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☒ Water Supply/Groundwater
☒ Wetland/Riparian
☒ Wildlife
☒ Growth Inducing
☒ Land Use
☒ Cumulative Effects
☐ Other

Present Land Use/Zoning/General Plan Designation:

General Agriculture and Open Space, Resource Conservation

Project Description: *(please use a separate page if necessary)*

The project includes construction of a new intake and fish screen at a site along the lower third of Victoria Canal (in the south-central part of the Delta), a pumping plant, and an associated pipeline across Victoria Island from the new intake to CCWD's Old River conveyance system on Byron Tract. The project purpose is to protect and improve the quality of water delivered to CCWD's untreated- and treated-water customers. Key objectives are: improve delivered water quality, especially during drought periods; protect and improve health and/or aesthetic benefits to consumers; improve operational flexibility; and protect delivered water quality during emergencies. The project would not increase CCWD's total Delta diversion capacity (rate or annual quantity), but would change the location (and quality) of existing diversions.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Appendix C, continued

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

- X Air Resources Board
- X Boating & Waterways, Department of
- ____ California Highway Patrol
- S Caltrans District # 4, 10
- ____ Caltrans Division of Aeronautics
- ____ Caltrans Planning (Headquarters)
- ____ Coachella Valley Mountains Conservancy
- ____ Coastal Commission
- ____ Colorado River Board
- X Conservation, Department of
- ____ Corrections, Department of
- S Delta Protection Commission
- ____ Education, Department of
- ____ Energy Commission
- S Fish & Game Region # 2, 3
- ____ Food & Agriculture, Department of
- ____ Forestry & Fire Protection
- ____ General Services, Department of
- X Health Services, Department of
- ____ Housing & Community Development
- ____ Integrated Waste Management Board
- S Native American Heritage Commission
- ____ Office of Emergency Services
- X Office of Historic Preservation
- ____ Office of Public School Construction
- ____ Parks & Recreation
- ____ Pesticide Regulation, Department of
- ____ Public Utilities Commission
- X Reclamation Board
- S Regional WQCB # 5
- ____ Resources Agency
- ____ S.F. Bay Conservation & Development Commission
- ____ San Gabriel & Lower L.A. Rivers and Mtns Conservancy
- ____ San Joaquin River Conservancy
- ____ Santa Monica Mountains Conservancy
- S State Lands Commission
- ____ SWRCB: Clean Water Grants
- X SWRCB: Water Quality
- S SWRCB: Water Rights
- ____ Tahoe Regional Planning Agency
- ____ Toxic Substances Control, Department of
- S Water Resources, Department of
- X Other Cal/EPA
- ____ Other

Local Public Review Period (to be filled in by lead agency)

Starting Date May 3, 2006 Ending Date June 26, 2006

Lead Agency (Complete if applicable):

Consulting Firm: EDAW, Inc.
Address: 2022 J Street
City/State/Zip: Sacramento, CA 95814
Contact: Phil Dunn
Phone: (916) 414-5800

Applicant: Contra Costa Water District
Address: 2411 Bisso Lane, P.O. Box H20
City/State/Zip: Concord, CA 94524-2099
Phone: (925) 688-8057

Signature of Lead Agency Representative: 

Date: May 3, 2006

Public Notice of the
Draft Environmental Impact Report/Environmental Impact Statement
And Public Hearings
for the Contra Costa Water District's Alternative Intake Project

Date: May 3, 2006
To: Responsible and Interested Parties
From: Samantha Salvia, Contra Costa Water District

The Contra Costa Water District (CCWD) is pleased to announce the release for public review and comment of the Draft Environmental Impact Report / Environmental Impact Statement (Draft EIR/EIS) for CCWD's Alternative Intake Project. The Draft EIR/EIS evaluates the proposed construction and operation of a new drinking water intake for CCWD in the central Delta, and alternatives. CCWD is proposing this project to protect and improve drinking water quality for its customers. The Draft EIR/EIS was prepared in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). CCWD is the lead agency under CEQA; the Bureau of Reclamation (Reclamation) is the lead agency under NEPA.

Project Location
The proposed project would be located in Contra Costa and San Joaquin Counties. CCWD would construct and operate a new, screened water intake and pump station located along the lower third of Victoria Canal on Victoria Island in the central Delta. A pipeline would be constructed from the new intake across Victoria Island and Old River and tie into CCWD's existing Old River conveyance system on Byron Tract.

Project Description
The basic project purpose is to protect and improve the quality of water delivered to CCWD's untreated- and treated-water customers.

The Proposed Action (Alternative 1) includes a new, 250 cubic foot per second (cfs) screened water intake and pump station located along the lower third of Victoria Canal on Victoria Island in the central Delta where water quality is better than at CCWD's existing intakes. A buried pipeline would extend 12,000–14,000 feet from the new intake directly across Victoria Island and beneath Old River and tie into CCWD's existing Old River conveyance system on Byron Tract. The Proposed Action would involve adding a new point of diversion to certain existing water rights held by CCWD and by Reclamation. CCWD would not seek to increase its water rights, CVP contract amounts, or permitted Los Vaqueros Reservoir filling rates through this action. The new intake changes the location, timing, and quality of some of CCWD's diversions, but does not increase total diversions.

The Draft EIR/EIS evaluates the potential environmental effects of the Proposed Action (Alternative 1) and four alternatives: the No-Action Alternative; Alternative 2, Indirect Pipeline Route; Alternative 3, Modified Operations Alternative; and Alternative 4, Desalination Alternative.

Significant Environmental Impacts
The Draft EIR/EIS identified impacts of the Proposed Action in the following areas that would be reduced to a less-than-significant level with mitigation: Delta Fisheries and Aquatic Resources; Earth Resources: Geology, Soils, and Seismicity; Local Hydrology and Water Quality; Terrestrial Biological Resources; Transportation and Circulation; Noise; Hazardous Materials; Cultural Resources; and Paleontological Resources.

The following impacts would be reduced with mitigation, but not to a less-than-significant level:

- Agriculture: permanent direct and cumulative impact of conversion of approximately 6-8 acres of Prime Farmland and Farmland of Statewide Importance; and

- Air Quality: short-term direct and/or cumulative emissions of criteria air pollutants during construction.

Document Availability
Copies of the Draft EIR/EIS are available for public review at the following locations:

Location	**Address**
CCWD	1331 Concord Ave Concord, CA 94524
Antioch Public Library	501 W. 18th Street Antioch, CA 94509
Brentwood Public Library	751 Third Street Brentwood, CA 94513
Concord Public Library	2900 Salvio Street Concord, CA 94519
Reclamation, Regional Library	2800 Cottage Way Sacramento, CA 95825-1898

The document may also be viewed at CCWD's project website: www.ccwater-alternativeintake.com or Reclamation's website: www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=1818. Printed or CD copies of the Draft EIR/EIS may be requested from CCWD by emailing alternativeintake@ccwater.com or calling Patricia Seals at (916) 688-8208.

Public Comment Period
The public comment period for the Draft EIR/EIS begins on May 3, 2006 and closes on June 26, 2006. Please submit comments by 5:00 p.m. on June 26, 2006 to:

Samantha Salvia
Contra Costa Water District
P.O. Box H2O
Concord, CA 94524
Fax: (925) 686-2187
alternativeintake@ccwater.com

Public Hearings
CCWD and Reclamation will hold three public hearings to present project information and receive comments from the public. The Antioch and Concord public hearings will be preceded by a 30-minute open house to view project information and interact with the project team. Hearing details are as follows*:

Antioch	**Sacramento**	**Concord**
Tuesday, June 6, 2006	Wednesday, June 7, 2006	Thursday, June 8, 2006
6:30 – 7:00 p.m. Open House	10:00 – 11:00 a.m.	6:30 – 7:00 p.m. Open House
7:00 – 8:00 p.m. Public Hearing	Federal Building Cafeteria	7:00 – 8:00 p.m. Public Hearing
Antioch Woman's Club	Conference Room C-1001	CCWD Board Room
509 G Street	2800 Cottage Way	1331 Concord Ave
Antioch, CA	Sacramento, CA	Concord, CA

*District facilities and meetings comply with the Americans with Disabilities Act. If special accommodations are needed for you to participate, please contact the CCWD project manager as soon as possible, but preferably at least two days prior to the meeting.

Samantha Salvia
Alternative Intake Project Manager
Contra Costa Water District

Appendix A-3
Reclamation Draft Notice of Availability

4310-MN-P

DEPARTMENT OF THE INTERIOR

Bureau of Reclamation

Contra Costa Water District Alternative Intake Project, Contra Costa and San Joaquin Counties, CA

AGENCY: Bureau of Reclamation, Interior

ACTION: Notice of availability of the Draft Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) and notice of public hearings.

SUMMARY: The Bureau of Reclamation (Reclamation) and the Contra Costa Water District (CCWD) have made available for public review and comment a Draft EIR/EIS for the proposed Contra Costa Water District Alternative Intake Project. The Draft EIR/EIS describes and presents the environmental effects of five alternatives: the No-Action Alternative and four action alternatives. Three public hearings will be held to receive comments from individuals and organizations on the Draft EIR/EIS.

DATES: The Draft EIR/EIS will be available for a 45-day public review period. Comments are due by close of business on Monday, June 26, 2006. Three public hearings have been scheduled to receive oral or written comments regarding the project's environmental effects:

- June 6, 2006, 7:00 p.m. to 8:00 p.m., Antioch, CA
- June 7, 2006, 10:00 a.m. to 11:00 a.m. Sacramento, CA
- June 8, 2006, 7:00 p.m. to 8:00 p.m., Concord, CA

A 30-minute open house to view project information and interact with the project team will precede the public hearings in Antioch and Concord.

ADDRESSES: The public hearings will be held at the following locations:

- Antioch at the Antioch Woman's Club, 509 G Street, Antioch, CA
- Sacramento at the Federal Building Cafeteria, Conference Room C-1001, 2800 Cottage Way, Sacramento, CA
- Concord at the Contra Costa Water District Board Room, 1331 Concord Avenue, Concord, CA 94524

Send comments on the Draft EIR/EIS to Ms Erika Kegel, Project Manager, Bureau of Reclamation, 2800 Cottage Way, Sacramento, CA 95825 or Ms. Samantha Salvia, Project Manager, Contra Costa Water District, PO Box H2O, Concord, CA 94524-2099.

Copies of the Draft EIR/EIS may be requested from Ms. Samantha Salvia, Project Manager, Contra Costa Water District, PO Box H2O, Concord, CA 94524-2099; telephone: 925-688-8057; e-mail: alternativeintake@ccwater.com. Copies of the Draft EIR/EIS are available for public inspection at:

- Bureau of Reclamation, Regional Library, 2800 Cottage Way, Sacramento, CA
- Contra Costa Water District, 1331 Concord Ave., Concord, CA
- Antioch Public Library, 501 W. 18th Street, Antioch, CA
- Brentwood Public Library, 751 Third Street, Brentwood, CA
- Concord Public Library, 2900 Salvio Street, Concord, CA

The Draft EIR/EIS and related documents are also available at Reclamation's website at www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=1818 and CCWD's project website at http://www.ccwater-alternativeintake.com..

FOR FURTHER INFORMATION CONTACT: Ms. Erika Kegel, Project Manager, Bureau of Reclamation, Mid-Pacific Region, 2800 Cottage Way, MP-730, Sacramento, CA 95825-1898, 916-978-5081, TDD 916-978-5608, ekegel@mp.usbr.gov or Ms. Samantha Salvia, Project Manager, Contra Costa Water District, PO Box H2O, Concord, CA 94524-2099, 925-688-8057, alternativeintake@ccwater.com.

SUPPLEMENTARY INFORMATION:

The project purpose is to protect and improve the quality of water delivered to CCWD's untreated- and treated-water customers. Project objectives are to improve delivered water quality, especially during drought periods; protect and improve health and/aesthetic benefits to customers; improve operational flexibility; and protect delivered water quality during emergencies. Water quality problems for CCWD result from elevated concentrations of salinity (chloride and bromide), minerals, organic carbon, and turbidity at CCWD's Sacramento-San Joaquin River Delta intakes. The proposed action includes the construction of a new intake and fish screen in the Delta on Victoria Canal, a pumping plant, and an associated 2- to 4-mile-long pipeline from the new intake across Victoria Island to CCWD's existing Old River conveyance system. Reclamation actions associated with the proposed action are agreeing to a change in point of diversion of Central Valley Project (CVP) water under Contract No. I75r-3401A-LTR1 and petitioning the California State Water Resources Control Board for necessary water right changes regarding point of diversion. Through the proposed action, CCWD is seeking to relocate some of its diversions to a Delta location with better water quality and would not seek to increase its water rights, CVP contract amounts, or permitted Los Vaqueros Reservoir filling rates.

Oral and written comments, including names and home addresses of respondents, will be available for public review. Individual respondents may request that their home address be withheld from public disclosure, which will be honored to the extent allowable by law. There may be circumstances in which a respondent's identity may also be withheld from public disclosure, as allowable by law. If you wish to have your name and/or address withheld, you must state this prominently at the beginning of your comment. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be available for public disclosure in their entirety.

Hearing Process Information:

The purpose of the public hearings is to provide the public with an opportunity to comment on environmental issues addressed in the Draft EIR/EIS. Written comments will also be accepted.

Persons needing special assistance to attend and participate in the public hearings should contact Ms. Erika Kegel, at 916-978-5081, TDD 916-978-5608, as soon as possible. To allow sufficient time to process requests, please call no later than one week before the public hearings. Information regarding this proposed action is available in alternative formats upon request.

Dated: _____

Signed: _____

Mid-Pacific Region

Appendix B

Alternatives Screening

Appendix B
Alternatives Screening for the Alternative Intake Project

Prepared by:

Contra Costa Water District
1331 Concord Avenue
Concord, CA 94524
Contact: Samantha Salvia
(925) 688-8057

and

Bureau of Reclamation, Mid-Pacific Region
2800 Cottage Way
Sacramento, CA 95825-1898
Contact: Erika Kegel
(916) 978-5081

With Technical Assistance From:

EDAW
2022 J Street
Sacramento, CA 95814
Contact: Phil Dunn
(916) 414-5800

and

Carollo Engineers
2700 Ygnacio Valley Road, Suite 300
Walnut Creek, CA 94598
Contact: Ken Wilkins, P.E.
925-932-1710

Table of Contents

Exhibits

Tables

1 Introduction

The Contra Costa Water District (CCWD) is proposing the Alternative Intake Project, to be located in the central Delta in Contra Costa and San Joaquin Counties. As required under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), CCWD and the Bureau of Reclamation (Reclamation) have conducted a detailed evaluation of alternatives to meet the project purpose to protect and improve the quality of water delivered to CCWD's untreated- and treated-water customers. Key objectives of the project purpose are as follows:

1. **Improve Delivered Water Quality, Especially During Drought Periods.** Ensure delivery of high-quality water, particularly in late summer/fall months and during drought periods, when Delta source water quality is typically lowest.

2. **Protect and Improve Health and/or Aesthetic Benefits to Consumers.** Enable CCWD to consistently meet or exceed current and future Federal and State drinking water regulations and CCWD objectives to provide high-quality water and protect public health by reducing salinity and disinfection byproduct precursors.

3. **Improve Operational Flexibility.** Increase operational flexibility to help deliver high-quality water and maintain the benefits of the Los Vaqueros Project by enabling CCWD to extend the time periods during which Delta water of sufficient quality is available for: 1) filling Los Vaqueros Reservoir, and 2) direct use without the need for blending with higher quality Los Vaqueros Reservoir water to meet delivered water quality goals.

4. **Protect Delivered Water Quality During Emergencies.** Help protect CCWD's delivered water quality during emergency situations by enabling CCWD to avoid diverting water from areas of the Delta affected by a levee failure, chemical or hazardous spill, or other potentially catastrophic events.

The basic project purpose is to protect and improve the quality of water delivered to CCWD's untreated- and treated-water customers. The need for this project derives from the following conditions:

- Delta water quality at CCWD's current intakes does not meet CCWD's Board-adopted water quality objectives during late summer and fall, as well as during drought periods.

- Future and more stringent Federal and State drinking water standards will be increasingly difficult to meet.

- Los Vaqueros Project benefits can be affected by periods of insufficient Delta water quality for reservoir filling or for direct diversion.
- Unforeseen events, such as levee failure, chemical and hazardous spills, and other events can seriously compromise water quality at CCWD's intakes.

This alternatives screening report meets legal requirements for evaluating alternatives, describes an array of conceptual alternative approaches for potentially meeting the project purpose and need/objectives, and identifies the alternatives to be evaluated in detail in the environmental impact report/environmental impact statement (EIR/EIS). Additional background information on the project purpose and need/objectives and CCWD's facilities and operations are included in the Alternative Intake Project EIR/EIS (see EIR/EIS Chapter 1, "Purpose and Need/Objectives," and Chapter 2, "Project Background," respectively).

1.1 Legal Requirements for Evaluating Alternatives

CEQA, NEPA, and Clean Water Act (CWA) Section 404(b)(1) all have provisions that require alternatives analyses. These requirements are discussed below.

1.1.1 California Environmental Quality Act and National Environmental Policy Act

CCWD and Reclamation are developing environmental documents to comply with CEQA and NEPA. Both CEQA and NEPA require that alternatives to the proposed action that meet the project purpose and need/objectives be evaluated to determine environmental impacts. CEQA further requires that alternatives be evaluated for their ability to reduce significant environmental impacts. According to the Council on Environmental Quality (CEQ) NEPA regulations (40 CFR 1502.14), the alternatives section of an EIS is required to rigorously explore and objectively evaluate all reasonable alternatives, and present the alternatives that were eliminated from detailed study and briefly discuss the reasons for elimination. Pursuant to Section 15126.6 of the State CEQA Guidelines, an EIR must describe and evaluate a reasonable range of alternatives that would feasibly attain most of the basic project objectives and would avoid or substantially lessen any of the significant environmental impacts of the proposed project. The State CEQA Guidelines state that the range of alternatives to be evaluated in an EIR is governed by the "rule of reason," whereby the EIR describes and evaluates those alternatives necessary to permit a reasoned choice and to foster informed decision-making and public participation.

1.1.2 Clean Water Act Section 404(b)(1)

Section 404 of the Clean Water Act (CWA) of 1972 (PL 92-500), as amended, is the primary Federal statute regulating the discharge of dredged or fill material into waters of the United States. The Section 404(b)(1) Guidelines (Guidelines)

promulgated by the U.S. Environmental Protection Agency (EPA) govern, in part, the issuance of permits by the U.S. Army Corps of Engineers (USACE) for such discharges into waters of the United States (e.g., lakes, rivers, and wetlands). CCWD is making efforts to develop a proposed action that minimizes impacts on wetlands and waters of the United States. Currently, CCWD anticipates that the Alternative Intake Project can be implemented using Nationwide Permits #7 (outfall structures), #12 (pipelines), and #33 (temporary access and dewatering); consequently, an individual permit and attendant Section 404(b)(1) alternatives analysis may not be needed. During a pre-application meeting held on June 2, 2005, the USACE opined that the Proposed Action would qualify for coverage under the nationwide permits listed above and may not require an individual permit. While compliance with the Section 404(b)(1) Guidelines may not be required, this alternatives screening report has been developed in such a manner that it satisfies the Guidelines, if needed.

1.2 Report Organization

This report is organized as follows:

- Chapter 1, "Introduction," provides an overview of legal requirements for evaluating alternatives and the organization of this report.
- Chapter 2, "Methodology," describes the approach for identifying alternatives to meet the basic project purpose, developing screening criteria, and screening the alternatives.
- Chapter 3, "Project Alternatives and First-Stage Screening Results," describes alternatives for meeting the project purpose and need/objectives, as well as the results of the first-stage screening of these alternatives.
- Chapter 4, "Second-Stage Screening Results," presents the results of more detailed refinement of the conceptual alternatives that passed through the first stage screening process, as well as additional analysis to determine which alternatives should be carried forward into the EIR/EIS for more detailed environmental analyses.
- Chapter 5, "References," lists all sources of information used to prepare this report.
- Chapter 6, "Acronyms and Abbreviations," presents the acronyms and abbreviations used in this report.

2 Methodology

2.1 Introduction

The primary purpose of alternatives screening is to identify and evaluate a reasonable range of alternatives to the Proposed Action that may meet the project purpose and need/objectives (consistent with NEPA and CEQA) with less environmental impact (consistent with CEQA). This chapter describes the methodology used to identify and screen alternatives.

2.2 Identify the Study Area

The study area for this project was broadly defined to include alternatives that could reasonably improve delivered water quality within CCWD's service area. The geographic scope of the study area is CCWD's service area and the surrounding area, including the Delta (see EIR/EIS Exhibits 3.4-1 and -2). However, a few conceptual alternatives outside of CCWD's service area and the Delta were also considered for completeness.

2.3 Identify and Develop Alternatives

A comprehensive list was compiled of possible types of alternatives that, either individually or in a reasonable combination, could meet the project purpose and need/objectives or substantially contribute to the project purpose and need/objectives; these "concept" alternatives are presented in Chapter 3, "Project Alternatives and First-Stage Screening Results." Both structural and nonstructural alternatives were considered. The initial listing of conceptual alternatives represented a broad approach to identify alternatives that conceivably could be used to generally meet or substantially contribute to meeting the project purpose and need/objectives. Potential alternatives to be considered were determined based on consideration of previous studies and reports (CALFED Bay-Delta Program 2004, 2000; CCWD 2005, 2003, 2000, 1998, 1992; California Department of Water Resources 2005; and East Bay Municipal Utility District et al. 2003); input from CCWD engineers, planners, and consultants; and results of NEPA/CEQA scoping activities. Alternative intake sites and other alternatives for improving delivered water quality were originally investigated as part of studies conducted for the original Los Vaqueros Reservoir Project in the early 1990s (CCWD 1992).

2.4 Develop Screening Criteria

Screening criteria were developed to screen alternatives/concepts and determine which alternatives were practicable for meeting the project purpose and need/objectives. The screening criteria provide a measure of whether a project alternative could satisfy the project purpose and need/objectives and a method to determine whether alternatives are available and practicable on the basis of, logistics, existing technology, and cost. Five criteria, described below in italics, were developed to establish the basis for the screening. The water quality criteria are specific to this project, whereas the other criteria are consistent with similar criteria commonly used to screen alternatives as part of alternatives evaluations, including several previous and successful CCWD and/or Reclamation projects (CCWD 1992; Reclamation 1997; and East Bay Municipal Utility District et. al. 2003).

2.4.1 Water Quality Criterion

An alternative, either individually or in combination with other possible alternatives, must be capable of improving delivered water quality to treated and untreated-water customers, especially during drought periods; protecting and improving health and/or aesthetic benefits to customers; improving operational flexibility, and protecting delivered water quality during emergencies.

The project purpose and need/objectives statement embodies the water quality criterion. Each alternative was evaluated to determine whether it could contribute to improving the quality of water delivered to untreated-water customers and/or improving the quality of treated water delivered to customers. More specifically, the project alternative must improve water quality with respect to key constituents of concern for CCWD, primarily salinity (chloride and bromide) and total organic carbon (TOC).

Measures of "improvement" in water quality can be quantified in terms of increasing the duration of time CCWD is able to meet its Board-adopted water quality goals for delivered water, reducing mean salinity levels in delivered water (especially during late summer, fall, and droughts), reducing the highest salinity levels delivered, and reducing the frequency of delivered chlorides greater than 100 mg/l[1]. Water quality protection and improvement can also take other forms which are not as readily quantifiable, including improved operational flexibility to operate around Delta emergencies (such as levee failures), aesthetic benefits affected by taste and odor causing compounds, and health benefits affected by pathogens and disinfection byproduct precursors (DBPs). CCWD is not currently meeting its delivered water quality goals at all times, so implementation timing is also an important part of the water quality criterion. To meet the water quality criterion, alternatives must be able to provide water quality improvements within the next several years.

[1] CCWD uses the 100 mg/l concentration as an approximate threshold for consumers detecting salt in their water (based on historical customer complaints).

2.4.2 Regulatory Criterion

An alternative, either individually or in combination with other possible alternatives, must not have any permits or agency approvals that cannot be reasonably obtained given considerations of logistics or existing technology.

The criterion for regulatory practicability assesses whether an alternative is likely to be compatible with existing regulations and be able to receive all necessary environmental permits and agency approvals in a reasonable fashion. Necessary permits must be reasonably obtainable from public agencies; an alternative cannot be deemed practicable if permit acquisition is highly unlikely, permit acquisition will likely require substantial and costly mitigation that renders the alternative infeasible, or the mitigation would impede meeting the project purpose and need/objectives. For example, an alternative may have substantial unmitigable impacts on critical wetlands such that USACE would not issue an individual permit under CWA Section 404 for such an alternative. Political or public opposition and/or potential litigation, however, would not necessarily eliminate a candidate alternative from consideration because any proposed project could be subject to disapproval or challenge from any segment of the community.

One of the primary purposes of identifying and evaluating alternatives under NEPA and CEQA is to compare environmental impacts resulting from a range of alternatives that potentially meet the project purpose and need/objectives. Certain alternatives may have major unacceptable environmental impacts that render them impracticable because regulatory permits cannot be obtained at all or without incurring substantial costs that render the alternative impracticable. Each alternative was evaluated to determine whether the environmental impacts would be so substantial that those impacts could render the alternative highly unlikely to be implemented. In addition, consistent with CALFED principles, any substantial redirected impacts from project implementation to other CALFED projects and goals would make such an alternative unreasonable because the necessary environmental permits and agency approvals could not be achieved.

2.4.3 Institutional Criterion

An alternative, either individually or in combination with other possible alternatives, must not have any legal, ownership, public policy, or social constraints that cannot be reasonably solved given considerations of logistics or existing technology.

In addition to agency permits and approvals being required, numerous institutional factors must be satisfied to successfully plan, site, construct, and operate most projects. The criterion for institutional practicability assesses whether an alternative has insurmountable institutional constraints, such as legal and social factors. Each alternative should be likely to be accepted by the general public and state/local entities and generally consistent with CALFED Bay-Delta Program (CALFED) principles and the intent of the CALFED Programmatic Record of Decision (ROD) (CALFED 2000). In addition, it must be reasonably

possible to solve any land ownership or related issues, or issues arising with parties that would potentially be affected by implementation of the alternative.

Moreover, this criterion considers the complexity and difficulty of institutional arrangements necessary to implement an alternative. Alternatives that require unobtainable or unreasonably complex institutional arrangements and agreements would prove infeasible.

2.4.4 Technical and Operational Criterion

An alternative, either individually or in combination with other possible alternatives, must not have any unreasonable engineering or operational problems, involve questionable or untested technologies, or depend on a site or resource that is unreliable.

The technical and operational criterion measures whether an alternative is technically practicable. More specifically, an alternative should not rely on untested technologies, should have no unreasonable geotechnical or engineering constraints, and should not require a site or resource that is unavailable or substantially unreliable such that the project purpose and need/objectives cannot be satisfied. In addition, the alternative must be operationally practicable and not have risk factors that could jeopardize the attainment of the project purpose and need/objectives.

2.4.5 Cost Criterion

An alternative, either individually or in combination with other possible alternatives, must be developed, constructed, and operated in a financially responsible and cost-effective manner with a commensurate improvement in delivered water quality to CCWD customers.

This criterion is the measure of whether the alternative appears to be, within the limits of information available at each screening stage, a potentially cost-effective means of achieving the basic project purpose. More specifically, alternatives must provide reasonable water quality benefits relative to cost. In addition, financial arrangements to implement the alternative must be available. Cost considerations include both the capital requirements for new facilities (i.e., construction, engineering, legal, administration, etc.), and ongoing operational requirements (i.e., labor, power, chemical requirements for treatment, etc.). Alternatives that have significant facility or infrastructure requirements, high operational costs, or would require substantial environmental mitigation are considered less preferable because there is increased likelihood of rejection due to higher relative costs. CCWD's mission statement addresses the need to provide high-quality water at the "lowest cost possible," and CCWD is committed to making financially responsible, cost-effective, and beneficial investments that ensure that customers receive high-quality water at all times.

Also affecting CCWD's ability to meet the cost criterion is project schedule. To ensure that the cost criterion is met, an alternative must be constructed by 2010 for the following reasons:

- Delta water does not meet CCWD's water quality objectives at times at CCWD's existing intakes, which increases treatment costs and costs to all residential and industrial users; and

- CCWD's Ten Year Capital Improvement Program for Fiscal Years 2006-2015 (CCWD 2005) has established funds to plan, design, and construct the project by 2010; delays in this schedule will substantially increase project costs to CCWD customers and therefore CCWD could not provide high-quality water at the "lowest cost possible" in years beyond 2010.

2.5 Screen Alternatives

The alternatives screening was structured so that potential alternatives were systematically identified and then tested or "screened" to ascertain their ability to substantially meet the project purpose and need/objectives. Combinations of alternatives were also evaluated; this approach ensured that reasonable combinations of potentially practicable alternatives were considered in the alternatives screening.

A tiered approach to the alternatives screening was conducted to most efficiently complete this process. Each stage resulted in more specific analyses with greater resolution. The alternatives screening consisted of first- and second-stage screening as follows:

- First-stage screening – Consisted of identifying alternatives and ascertaining whether any alternative could reasonably or potentially meet a substantial portion of the project purpose and need/objectives (results presented in Chapter 3, "Project Alternatives and First-Stage Screening Results").

- Second-stage screening – Consisted of further defining the alternatives passing the first-stage screening into specific project alternatives and then more rigorously applying the screening criteria to these alternatives to determine which alternatives substantially meet the project purpose and need/objectives and would be carried forward into the EIR/EIS (results presented in Chapter 4, "Second-Stage Screening Results").

Alternatives passing the second-stage screening were carried forward into the EIR/EIS for detailed analysis of environmental impacts.

3 Project Alternatives and First-Stage Screening Results

3.1 Introduction

Many alternatives for improving delivered water quality to CCWD customers have been postulated and/or examined by CCWD and others during the past decade (CCWD 2005, 2003, 2000, 1998, 1992; CALFED 2004, 2000; California Department of Water Resources 2005). CCWD's previous alternatives analyses conducted in the early 1990s to improve water quality and emergency supply are particularly relevant (CCWD 1992). In this chapter, alternatives are briefly defined and then screened to determine which alternatives could reasonably or potentially meet the project purpose and need/objectives. An alternative that is deemed potentially practicable at this first stage of screening could not be definitively screened from further analysis and required additional evaluation in the subsequent and more detailed second-stage screening to determine if it was practicable and could meet the project purpose and need/objectives. Table B-1 presents the first-stage screening results.

3.2 Alternatives Identified for Consideration

Possible alternatives for meeting the basic project purpose and need/objectives fall into three general groups as follows:

- **Group A. Protect/Improve Source Water at Existing Intakes**

  A1. Point-Source and Nonpoint-Source Discharge Reduction: Provide treatment of discharges or relocate discharges to reduce impacts of discharges on water quality at existing CCWD intakes

  A2. Increased Water Quality/Regulatory Standards in Delta: Establish new water quality standards/regulatory requirements that would improve water quality at existing CCWD intakes

  A3. Modifications to Delta Water Supply Management and Operations: Implement new operational strategies that would improve water quality at existing CCWD intakes

  A4. Delta Levee Improvements: Improve levees to protect against salinity intrusions during levee failures

Appendix B. Alternatives Screening for the Alternative Intake Project

Table B-1
Stage 1 Screening Summary

Alt #	Conceptual Alternative Description	May Substantially Meet Project Purpose and Need/ Objectives?	Potentially Practicable?[1]	Moved to Stage 2 Screening for Additional Analysis?
Group A. Protect/Improve Source Water at Existing Intakes				
A1	Point-Source and Nonpoint-Source Discharge Reduction	Y	Y	Y
A2	Increased Water Quality/Regulatory Standards in Delta	Y	N	N
A3	Modifications to Delta Water Supply Management and Operations	Y	N	N
A4	Delta Levee Improvements	N	N	N
A5	Delta Hydraulic Improvements	Y	Y	Y
Group B. Obtain New/Alternative Source Water				
B1	Regional Water Management/Intertie with Untreated- or Treated-Water Sources	Y	Y	Y
B2	Relocation of Some CCWD diversions to New Intake	Y	Y	Y
B3	Supplemental CCWD Water Conservation and Reclamation	N	N	N
B4	Bottled Water	Y	N	N
B5	Sierra Source Supply	Y	N	N
B6	Groundwater Management/Conjunctive Use	N	N	N
B7	Water Transfers/Exchanges	N	Y	N
Group C. Enhance Existing Water Treatment				
C1	Supplemental Treatment at CCWD's Water Treatment Plants	N	Y	N
C2	Desalination Plant	Y	Y	Y
C3	Home Water Treatment Devices	N	N	N

[1] Potentially meets CWA Section 404(b)(1) Guidelines for practicability (i.e., available and capable of being done taking into account cost, existing technology, and logistics, in light of overall project purposes [40 CFR 230.10(a)(2)]).

A5. Delta Hydraulic Improvements: Improve Delta hydraulics with tidal control gates, barriers, levee modifications, etc. to improve water quality at existing CCWD intakes

- **Group B. Obtain New/Alternative Source Water**

B1. Regional Water Management/Intertie with Untreated- or Treated-Water Sources: Construct an intertie with one or more other Bay Area water agencies to access non-Delta or treated water sources

B2. Relocation of Some CCWD Diversions to New Intake: Install an alternative CCWD intake at a location with better water quality.

B3. Supplemental Water Conservation and Reclamation: Reduce water demands, via implementation of supplemental conservation and reclamation activities, to minimize CCWD's need to divert Delta water during dry months, and/or to reduce demand for water from Los Vaqueros Reservoir to be used for blending.

B4. Bottled Water: Provide CCWD water customers with bottled water during periods when water quality objectives cannot be met

B5. Sierra Source Supply: Obtain and access a Sierra source supply

B6. Groundwater Management/Conjunctive Use: Access groundwater that has better water quality than Delta source water

B7. Water Transfers/Exchanges: Implement agreements for water transfers/exchanges to access higher-quality water

- **Group C. Enhance Existing Water Treatment**

C1. Supplemental Treatment at CCWD's Water Treatment Plants: Install a combination of treatment processes (e.g., granular activated carbon [GAC] and new ultraviolet [UV] treatment) at CCWD's existing water treatment plants (WTPs)

C2. Desalination Plant: Install desalination treatment processes at the Bollman or Randall-Bold WTPs or participate in a regional desalination plant with other Bay Area water agencies

C3. Home Water Treatment Devices: Provide CCWD treated-water customers with point-of-use devices

3.3 Alternative Descriptions and Screening

3.3.1 Group A: Protect/Improve Source Water

3.3.1.1 A1. Point-Source and Nonpoint-Source Discharge Reduction

CCWD relies exclusively on source water obtained from the Delta at its three existing intakes. With this alternative, discharges (including agricultural, municipal, and stormwater drainage) in the Delta or near CCWD's intakes would be: 1) collected and rerouted to alternate discharge locations farther from the CCWD intakes, 2) reduced, or 3) treated prior to discharge to the Delta. This group of alternatives has the potential to improve localized Delta water quality by reducing the concentration of organic carbon, pesticides, salts (i.e. chloride, bromide), and other constituents that impact source water quality for drinking water.

Screening Evaluation: This alternative is carried forward for additional development and screening because it could partially meet the purpose and need/objectives by improving water quality (especially during drought periods) and protecting and improving health and/or aesthetic benefits to customers.

3.3.1.2 A2. Increased Water Quality/Regulatory Standards in Delta

This alternative entails promulgating new water quality standards and/or regulatory requirements that target specific constituents of concern with regard to drinking water, which could include salinity, TOC, and other organic and inorganic constituents. These new standards and/or requirements could target specific activities such as agricultural or municipal discharges to improve overall untreated-water quality at CCWD's intakes. This alternative would require actions by Reclamation, as well as California Department of Water Resources (DWR), State Water Resources Control Board (SWRCB), Central Valley Regional Water Quality Control Board (CVRWQCB), and EPA, and would be implemented through Basin Plan amendments, the SWRCB Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Delta WQCP), or other water quality standard modifications.

As an example of this alternative, the CVRWQCB has passed a resolution supporting the development of a drinking water policy for the Delta and upstream tributaries. The Central Valley Drinking Water Policy is an ongoing CALFED project led by the CVRWQCB that could potentially lead to new water quality standards or regulatory requirements. This drinking water policy is needed because current policies and plans lack water quality objectives for known drinking water constituents of concern and do not include implementation strategies to provide effective source water quality protection. (CALFED 2005.)

Another example of this alternative is the potential inclusion of a drinking water quality objective in the Delta WQCP.

Screening Evaluation: This alternative could partially meet the purpose and need/objectives to protect water quality and improve public health benefits, but would not improve operational flexibility or protect water quality during emergencies. This alternative also would not meet the regulatory criterion because of: 1) significant indirect environmental impacts to aquatic habitats and fish in upstream reservoirs and rivers from substantially modified flows to reduce seawater intrusion, and 2) substantial CVP and SWP water supply impacts resulting from substantially increased flows necessary to significantly reduce salinity at CCWD's intakes, especially during drought periods. Further, this alternative does not meet the cost criterion because it is unlikely to be fully implemented in the near term, and additional project costs to CCWD would result. This alternative would require significant actions by CVRWQCB, SWRCB, EPA, and others. It is not reasonable at this time to conclude that this alternative would be implemented in the foreseeable future and improve CCWD's source water quality sufficiently. The complexity and speculative nature of institutional agreements renders this alternative infeasible, similar to A3, "Modifications to Delta Water Supply Management and Operations" described below. CCWD is working with other water agencies and regulatory bodies to promote regulations that could improve water quality, and will continue to do so regardless of whether it implements the Alternative Intake Project or another alternative. If ever implemented in the distant future, this alternative could complement the Proposed Action in the long term. At this time, however, this alternative does not meet several of the screening criteria (cost, institutional, water quality) and is not being carried forward for more detailed evaluation.

3.3.1.3 A3. Modifications Delta Water Supply Management and Operations

This alternative would involve modifying the manner in which water supply to and through the Delta is managed and operated by the CVP and SWP to meet water supply and other responsibilities, focusing more on increasing upstream releases when Delta concentrations of constituents of concern to drinking water are highest and when Delta water quality does not meet CALFED drinking water quality goals or CCWD source water quality goals. Upstream releases are currently made as part of complex regulatory requirements to maintain specific salinity levels at specific Delta locations. Modifications would increase CVP and/or SWP responsibilities beyond those required by existing water right decisions. However, modified operations could focus on meeting CCWD or CALFED goals for Delta drinking water quality at CCWD's intakes by targeting specific constituents of concern such as salinity and TOC. Modified operations are especially important during drought years and late summer and fall conditions when Delta concentrations of salinity, organic carbon, and other constituents of concern to drinking water are highest. Typical water supply management and operation modifications to accomplish these goals would include the following:

- increase controlled water releases from upstream storage reservoirs of the CVP and SWP to increase Delta inflows and improve water quality at CCWD's intakes at appropriate times, and

- reduce Delta exports to limit saltwater intrusion near CCWD intakes at the appropriate times.

Implementation of new Delta water supply management and operational practices to improve water quality at CCWD intakes would require revisions of CVP/SWP water rights. Reclamation would need to gain approvals from a number of Federal, State, and local stakeholders—potentially including DWR, CVP and SWP service contractors, fisheries agencies, other water purveyors, environmental stakeholder groups, and others to change existing water right decisions controlling operation of the CVP and SWP. Long-term water supply contracts and the Coordinated Operating Agreement may need to be modified.

Screening Evaluation: Modification of CVP and SWP operations to improve water quality at CCWD intakes during droughts and late summer and fall conditions would require substantial changes in operations. This alternative has the potential to meet the purpose and need/objectives. However, there are substantial regulatory and institutional constraints that render it infeasible. Reoperation of Reclamation and DWR facilities to improve water quality at CCWD's intakes is unrealistic, unreasonable, and unattainable. Both Reclamation and DWR must meet numerous complex legal requirements, in addition to meeting water quality goals, including fisheries requirements for instream flows, temperature, and water quality. This alternative would have substantial redirected impacts, especially to CVP and SWP water supplies that serve a majority of California's urban and agricultural water users. Because this alternative could not reasonably be accomplished, it is not being carried forward for more detailed evaluation.

3.3.1.4 A4. Delta Levee Improvements

The Delta consists of a series of waterways and islands. These islands are substantially below sea level and must be protected by levees. There are 1,100 miles of levees needed to protect Delta land uses and water quality for Delta and export users. When a Delta levee fails, large volumes of water can flood the island, thereby modifying Delta hydrodynamics and impacting seawater intrusion into the Delta. This alternative would consist of structural improvements to Delta levees to reduce the risk of levee failure and the corresponding high salinity caused by saltwater intrusion.

CALFED has initiated the Levee System Integrity Program to provide base-level protection, special levee improvement projects, a levee subsidence control plan, and a levee emergency response plan for Delta levees. Severe funding limitations have precluded the Levee System Integrity Program from making the substantial levee improvements proposed in the Delta. USACE has completed the Sacramento/San Joaquin River Comprehensive Study to evaluate and recommend

solutions to flooding problems in the Central Valley, including the Delta. However, only a few projects were identified for near-term funding, and these projects would not affect or protect Delta water quality. CALFED, USACE, DWR, the Reclamation Board, and local reclamation districts are currently involved in Delta levee improvement efforts. However, because of a variety of reasons, including funding issues, substantial risk of Delta levee failures still exists, as evidenced by the flooding of Jones Tract in 2004.

Under this alternative, no additional CCWD facilities would be required as the focus would be on structural improvements of existing levees throughout the Delta, but particularly for those levees close to CCWD's existing intakes.

Screening Evaluation: This alternative only partially meets the project purpose and need/objectives because it could protect CCWD's existing source water quality by reducing the potential for levee failure and seawater intrusion, but it would not improve existing water quality. The fact that Delta water does not meet CCWD's water quality objectives at CCWD's intakes has generally not been caused by Delta levee failures but is more directly related to Delta conditions during hydrologic events (droughts) and seasonal (late summer and fall) events. Further, USACE and DWR estimate costs to improve Delta levees at several billion dollars, and funding mechanisms to make the necessary structural improvements throughout the Delta are not in place. Furthermore, planning and implementing a large-scale Delta levee improvements project would require substantial coordination between agencies, similar to A3, "Modifications to Delta Water Supply Management and Operations" above, and may not be feasible for institutional reasons. This alternative does not meet the cost, institutional, and water quality criteria and is not being carried forward for more detailed evaluation.

3.3.1.5 A5. Delta Hydraulic Improvements

The Delta is a highly managed system, and numerous hydraulic improvements have been made to the system to convey high-quality water to CVP and SWP exporters. Delta hydraulic improvements include tidal control gates, barriers, and channel modifications. All of these types of improvements have been made in the Delta by DWR to convey water to its customers. This alternative includes additional and modified facilities to inhibit salt trapping and mixing, and thus improve Delta water quality at CCWD's existing intakes by reducing seawater intrusion in the region.

DWR has recently completed studies of three flooded Delta islands (Franks Tract, Big Break, and Lower Sherman Lake) to evaluate whether hydraulic modifications at these sites could improve Delta water quality, the ecosystem, and recreation. The pre-feasibility study report showed that modifications at Franks Tract had the most promise for improving Delta water quality; modifications to the other two flooded islands provided minimal water quality benefits (DWR 2005).

Screening Evaluation: The DWR pre-feasibility study on Delta flooded islands concluded that only Franks Tract modifications are worth further investigation. DWR's preliminary studies of Franks Tract indicate that a project that would involve constructing tidal gates and/or improving the existing levees surrounding Franks Tract has the potential improve water quality at Delta drinking water intakes (DWR 2005). This alternative, while requiring numerous regulatory agreements and having significant effects on the Delta ecosystem, could conceivably be designed in a manner with sufficient mitigation to potentially meet the project purpose and need/objectives by improving water quality during drought and late summer and fall periods. Therefore, this alternative is carried through to the next round of the screening evaluation for further evaluation and refinement. No other alternatives involving hydraulic improvements have been identified that could meet the project purpose and need/objectives.

3.3.2 Group B: Obtain New/Alternative Source Water

3.3.2.1 B1. Regional Water Management/Intertie with Untreated- or Treated-Water Sources

The concept of regional water management consists of pooling and joint management of water resources in the study area, which is limited to Bay Area water purveyors that are directly adjacent to CCWD's service area, or that operate conveyance facilities that cross through or near CCWD's service area. In this context, "regional" refers generally to the Bay and East Bay areas; any alternatives outside of this area would result in substantial conveyance costs and environmental impacts and are not considered further. Regional water management alternatives include untreated-water interties/exchanges with other water agencies, such as EBMUD, the City of San Francisco, Santa Clara Valley Water District, Zone 7, and Alameda County Water District. These untreated-water interties/exchanges could be used with CCWD's existing water rights at a changed point of diversion, or could represent a new water supply source for CCWD.

Screening Evaluation: These types of alternatives could potentially meet the project purpose and need/objectives. The potential for a regional management agreement or intertie varies by agency and water source. EBMUD's Mokelumne and American River sources have no available surplus water and minimal capacity, especially during droughts and late summer and fall when Delta water quality is diminished. Likewise, the City of San Francisco's water supplies and conveyance capacities are extremely limited and could not be used on any regular basis, especially during droughts and late summer and fall, to meet CCWD's needs. These water agencies would not be amenable to selling their limited supply sources to CCWD on any regular basis every late summer and fall, or during extended droughts. Even at a substantial cost to CCWD, these agencies are not willing to provide water or capacity except for a few thousand acre-feet of water during emergencies. Obtaining water rights from a Sierra supply source, or some other non-Delta source to add into another agency's water delivery system, would be unacceptable due to the small amount of high-quality water provided because

of conveyance capacity limitations and significant regulatory and institutional barriers at the source stream. EBMUD and CCWD are constructing an intertie for CCWD to access a portion of their CVP water at the Sacramento River, and it may be feasible to examine expanding this intertie. An intertie between CCWD and the South Bay Aqueduct, fed by Clifton Court Forebay in the south Delta, is another potentially feasible alternative. Therefore, these two alternatives are carried through to the next round of screening, with particular focus on alternative configurations that do not have significant technical and operational, institutional, or cost barriers.

3.3.2.2 B2. Relocation of Some CCWD Diversions to New Intake

This type of alternative entails constructing an alternative intake and relocating pumping from CCWD's existing intakes to another location within the Delta to access available source water having higher water quality than is found at the current intake locations. Past and ongoing CCWD modeling studies and water quality sampling results have consistently shown that Delta locations relatively close to existing CCWD facilities (primarily Middle River and Victoria Canal) have water quality at certain critical times that is better than the water quality conditions at the existing CCWD intakes. For example, studies showed that a Middle River intake would provide substantial water quality benefits, and such an intake was proposed as a project alternative during the original Los Vaqueros Project alternatives evaluation (this alternative provided for a new intake on Middle River, but excluded a reservoir because of cost limitations). However, due to a number of factors including cost and reduced water supply reliability, the Middle River intake alternative was rejected as the preferred alternative (Contra Costa Water District 1992).

This alternative includes the construction of a new intake, alternative pipeline alignments, and alternative operational scenarios to relocate CCWD pumping to the new intake location. One or more of the existing Old River, Rock Slough, and Mallard Slough intakes could be taken out of service, maintained only for emergency purposes, or used in concert with the new intake for operational flexibility. CCWD and Reclamation would need to modify certain water rights for a new point of diversion.

Screening Evaluation: Water quality varies geographically and seasonally in the Delta, and there are certain locations in the south and central Delta that have water quality that is better than what is available at CCWD's existing intakes. This type of alternative could meet the purpose and need/objectives, by improving delivered untreated- and treated-water quality during drought and late summer and fall periods, protecting and improving the health and/or aesthetic benefits to customers, and providing improved operational flexibility by adding a new intake at a different location. Such an alternative would also provide some protection of delivered water quality during certain types of emergencies because an additional intake could be used if other intakes were damaged or had localized water quality

problems that precluded their use. Therefore, this alternative is carried forward into second-stage screening for further analysis.

3.3.2.3 B3. Supplemental CCWD Water Conservation and Reclamation

Supplemental water conservation and reclamation could potentially improve water quality indirectly by reducing water demands and thereby allowing CCWD to minimize its need to divert Delta water and/or use less water from Los Vaqueros Reservoir during dry months or droughts. A water conservation alternative would have to achieve savings significantly greater than the savings already attained and projected to be attained through CCWD's existing conservation program. CCWD's Future Water Supply Study evaluated significantly increasing conservation as a means of meeting future water supply needs (CCWD 1998). It was determined that conservation could not reliably provide significant water savings above the level already implemented in CCWD's conservation programs (CCWD 1996, 2002). Note that about one-third of CCWD's water demand is for industrial use, which has limited potential for conservation. CCWD is currently a signatory to the Memorandum of Understanding Regarding Urban Water Conservation in California developed by the California Urban Water Conservation Council. As part of this agreement, CCWD continually evaluates its conservation program to maximize water savings. "Reclaimed water" is defined as effluent that has been treated adequately and reliably to a high quality so that it is suitable for beneficial uses. Reclaimed water, which is not intended for drinking, could be used for landscape and crop irrigation, industrial processing, heating and cooling, dust suppression and soil compaction, flushing toilets in commercial buildings, wetland enhancement, stream flow augmentation, and groundwater recharge.

CCWD's Urban Water Management Plan describes water reclamation activities already underway within CCWD's service area (CCWD 2000). CCWD is working with the Central Contra Costa Sanitation District and Delta Diablo Sanitation District to identify opportunities for using recycled water.

Screening Evaluation: CCWD incorporates reliable, cost-effective means of water conservation and reclamation in its water supply planning. Analysis indicates that implementing additional conservation and reclamation measures above the current level would result in minor water quality benefits relative to cost, and the results of such a program would not be reliable. Conservation and recycled water do not focus on the fall period when water quality improvement is most needed. They do not improve CCWD's water quality during extended dry periods when Los Vaqueros Reservoir may not have sufficient supplies for blending. Consequently, this alternative would not provide adequate demand reduction to meet or even approach meeting the project purpose and need/objectives. Operational flexibility and water quality protection during emergencies also would not be improved. CCWD will continue to pursue water conservation and reclamation projects regardless of whether the Proposed Action is implemented; thus any such projects would complement the Proposed Action, if

implemented. This alternative was not carried forward for more detailed evaluation because it does not meet the water quality and cost criteria.

3.3.2.4 B4. Bottled Water

Under this alternative, CCWD would supply bottled water for individual customers, either when CCWD's delivered water quality objectives were not attained or during an emergency that would exceed the demand of Los Vaqueros Reservoir. This alternative would involve purchasing, storing, monitoring, and delivering bottled water to individual residences, workplaces, commercial establishments, and other public facilities, or contracting with an existing company to perform these services. It is expected that an extremely large warehouse and testing facility, as well as parking and maintenance space sufficient for a fleet of delivery trucks, would be needed.

A volume of at least two liters per person per day would be required to meet basic ingestion needs, and more would be required to meet cooking requirements. If bottled water were supplied only when CCWD's water quality objectives were not met, monitoring and communication systems or notices would be needed to notify customers when to switch to bottled water. Bottled water would need to be provided to approximately 500,000 people who live in CCWD's service area.

Screening Evaluation: This alternative could partially meet the project purpose and need/objectives by delivering improved water quality and protecting and improving the health and/or aesthetic benefits to customers. Operational flexibility would not be improved, but some aspects of water quality protection during an emergency would be met. However, institutional and cost criteria could not be reasonably met. This alternative was considered by CCWD in 1992 and technical and operational, as well as institutional, constraints were identified, including the difficulty of widespread and continued mass distribution of bottled water and possible California Department of Health Services violations if existing standards for bottled water are not met. Costs to implement this alternative would be substantially higher than other potential alternatives and continuous, but were not specifically determined at this stage of screening. Private contracting for continuous provision of bottled water would be extremely expensive, and no such endeavor has been attempted in the world. Industrial and irrigation customers would not benefit from this alternative. The technical and operational, institutional, and cost criteria could not be reasonably met, and a large segment of CCWD customers, both industrial and irrigation, would receive no benefits. Consequently, this alternative is not carried forward for more detailed evaluation.

3.3.2.5 B5. Sierra Source Supply

Sierra source supply alternatives would involve constructing a new intake at a point upstream of the Delta where better water quality could be obtained. The goal would be to access this water directly without any regional partners. One alternative would involve moving the diversion point for CCWD's entire diversion of 195,000 acre-feet per year (af/yr) to a Sierra source point, similar to supplies used by EBMUD or the City of San Francisco. Conceptually, this could

be accomplished by obtaining new CCWD water rights or changing the point of diversion of CCWD's existing CVP water rights to a new Sierra location. Another alternative would be to maintain the existing intakes and develop a new Sierra diversion (with the same capacity as the Old River intake) for use during times of high salinity, whereby the water would be transferred from the Sierra through the Delta via a pipeline. Another alternative would be to tie into EBMUD's Sierra source water system (see B1, "Regional Water Management/Intertie with Untreated- or Treated-Water Sources").

Sierra supply source alternatives would require the construction of diversion facilities and a new conveyance system to bring water from the Sierra source point to the CCWD Service Area. New water rights would be needed. A Sierra supply source could theoretically be developed within the following river basins where water quality is generally better than Delta water quality: American, Feather, Sacramento, Stanislaus, Cosumnes, Mokelumne, Calaveras, Tuolumne, and San Joaquin.

Screening Evaluation: Because of the high water quality of a Sierra supply, this alternative could easily meet the water quality criterion. Unfortunately, this alternative also has severe regulatory (including environmental), institutional, technical and operational, and cost constraints. Obtaining new water rights or changing the point of diversion of existing CVP water rights for a new Sierra supply (such as the Cosumnes, Stanislaus, Mokelumne, American, or Tuolumne Rivers) would be extremely difficult, if not impossible. Moreover, the cost to construct a pipeline to access a Sierra supply would be extremely high. The regulatory constraints would be massive as numerous agencies (U.S. Fish and Wildlife Service [USFWS], National Marine Fisheries Service [NMFS], California Department of Fish and Game [DFG], and SWRCB), water districts, and both water and environmental stakeholders would be adamantly opposed to such a project. This alternative could also increase the potential for fisheries impacts on the source river by diverting water during drought and low-flow late summer and fall periods. This alternative is impracticable and is not being carried forward for more detailed evaluation.

3.3.2.6 B6. Groundwater Management/Conjunctive Use

This alternative would consist of groundwater management to provide for an alternate water source with higher-quality water than Delta source water. Groundwater management alternatives could include groundwater production/recharge facilities or individual property-specific wells. If needed, desalination and conveyance facilities could also be constructed to obtain, treat, and distribute groundwater to CCWD customers. This alternative would require the availability of willing sellers from whom CCWD would exchange/transfer CCWD's CVP surface water rights for groundwater rights, or require CCWD to acquire additional groundwater rights.

The major facilities for this alternative include groundwater production and recharge facilities. Production facilities would include groundwater production

wells, a well field collection system, and conveyance facilities (i.e., pipelines and pumping facilities) to deliver groundwater to the Contra Costa Canal. The recharge facilities would include a recharge basin and conveyance facilities from the Contra Costa Canal to the groundwater basin to deliver recharge water from the Delta during those times when Delta water quality is good. A desalination plant could be constructed in association with the groundwater facilities to provide improved water quality for groundwater sources with high chloride concentrations.

Potential groundwater sources include the east Contra Costa County Basin, the Livermore Valley Basin, the Sacramento-San Joaquin Delta Groundwater Basin, and the San Joaquin County Basin. Preliminary studies of the east Contra Costa County Basin estimate the yield at 3,000-6,000 af/yr with chloride concentrations ranging from 64 to 295 milligrams per liter (mg/L) and the average chloride at about 210 mg/L. Groundwater quality in the Livermore Valley basin is only fair, with chloride concentrations averaging 130 mg/L. The Delta groundwater basin has chloride concentrations that average over 1,000 mg/L throughout the San Joaquin County portion of the Delta. Water quality in the San Joaquin County Basin is much better, with chloride concentrations averaging about 75 mg/L, but there are serious overdraft conditions in this basin. (CCWD 1992.)

Screening Evaluation: The groundwater basins in and near CCWD's service area do not provide the quality of water necessary to meet the water quality screening criterion. This alternative would provide operational flexibility by providing another source of water and would also protect water quality from emergencies by providing a completely separate water supply. Capital costs for accessing groundwater in San Joaquin County would likely be over $500 million (CCWD 1992). This alternative would also incur greater costs as the project could not be developed by 2010 because of the numerous and complex institutional and regulatory constraints, including strong public opposition from a variety of local and regional stakeholders. Moreover, the yield required to provide customers with sufficient water on a continuous and regular basis could likely not be met, and there would be serious groundwater overdraft issues. San Joaquin County has management controls over groundwater extraction and is actively seeking additional water supplies. It is highly unlikely that San Joaquin County officials would approve groundwater export given the present groundwater overdraft problems and water supply needs in San Joaquin County. The reliability of groundwater management and potential threats from groundwater contamination are other considerations. This alternative does not meet the water quality, regulatory, institutional, or cost criteria and is not being carried forward for more detailed evaluation.

3.3.2.7 B7. Water Transfers/Exchanges

This alternative would entail the transfer of water to CCWD from water supply sources not under the control or ownership of CCWD. Transfers would be negotiated with one or more entities holding water rights, such as other CVP

contractors, SWP contractors, or individual contractors such as Yuba County Water Agency. Water transfers to CCWD would need to be conveyed through the Delta, and CCWD has participated in several temporary water transfers with Yuba County Water Agency. This alternative only improves delivered water quality if CCWD can access better quality water than is currently available at CCWD's Delta intakes and have that water conveyed to its system.

Screening Evaluation: This alternative does not meet the water quality criterion as transfer water is still conveyed through the Delta to reach CCWD's intakes. Water transfers large enough to improve salinity at CCWD's intakes would need to be very large and the institutional mechanisms necessary to ensure that they result in increased outflow to improve water quality rather than increased export pumping are not in place. This alternative would encounter the same constraints as presented above for A3, "Modifications to Delta Water Supply Management and Operations." This alternative also does not improve operational flexibility or CCWD's ability to protect delivered water quality during emergencies. The availability of willing sellers to transfer water under stringent CVP and SWP requirements may be difficult. This alternative does not meet the water quality, cost, regulatory, and institutional screening criteria and is not carried forward for more detailed evaluation.

3.3.3 C: Enhance Existing Water Treatment

3.3.3.1 C1. Supplemental Treatment at CCWD's Water Treatment Plants

This alternative entails incorporating advanced treatment technologies at the Bollman WTP and/or the Randall-Bold WTP to further reduce the targeted constituents of concern and to better meet CCWD's goals. This alternative could also include treatment facilities utilized by CCWD's untreated-water customers or new CCWD treatment facilities. CCWD currently uses both GAC and advanced oxidation treatment processes. However, several technologies exists that may further improve overall delivered water quality. Potential methods for providing supplemental water treatment at CCWD's WTPs include:

- constructing additional GAC treatment processes at the existing WTPs to further enhance taste and odor control, and

- constructing UV treatment technology as an alternate form of disinfection to improve the delivered water quality by preventing the formation of disinfection byproducts and enhancing health, taste, and odor benefits.

This alternative would only benefit CCWD's treated water customers unless it included upgrades to treatment facilities used by CCWD untreated-water customers and/or new facilities for untreated-water customers.

Screening Evaluation: This alternative partially meets the purpose and need/objectives by improving taste and odor (not chlorides or bromides), and, for UV treatment technology, protecting public health. These methods also do not

provide any improvement in operational flexibility and provide only minor protection of water quality during emergencies. This alternative would only minimally address the project purpose and need/objectives and would not provide benefits to untreated-water customers without upgraded/new facilities and substantial increased costs and institutional arrangements. This alternative does not meet the water quality, cost, and institutional criteria and is not carried forward for further evaluation.

3.3.3.2 C2. Desalination Plant

CCWD could construct a desalination plant and treat either Bay or Delta water. Desalination is a water treatment process used to remove salt and other dissolved minerals from water. Some processes may also remove other contaminants of concern, such as dissolved metals, microorganisms, and organics. Desalination processes can be used for either brackish water (total dissolved solids [TDS] of 500 to 10,000 mg/L) or seawater (TDS of 10,000 to 50,000 mg/L).

Screening Evaluation: This alternative generally meets the project purpose and need/objectives: it would improve delivered water quality, especially during droughts; would protect and improve health and/or aesthetic benefits to customers; would improve operational flexibility by providing the flexibility to divert Delta water of a wider range of quality and still meet delivery goals; and, depending on how the alternative is developed, could provide some protection during emergencies by enabling CCWD to treat lower-quality water. Regulatory (including environmental) and institutional criteria could potentially be met, although typical environmental issues associated with desalination plants (brine disposal, facility siting, and increased energy use) would need to be resolved. Consequently, this alternative is carried forward into second-stage screening for further analysis.

3.3.3.3 C3. Home Water Treatment Devices

This alternative would involve providing CCWD's customers with point-of-use (i.e., home water treatment) devices to reduce the salinity in their drinking water. Point-of-use devices typically treat water in batches and deliver water to a single tap. Types of point-of-use systems include Pour Through, Faucet Mount, Counter Top Manual Fill, and Plumbed-in. The extent of water quality improvement varies with the sophistication of these devices. Home water treatment devices include:

- GAC treatment devices (taste and odor control only),
- Ion-exchange water softeners to reduce hardness (e.g., calcium and magnesium) (taste and odor control only),
- simple home filtration devices (taste and odor control only), and
- distillation units (this is the only unit that also removes most dissolved solids such as salts, minerals, particles, and some organic chemicals).

Screening Evaluation: This alternative could only partially meet the project purpose and need/objectives to improve delivered water quality and protect and improve the health and/or aesthetic benefits to customers. Home water treatment devices, with the exception of distillation units, would not improve water quality with respect to salinity; consequently, distillation units would be required to meet the water quality criterion. Operational flexibility would not be improved, but some aspects of protecting water quality during an emergency would be met. Substantial technical and operational constraints include installing, monitoring, maintaining, and replacing distillation units continuously on a widespread basis. Implementation of this alternative at such a large scale on an annual basis would be unprecedented in the United States and could involve questionable or untested technologies relative to the institutional constraints presented above. The need to install devices at the point-of-use, such as a private residence, would likely be unacceptable to some customers and poses a major institutional constraint. Costs to implement this alternative would be substantial and continuous, but were not specifically determined at this stage of screening. This alternative does not meet the water quality, technical and operational, institutional, and cost criteria and is not carried forward for more detailed evaluation.

4 Second-Stage Screening Results

This chapter presents the results of the second-stage screening evaluation of alternatives that passed first-stage screening. This second-stage evaluation is a more detailed evaluation of these alternatives to further identify the types of projects each encompasses and to determine whether the alternatives should be carried forward into the EIR/EIS for detailed analysis. Table B-2 presents the second-stage screening results. The following alternatives were evaluated in second-stage screening:

- A.1. Point-Source and Nonpoint-Source Discharge Reduction,
- A.5. Delta Hydraulic Improvements,
- B.1. Regional Water Management/Intertie with Untreated- or Treated-Water Sources,
- B.2. Relocate Some CCWD Diversions to New Intake, and
- C2. Desalination Plant.

4.1 A1. Point-Source and Nonpoint-Source Discharge Reduction

4.1.1 Alternative Description and Configuration

This alternative was carried forward for additional evaluation because of its potential to meet the project purpose and need/objectives. This second-stage screening evaluates the potential for point and non-point source discharge reduction in greater detail. Under this alternative, discharges (including irrigation, municipal, and stormwater drainage discharges) in the Delta, particularly those near CCWD's intakes, would be moved, reduced, and/or treated in an effort to reduce the loading of organic carbon, pesticides, salts, and other constituents that impact CCWD's source water quality.

CCWD has already identified numerous potential steps that can be taken to reduce water quality effects at CCWD's intakes from point-source and nonpoint-source discharges and is in the process of implementing the options that it has determined would be most effective in the near term. The projects that are currently being implemented are included under the No-Action Alternative, and therefore are not alternatives to the project in and of themselves. They are described here, however, for consideration as a part of a potential comprehensive approach to reducing point- and nonpoint-source discharge.

4.1.1.1 Ongoing Point-Source Discharge Reduction Efforts

CCWD has undertaken the CALFED Rock Slough and Old River Water Quality Improvement Projects, which targeted the reduction of agricultural drainage and its associated impacts to CCWD's Rock Slough and Old River drinking water intakes, respectively. Both projects have been completed and are expected to reduce salt loadings from these agricultural discharge sources by about 90-100%. A third project, the Contra Costa Canal Encasement Project, is under development and expected to begin construction in 2007. The project will encase 21,000 feet of unlined canal to protect and improve water quality in the canal, among other goals. These projects are explained in further detail in Chapter 2, "Project Background," of the EIR/EIS and were taken into account in determining the need for the Alternative Intake Project.

4.1.1.2 Ongoing Nonpoint-Source Discharge Reduction Efforts

In an effort to offset proposed increased wastewater discharges in the Delta, the Sacramento Regional County Sanitation District and several urban water agencies, including CCWD, are currently conducting a feasibility study to identify and evaluate potential projects that reduce nonpoint-source discharges that affect Delta water quality. Despite the ongoing studies, many of the candidate projects are still only broad concepts without specific project locations or proponents, and will need considerably more development to be implemented within the next 5 to 20 years. In addition, DWR's agricultural drainage program and the multi-agency Bay Area Blending/Exchange Project are conducting similar studies.

4.1.1.3 Additional Point-Source Discharge Reduction Strategies

In addition to the option of collecting and rerouting the discharge flows, the discharges could be treated. Treatment options include treatment at point of discharge with reverse osmosis, treatment of discharge through wetland systems, and evaporation of discharge. Other options include land management practices, which fall into two categories: treatment and source reduction. Both target the reduction of runoff from the agricultural fields surrounding CCWD's intakes. Source reduction best management practices (BMPs) include reducing the volume of water applied to the agricultural lands, improving irrigation efficiencies, reusing drainage water, blending drainage water, retiring agricultural land, and agro-forestry. Treatment options include evaporation ponds, solar evaporation, solar ponds, electrodialysis, and reverse osmosis. Potential treatment alternatives include diversion of discharges near CCWD's intakes to an alternate location and/or treatment of the discharge prior to discharge to Delta waterways. Alternatives may also include treatment of drainage water with treatment technologies, including desalination and others. Treatment, if implemented, would likely be located as close as possible to the point-source discharge location. New facilities could include land, treatment facilities, disposal facilities, holding ponds, wetlands, pump stations, irrigation piping, and other conveyance facilities.

Table B-2. Second-Stage Screening Results

ALTERNATIVE	SCREENING CRITERIA								SCREENING SUMMARY
	Meets Water Quality Criteria								
	Improves Water Quality, Especially During Drought Periods	Protects/ Improves Health/ Aesthetic Benefits to Customers	Improves Operational Flexibility	Protects Water Quality During Emergencies	Meets Regulatory Criterion	Meets Institutional Criterion	Meets Technical and Operational Criterion	Meets Cost Criterion	Alternative Carried Forward Into EIR/EIS
Group A. Protect/Improve Source Water at Existing Intakes									
A1. Point-Source and Nonpoint-Source Discharge Reduction	Partial	Partial	No	No	Maybe	No	Maybe	No	
A5. Delta Hydraulic Improvements	Maybe	Maybe	No	No	No	No	No	No	
Group B. Obtain New/Alternative Source Water									
B1. Regional Water Management/Intertie with Untreated- or Treated-Water Sources									
B1-1. EBMUD Intertie	Yes	Yes	Partial	Partial	Maybe	No	No	Maybe	
B1-2. South Bay Aqueduct Intertie	Maybe	No	No	No	Maybe	No	No	No	
B2. Relocation of Some CCWD Diversions to New Intake									
B2-1. Alternative Delta Intake - Canal Conveyance	Yes	Yes	Yes	Partial	Yes	Yes	No	Yes	
B2-2. Alternative Delta Intake - Direct Pipeline Route	Yes	Yes	Yes	Partial	Yes	Yes	Yes	Yes	X
B2-3. Alternative Delta Intake - Indirect Pipeline Route	Yes	Yes	Yes	Partial	Yes	Yes	Yes	Yes	X
B2-4. Alternative Delta Intake - Alternative Project Operations	Yes	Yes	Yes	Partial	Maybe	Yes	Yes	Yes	X
Group C. Enhance Existing Water Treatment									
C2. Desalination Plant									
C2-1. CCWD-Only Desalination Plant	Yes	Yes	Yes	Partial	Maybe	Maybe	Yes	Maybe	X
C2-2. Desalination Plant with Regional Partners	Maybe	Maybe	Yes	Partial	Maybe	No	Maybe	No	

Key:
Yes: Meets the criterion
Partial: Meets some but not all of the criterion
Maybe: May or may not meet the criterion depending on how the project is implemented, and/or further analysis is necessary to determine whether criterion is met
No: Does not meet the criterion

4.1.1.4 Additional Nonpoint-Source Discharge Reduction Strategies

Nonpoint-source discharges that influence Delta water quality also could be managed to reduce their adverse effect on CCWD intakes. The use of BMPs would aim to minimize the pollutants contained in drainage from agriculture; stormwater; and urban, livestock, and mining uses being discharged to the Delta. Reduction strategies include:

- initiating programs that encourage farming practices with less water use, reduced field runoff, agricultural buffers, lower pollutant loadings, and tailwater recovery;
- implementing approaches to capture and treat nonpoint-source pollutants, using natural wetlands or complex water treatment processes such as reverse osmosis and high-rate disinfection;
- converting agricultural land to native cover;
- stabilizing and restoring streambanks and riparian areas; and
- fencing off livestock from the Delta waters.

This suite of alternatives would likely include the implementation/construction of wetlands, treatment technologies, BMPs (e.g., modification of irrigation practices, modification of crop patterns, and alternative crops), and retention/evaporation ponds. Potential facilities would include drainage collection systems, conveyance systems, and treatment facilities. Because of the seasonal nature of the discharges, treatment may need to be sized for peak drainage times (i.e., wet weather discharges). In addition, some proposed BMPs would necessitate that many landowners substantially modify their current land management and farming practices. Nonpoint-source facilities would need to be constructed at numerous locations throughout the Delta drainage area, either on properties with major dischargers or at major tributaries where the collective drainage from agricultural areas and/or urban areas can be managed.

4.1.2 Screening Evaluation

With CALFED funding assistance, CCWD is in the process of implementing the three most cost-effective projects to reduce major point-source problems adjacent to CCWD intakes or conveyance facilities. While mitigating three specific point-source Delta discharges, these projects do not obviate the need for the Proposed Action. Other regional projects are in the planning stages but are not yet ready to be implemented and may never be implemented. CCWD also is actively participating in regional efforts to evaluate projects to reduce nonpoint-source discharges that affect Delta water quality to offset proposed increases in wastewater discharges to the Delta. Such projects, if cost effective and technically feasible, could be developed in the future but are speculative and are intended to offset water quality degradation caused by upstream projects and are thus unlikely to improve water quality at CCWD intakes in any meaningful way. Improved

operational flexibility and water quality protection during emergencies would not occur with this alternative.

Institutional constraints associated with alternatives developed under this concept include an absence of laws or pending legislation to mandate improvements in of the quality of drainage water to the Delta, and substantial cost (and time) would be needed to achieve extensive and meaningful landowner and agency consensus and cooperation. Achieving agency and landowner cooperation for such alternatives would require additional studies, substantial outreach efforts, and substantial funding mechanisms. Based on the analyses described above, this alternative does not meet the water quality, institutional, technical and operational, and cost criteria and is not carried through to the next screening level.

4.2 A5. Delta Hydraulic Improvements

4.2.1 Alternative Description and Configuration

DWR has conducted a pre-feasibility study of the ecosystem and water quality benefits associated with potential modifications of three flooded Delta islands: Franks Tract, Big Break, and Lower Sherman Lake. Preliminary results indicate that structural modifications to channels around Franks Tract and to the remaining levees that once protected Franks Tract have the greatest potential of the three flooded islands to improve Delta water quality. CALFED has identified funding for studying the "Ecosystem and Water Quality Benefits Associated with Restoration of Franks Tract." For the Franks Tract project, DWR is recommending alternatives refinement and optimization, program development, final pilot project development, and environmental compliance as next steps to be completed over the next 2 years. (DWR 2005.)

For the purposes of second-stage screening, the analysis of the hydraulic improvements alternative is focused on Franks Tract.

Franks Tract is located north of CCWD's Old River and Rock Slough intakes and consists of two flooded Delta tracts totaling approximately 3,300 acres. Franks Tract flooded in 1936 and again in 1938 as a result of levee breaches. Preliminary water quality modeling studies conducted by DWR and others have demonstrated that reconfiguring Franks Tract could potentially reduce the extent of salt penetration and salinity increases in the Delta from seawater intrusion. The shape of Franks Tract and the specific locations of the levee breaks have resulted in the flood tide, from the west, pushing salty water along False River and into Franks Tract. The ebb tide pulls ambient water from all over the tract (not just the seawater) back out to sea. Meanwhile, the levee breaks on the east side of the tract allow the salty residue to mix with freshwater from the north. Studies have shown that Franks Tract acts as a salt trap, which results in the mixing of freshwater with trapped salt. Water quality modeling results suggest that salinity concentrations in Delta waters increase after water flows through Franks Tract, resulting in more

saline waters being delivered to Delta water users, including CCWD (DWR 2005).

This alternative would involve constructing tidal gates and/or improving the existing levees surrounding Franks Tract to reduce tidal flows and salinity mixing. As Delta water currently flows through Franks Tract on its way to Middle River and Old River, water quality within Franks Tract influences water quality delivered to CCWD. With extension of the length of False River (i.e., repair of the northeastern levee), the flood tides would never fully discharge into the tract, and the exchange and storage of salinity on the tract would be reduced. In addition, repairing several major levee breaks along False River would eliminate the saltwater jets entering the tract. The addition of a new tide gate that could be closed during fall or droughts, when salinity is generally high, could further minimize seawater intrusion.

4.2.2 Screening Evaluation

This alternative has the potential to partially meet the project purpose and need/objectives by improving delivered water quality during dry periods and improving health/aesthetic benefits. The extent to which water quality benefits from Franks Tract are realized would depend on how the project is implemented and what institutional or regulatory measures are put in place to ensure that expected water quality benefits are not offset by increased Delta exports. Modifications of Franks Tract would potentially need to be combined with tidal gate operating criteria, and possibly new Delta standards or assurances, to ensure that water quality benefits are actually realized and not offset by increased Delta exports, decreased Delta outflow, or other changes in Delta operations. The amount of water quality improvement is not entirely certain, as modeling studies are ongoing and have not yet been completed. DWR's pre-feasibility study identifies four potential project alternatives with costs ranging from $294 million to $324 million in 2005 dollars that would take a minimum of 8 to 10 years to implement. This alternative would not improve operational flexibility or provide greater water quality protection during emergencies, and may or may not meet the water quality criterion, which is fundamental to the project purpose and need/objectives.

The high preliminary cost estimates with the long implementation timeline are likely to result in prohibitive overall project costs relative to potential project benefits. The alternative proposes major structural modifications in the Delta that may or may not prove technically and operationally feasible. In addition, there is significant complexity and uncertainty in meeting the numerous regulatory (including environmental) and institutional constraints this alternative would involve, including the regulatory and institutional measures that would be required to ensure that water quality benefits are realized and not offset by increased Delta exports, decreased Delta outflow, or other changes in Delta operations. The alternative is not carried forward because it does not meet the

cost, technical and operational, regulatory, and institutional screening criteria, and it may not meet the water quality criterion.

4.3 B1. Regional Water Management/Intertie with Untreated- or Treated-Water Sources

4.3.1 Alternative Description and Configuration

The intertie alternative was carried forward to second-stage screening because of its potential to meet all aspects of the project purpose and need/objectives. This section analyzes interties with Delta supply sources from EBMUD's Sacramento River supply and with the South Bay Aqueduct. Interties with Sierra supply sources are infeasible because of substantial institutional and regulatory (including environmental) constraints.

4.3.1.1 Expanded EBMUD Intertie to Sacramento River Supply

EBMUD's service area is adjacent to the westerly boundary of CCWD's service area, and EBMUD's Mokelumne Aqueduct passes directly through CCWD's service area. CCWD and EBMUD currently have a two small-capacity treated-water interties and an untreated-water intertie for emergency purposes. As part of EBMUD's Freeport Regional Project, a new intertie will be constructed to connect the CCWD Los Vaqueros Pipeline to the EBMUD Mokelumne Aqueduct. The intertie will allow up to 3,200 af annually of CCWD's CVP supply to be taken from the Sacramento River at Freeport. The intertie would also function as an emergency connection between EBMUD and CCWD, enabling both the agencies to share water resources in the event of an emergency. The CCWD-EBMUD intertie is in design with construction expected to begin in summer 2006.

EBMUD and CCWD could possibly expand the connections between their untreated- or treated-water supply systems to allow joint use of CCWD's Delta supply and EBMUD's Sacramento River supply.

4.3.1.2 Intertie with South Bay Aqueduct

This alternative would involve constructing an intertie between CCWD's Contra Costa Canal and the South Bay Aqueduct, which provides supply to Santa Clara Valley Water District, Zone 7, and Alameda County Water District. The South Bay Aqueduct is fed by Clifton Court Forebay, a Delta intake that, at times, has better water quality than CCWD's existing intakes.

4.3.2 Screening Evaluation

4.3.2.1 Expanded EBMUD Intertie to Sacramento River Supply

Expanding untreated- and treated-water interties with EBMUD or increasing the use of existing interties could protect and improve public health and aesthetic benefits and increase operational flexibility to a limited degree. The limited capacity of the Mokelumne Aqueduct during key periods of the year may limit this alternative's ability to consistently provide additional water quality

protection. Expanded facilities, however, could potentially provide water supplies or conveyance capacity during droughts and emergencies to provide significant water quality benefits to CCWD at those times. There are extensive institutional barriers related to developing a mutually acceptable agreement with EBMUD to allow use and/or expansion of a CCWD-EBMUD intertie related to cost-sharing and other issues. The cost criterion could possibly be met but would depend on the nature of the specific CCWD-EMBUD agreement. This alternative does not meet the institutional, and technical and operational criteria, and is not being carried forward for more detailed evaluation.

4.3.2.2 Intertie with South Bay Aqueduct

The South Bay Aqueduct users face their own water quality challenges, particularly taste and odor related to periodic algal blooms in Clifton Court Forebay. More significantly, supply on the South Bay Aqueduct is constrained by the ability of the SWP to move water through its export facilities. In many years, there is insufficient conveyance capacity to meet all contract deliveries. It is highly unlikely that there would be any extra capacity for deliveries to CCWD for water quality improvement or to meet any of CCWD's water quality objectives. Such deliveries, as described above, would require significant infrastructure construction and costs. Institutional issues related to sharing capacity, supply, and costs, would likely occur. The technical and operational criterion could not be reasonably met. Given the major constraints to implementation and the limited ability of this alternative to meet the project water quality objectives, this alternative is considered to be impracticable and is not being carried forward for more detailed evaluation.

4.4 B2. Relocation of Some CCWD Diversions to New Intake

4.4.1 Alternative Description and Configuration

This alternative entails constructing a new intake for CCWD at a location with better water quality. To further refine this alternative, different intake locations, pipeline routes, and operations were evaluated to develop specific project alternatives for analysis. The new intake would need to be located in the Delta because no other water supplies are reasonably obtainable or can be reasonably conveyed to CCWD's service area. Different intake sites and connections into CCWD's existing intakes and conveyance system were considered. Based on an initial evaluation, alternative configurations evaluated as part of the second-stage screening were:

- B2-1 Alternative Delta Intake – canal conveyance,
- B2-2 Alternative Delta Intake – direct pipeline to Old River Pump Station,
- B2-3 Alternative Delta Intake – indirect pipeline to Old River Pump Station, and
- B2-4 Alternative Delta Intake – alternative project operations.

A new intake and associated fish screen would be constructed so that Delta water could be conveyed from the intake to CCWD facilities, which include Contra Costa Canal, Bollman WTP, and Randall-Bold WTP. Any new intake would consist of an intake, fish screen, pump station, conveyance piping or canal, and additional transmission facilities to connect to Los Vaqueros Reservoir, Contra Costa Canal, or the WTPs. The pipeline or canal would tie into either the Old River distribution system or the Contra Costa Canal.

Project facilities would include:

- a new intake in the Delta with associated fish screens;
- a conveyance system (pipeline or canal) to transport the water from the intake across typically agricultural lands to tie into CCWD's distribution system;
- a pump station, depending on hydraulic differentials between the intake site and CCWD's distribution system; and
- small appurtenant structures such as a power substation, maintenance building, etc.

4.4.1.1 Intake Siting

The new intake would need to be located in Contra Costa and/or San Joaquin Counties, reasonably adjacent to existing CCWD facilities to reduce the cost of water conveyance from the new intake(s) to CCWD's existing water treatment and distribution system. The new intake would also need to be sited at a location where water quality is generally better than the water quality available at existing CCWD intakes.

Delta water quality can vary widely in its quality, depending on annual and seasonal hydrologic conditions and depending on specific location in the Delta. CCWD conducted extensive studies of potential Delta intake sites as part of the original Los Vaqueros Reservoir Project (CCWD 1992; CCWD and Reclamation 1993). Intake locations at numerous sites on Old River, Middle River, Empire Cut, Woodward Island, Woodward Island Forebay, Victoria Canal, Clifton Court Forebay, the California Aqueduct Intake Channel, and Banks Pumping Plant Discharge have all been investigated. Numerous permanent water quality monitoring stations in the Delta, as well as CCWD's water quality monitoring program, provide an extensive database with which to evaluate and compare water quality conditions in the Delta, especially during droughts and late summer and fall.

Selecting a location for an alternative intake is essentially a function of selecting a site that provides the greatest water quality benefits at the least cost, while minimizing environmental impacts. Areas of the Delta near CCWD's most northerly intakes, Mallard Slough and Rock Slough, have higher salinity than the area near CCWD's existing intake at Old River; salinity is nearly always highest at Mallard Slough and lowest at Old River (Exhibit B-1). These intakes are also

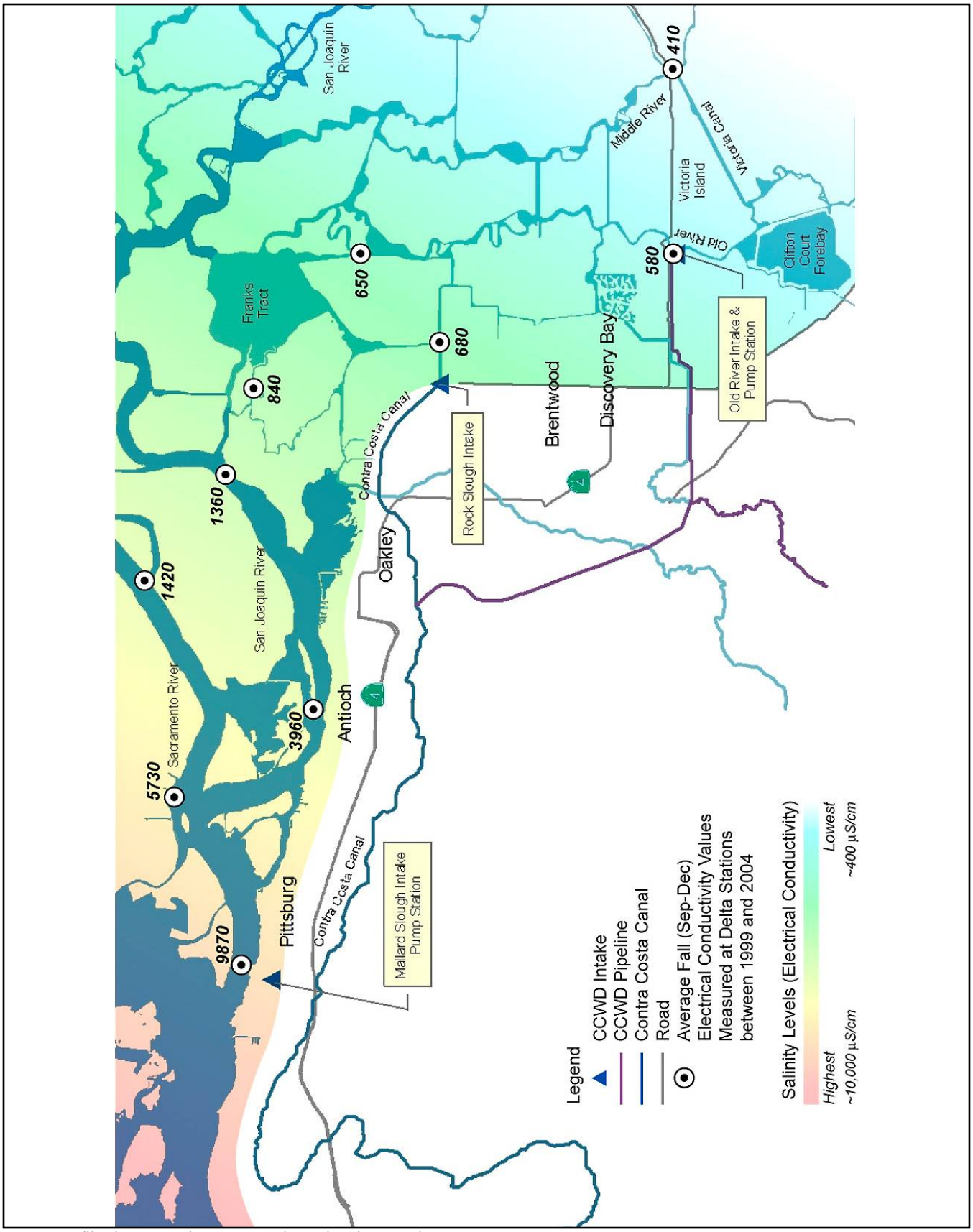
farther from Delta locations with consistently better water quality and would require longer conveyance[2] and significantly increased project costs to tie into them. Pipeline costs per linear mile are substantial, and a cost-effective project must necessarily be located within a few miles of CCWD's existing Old River intake; otherwise, project costs become prohibitive. Furthermore, Mallard Slough intake and Rock Slough intake do not connect to the Los Vaqueros Reservoir, thus limiting the operational flexibility and ability to store high quality water from these sites. Relocating CCWD pumping to a site that cannot be used to store water in Los Vaqueros Reservoir limits the water quality benefits and operational flexibility of that alternative. Connecting into the CCWD conveyance system near the Old River Intake provides the best water quality at the most economical cost.

Exhibits B-1 and B-2 summarize intake siting considerations to meet the project purpose and need/objectives in a cost-effective manner, and can be summarized as follows:

- High-quality water is available in Middle River and Victoria Canal;
- Reasonable costs to meet the project purpose and need/objectives limit intake sites to waterways within a few miles of existing CCWD infrastructure, particularly those surrounding the western portion of Victoria Island; and
- Fisheries monitoring and preliminary biological surveys indicate that environmental considerations do not vary greatly on Victoria Island or in the adjacent waterways; fisheries evaluations found fish densities and species compositions to be similar between several Old River and Middle River sampling sites (Hanson Environmental, Inc. and Environmental Science Associates 2004).

Based on meeting the project purpose and need/objectives, the lower third of Victoria Canal adjacent to the southern edge of Victoria Island in the central Delta is the optimal siting location considering water quality improvements, conveyance cost, and environmental effects. When all screening criteria are considered, such as the institutional criterion (number of landowners, logistics, agreements), the technical and operational criterion (engineering constraints and existing technology), and the regulatory (including environmental) criterion, intake siting in the lower third of Victoria Canal remains the most practicable and feasible intake location for meeting the project purpose and need/objectives. Additional site-specific engineering and environmental data will be collected and used to select a specific intake location to maximize water quality benefits; minimize costs; optimize engineering and operational design; and minimize environmental

[2] CCWD's Rock Slough intake is approximately 10 miles from Middle River at Empire Cut, a location with consistently higher water quality, and would require at least two tunneled river crossings. By comparison, CCWD's Old River Intake is less than 3 miles from Victoria Canal and would only require one tunneled river crossing.



Source: California Data Exchange Center (CDEC) and CCWD data

Average Fall Delta Salinities, 1999-2004

EXHIBIT B-1

Water Quality Considerations

Note:
Blue highlight delineates the area of similar water quality conditions. A new intake within this area would provide CCWD with access to water that is better quality than is available at CCWD's existing intakes during key periods (late summer, fall, and droughts). The highlighted area is based on extensive water quality monitoring conducted by CCWD; historical water quality and flow data collected by reclamation, DWR, and others; and water quality modeling using DSM2.

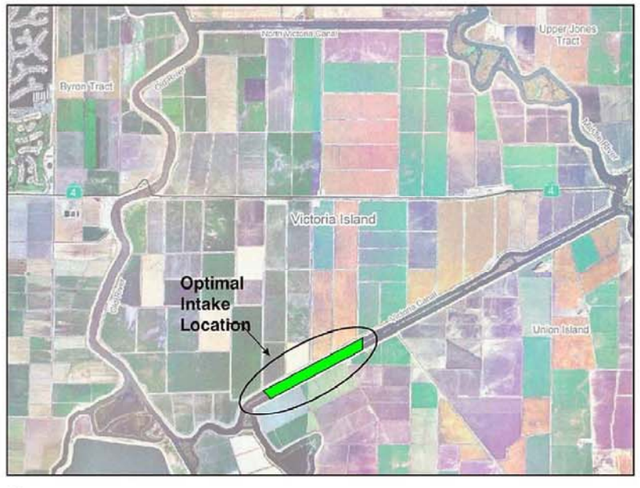
Environmental Considerations

Note:
Yellow highlight delineates an area of similar environmental conditions. Construction and operation of a new intake and conveyance facilities within this area will generally have similar effects to environmental resources. The highlighted area is based on preliminary site reconnaissance of environmental conditions on portions of Victoria Island and surrounding waterways.

Cost Considerations

Note:
Red highlight delineates an area with similar cost conditions and that meets the cost criterion for constructing and operating a new intake and conveyance facilities. The highlighted area is based on preliminary engineering and cost analysis of intake and conveyance alternatives that can meet CCWD project objectives.

Optimal Intake Location Based On Above Considerations



Note:
Green highlight delineates the area that is the optimal intake location considering water quality, environmental, and cost considerations.

Source: Carollo Engineers

Intake Siting Considerations and Optimal Intake Location

EXHIBIT B-2

impacts, particularly with respect to fisheries, wetlands, other biological resources, and waters of the United States.

4.4.1.2 Type of Conveyance

An alternative intake would involve the construction of conveyance facilities to convey water from the intake location to CCWD's Old River conveyance system on Byron Tract. The type of conveyance facilities to be constructed is primarily a function of cost and environmental impacts, including potential impacts on existing agricultural activities on Victoria Island.

Two types of conveyance facilities were evaluated: pipeline and canal. There is little cost differential between the two. Pipeline is the most conventional method of conveyance and provides the following significant advantages over canal conveyance, including minimization of potential adverse environmental effects:

- better security of drinking water supply and protection of public safety because the water is enclosed during conveyance;
- less contamination of the conveyed water because a canal would receive airborne particles of pesticides, herbicides, fungicides, and fertilizers during frequent agricultural applications, including aerial applications;
- least potential disruption to surface activities, primarily the extensive agricultural activities on Victoria Island; and
- least potential disruption (permanent and temporary) to drainages, waters of the United States, wetlands, and terrestrial plants and animals because a pipeline can be constructed within a narrower right-of-way and can be buried, avoiding permanent impacts on surface features.

Based on these conclusions, a pipeline was chosen as the best and only feasible conveyance method.

4.4.1.3 Conveyance Routing

Exhibit B-3 presents various conveyance route configurations from a new Victoria Canal intake site to the Old River Pump Station. The first route (Option 1) evaluated would be a direct route connecting the new alternative intake to CCWD's existing Old River Pump Station. Based on comments received during project scoping, the following alternative routes were examined: Option 2, routing the pipeline west from the Victoria Canal intake site, crossing Old River, and proceeding north on Byron Tract; Option 3, routing the pipeline under Old River; and Option 4, routing the pipeline along existing drainages on Victoria Island north toward State Route 4 and west toward the Old River pump station. Options 1 and 4 were carried forward for additional evaluation. Based on reconnaissance-level engineering and discussions with engineers from Reclamation District 800, Option 2 was eliminated from further consideration because of concerns regarding soil conditions in and around the levees on Byron

Source: Carollo Engineers

Optional Conveyance Routing Corridors for an Alternative Intake

EXHIBIT B-3

Tract. Soils in and adjacent to the levees south of Old River pump station are known to include unconsolidated sands and silty sands. Because of these poor soil conditions, construction in and adjacent to the levee footprint could compromise levee stability. A route farther west (i.e., farther from the levee) would affect more farmland, would be more costly, and offers no advantage to other potentially viable options with primary construction on Victoria Island.

Option 3 was eliminated because of greater environmental impacts than other options when constructing under a long portion of Old River, and cost considerations.

Preliminary analyses suggest that Option 1, the direct route, is the most cost effective because of the shorter pipe length (approximately 4,000–5,000 feet shorter than Option 4 and 4,000 feet shorter than Option 3). The indirect route may have less effect on the agricultural activities on Victoria Island. Additional engineering and environmental studies will be undertaken to clearly differentiate between the two corridors (Options 1 and 4).

4.4.1.4 Operations

CCWD delivers water to its customers using the three Delta intakes described in the EIR/EIS (see EIR/EIS Chapter 2, "Project Background"). Operational decisions regarding timing and use of each intake involve consideration of water quality, system demands, water rights, power, and biological opinion requirements. Old River is CCWD's primary intake because it generally has the best water quality and fish screen. With an alternative intake, CCWD could have the flexibility to relocate some of its pumping from the existing Old River intake to a new location during certain periods of the year to obtain better water quality. The proposed intake would use CCWD's existing water supply and would not increase CCWD's total Delta diversion capacity (rate or average annual quantity) and would not change CCWD's demands or the quantity of water delivered to its service area each year; it would simply allow CCWD to shift the location and timing of pumping.

Proposed Operations

Several operational scenarios were considered, including relocating all Old River pumping to the alternative location and relocating a portion of pumping based on water quality. The capacity initially evaluated for the alternative intake was 250 cubic feet per second (cfs) because this rate matches the existing permitted capacity at the Old River pump station. Historical water quality monitoring data show that for portions of most years, particularly in late winter and spring, Old River water quality is better than Middle River and Victoria Canal water quality. In summer and fall, Middle River and Victoria Canal water quality is far better than Old River water quality (in late summer and fall, chloride concentrations in Middle River and Victoria Canal are usually half the concentrations in Old River at SR 4 and rarely exceed 100 mg/L; Old River chlorides frequently exceed 150 mg/L during the same period). Based on the monitoring data and operational modeling, the alternative selected for further analysis was one that would provide

CCWD with the flexibility to divert up to 250 cfs of water for conveyance to Los Vaqueros Reservoir and the Contra Costa Canal using either the existing Old River intake, the new Victoria Canal intake, or a combination of the two intakes. Under this alternative, Rock Slough would continue to provide a portion of CCWD's water supply, but would be used less frequently under the Proposed Action because of the operational flexibility a new intake with better water quality provides. The Mallard Slough intake would continue to provide a portion of CCWD's water supply in a manner similar to its current operations.

Alternative Operations

One additional operational scenario was also developed and considered based on requests from fisheries agencies during scoping that CCWD consider how the Alternative Intake Project could be developed to enable CCWD to divert more of its supply through screened intakes. The physical features of this alternative are the same as those described above. The operations would differ in that CCWD would relocate a portion of the current Rock Slough pumping as well as some of the current Old River pumping to the new screened intake. The Rock Slough intake is currently unscreened.

Operations under this alternative would differ from the proposed operations as follows: CCWD would immediately change its permits to allow diversion of up to 320 cfs through the Old River conveyance system rather than in the future, as planned. Combined diversions from the 250 cfs Old River pump station and the proposed 250 cfs Alternative Intake would be limited to 320 cfs by the capacity of the pipeline connecting the Old River Pump Station to CCWD's transfer station that routes water either to Los Vaqueros Reservoir or the Contra Costa Canal. CCWD's system-wide total permitted diversion capacity would remain the same. This change would enable CCWD to relocate some portion of the current Rock Slough diversions to the screened Old River conveyance system. Rock Slough would continue to provide a portion of CCWD supply, but would be used less in the near term than under the proposed operations. Mallard Slough operations would be similar under both operational scenarios. There are minimal cost differences between the Proposed Action and this alternative as there are no differences in facilities but just slight modifications to operations, which would require water right changes with SWRCB be performed sooner. This alternative would reduce fish losses in the near-term at Rock Slough by maximizing diversions through screened intakes[3].

4.4.2 Screening Evaluation

Different intake locations, pipeline routes, and operations were evaluated to develop specific project alternatives for analysis under this alternative of relocating CCWD diversions to a new intake. The screening criteria were applied to assist in the configuration and selection of alternatives for evaluation in the

[3] Note that the CVPIA includes a requirement for Reclamation to add fish protection measures to Rock Slough by 2008.

EIR/EIS. Intake locations outside of the lower one-third of Victoria Canal that connect to the Old River pump station were screened out because they would not be cost effective (a longer pipeline to Middle River would cost more with no appreciable increase in water quality) or they would not meet the water quality criterion (intake locations in Old River, Rock Slough, or farther north where water salinities are generally higher than in Victoria Canal would not provide cost-effective water quality benefits [see Exhibits B-1, B-2, and B-3]). A pipeline clearly is superior to a canal for ensuring secured water conveyance and water quality, and would have less adverse environmental effects. Therefore, canal conveyance was screened out because of technical and operational reasons and pipeline conveyance retained for further refinement.

The selection of a *specific* intake location and a *specific* conveyance route will require more detailed analysis. In addition, two primary alternative operations scenarios are possible. Application of the screening criteria therefore resulted in the development of alternatives consisting of an intake on the lower one-third of Victoria Canal, a pipeline along one of two routes, an Old River crossing and connection to the Old River conveyance system, and two operational scenarios. These components were combined into three similar but distinct alternatives:

- alternative intake in lower one-third of Victoria Canal with a direct pipeline route across Victoria Island,
- alternative intake in lower one-third of Victoria Canal with an indirect pipeline route across Victoria Island, and
- alternative intake in lower one-third of Victoria Canal with a direct pipeline route across Victoria Island and immediate operational modifications to CCWD and Reclamation permits to allow increased diversions from the Old River and Victoria Canal intakes to reduce use of CCWD's unscreened Rock Slough intake in the near-term.

These alternatives would all meet the CCWD's four water quality objectives, except that protection of water quality during emergencies would only be partially met since some common facilities with the Old River conveyance system would be used and the water source is still limited to one source (i.e., the Delta). All other screening criteria would be met except the regulatory criterion may or may not be met for the alternative operations (Alternative B2-4). These three alternatives were moved forward for additional analysis in the EIR/EIS.

The following alternatives were considered as part of second-stage screening and are not being moved forward for additional analysis in the EIR/EIS:

- Intake locations outside of Victoria Canal: Intake locations outside of the lower one-third of Victoria Canal using either Sierra or Delta supplies were screened out because they would be cost prohibitive, would not improve water quality, or both (see Exhibits B-1 and B-2).

- Canal conveyance: This conveyance method would have more significant agricultural and environmental effects than pipeline conveyance, would raise concerns about the security of the water supply from contamination, and would be subject to water quality problems from agricultural practices that would not be concerns with pipeline conveyance.

- Option 2 pipeline route: Routing the pipeline directly west from the intake location and north on Byron Tract to Old River pump station was eliminated based on geotechnical considerations, increased costs associated with a longer pipeline, and potentially greater environmental effects.

- Option 3 pipeline route: Burying the pipeline under Old River to minimize land disturbances was eliminated because of significant environmental impacts of construction in Old River and cost considerations.

4.5 C2. Desalination Plant

4.5.1 Alternative Description and Configuration

This alternative entails the construction of desalination facilities to treat untreated-water quality. Desalination, a water treatment process used to remove salts and other dissolved minerals from water, has received increasing attention in recent years. Other contaminants, such as dissolved metals, microorganisms, and organics, may also be removed by some of the potential desalination processes. CCWD could potentially develop a desalination plant on its own or with regional partners. This section presents a general presentation of key considerations for developing a desalination plant, followed by a discussion of desalination plant configurations both with CCWD as the sole plant operator and with CCWD as a regional partner with other Bay Area water providers.

4.5.1.1 General Desalination Plant Considerations

There are several desalination processes available – some produce freshwater from brackish sources and others reduce the amount of salt in seawater. Five basic techniques can be used to remove salt and other dissolved solids from water: reverse osmosis (RO), electrodialysis/electrodialysis reversal (ED/EDR), ion exchange, distillation, and freeze desalination. RO and ED/EDR use membranes to separate dissolved salts and minerals from water. Ion exchange involves an exchange of dissolved mineral ions in the water for other more desirable dissolved ions using chemical resins. Distillation and freezing involve removing pure water, in the form of water vapor or ice, from salty brine. The most commonly used processes are RO and ED/EDR. Either of these processes may be suitable for the Delta water supply, whereas the others are not. Ion exchange is not suitable for large-scale removal of salts and salinity levels in the Delta often exceed the upper limit for economical operation of an ion exchange facility. Distillation processes are employed primarily for seawater desalination but are not economically competitive with other options for the TDS levels in the Delta water. Freeze desalination is complex and relatively untested.

Desalination using either RO or ED/EDR could potentially meet the project purpose and need/objectives. These processes can meet the water quality objectives for water quality, improve operational flexibility, and provide some protection during certain emergencies.

A significant issue with desalination plants is disposal of the concentrate byproduct (i.e., brine). Both viable desalination processes (RO and ED/EDR) produce brine with high levels of dissolved solids, which must be disposed. Separate brine conveyance and disposal facilities would be constructed to convey brine for surface water discharge into the Delta or Bay. Deep well injection of brine into the subsurface, or placement in lined evaporation ponds with disposal of the concentrate to a nearby landfill, are other options. Deep well injection was not considered to be practical because of the large number of injection wells that would be required and groundwater-contamination concerns. Evaporation and landfill disposal was not considered practical because of the large amount of land that would be required and the associated land costs and environmental permitting requirements, and the uncertainly of the long-term availability of landfill space.

The RO and ED/EDR processes would require facilities for water intake and pumping, conveyance, pretreatment, desalination, post-treatment (possible, depending on the intended use of the water), and pumping and conveyance of the byproduct concentrate for disposal.

4.5.1.2 CCWD-Only Desalination Plant

CCWD could develop a desalination plant on its own and without regional partnerships. Potential facility locations include the existing intakes at Mallard Slough, Rock Slough, or Old River; Bollman and Randall-Bold WTPs; on the Contra Costa Canal near the confluence of the Los Vaqueros/Old River/Rock Slough transmission lines; Mirant Contra Costa Plant (Antioch); and the Delta Diablo Sanitation District site.

The most reasonable and feasible siting for a new intake and desalination plant would be an intake at Mallard Slough and a desalination plant at Bollman WTP. Because CCWD has an existing intake at Mallard Slough and owns sufficient additional land at the site for an expanded intake, institutional constraints would not be an issue. This site would also maximize use of CCWD's existing Mallard Slough water rights and facilities. A desalination plant at either Bollman WTP or Randall-Bold WTP could most easily and cost effectively be tied in with the Mallard Slough intake. Of the two, Bollman WTP is preferred because CCWD owns the Bollman WTP, whereas the Randall-Bold WTP is jointly owned with Diablo Water District. CCWD could build a new desalination plant on vacant land on the Bollman WTP site adjacent to the existing treatment facilities without institutional constraints. Because of the water quality effects of the disposal of desalination byproduct concentrate, discharge further west is much preferred to discharge into the central Delta, which would be necessary with several other alternative sites.

Substantial institutional and environmental constraints would render the Rock Slough and Old River intake sites and the Contra Costa Canal location infeasible for desalination facilities. Brine disposal would need to take place somewhere in the nearby Delta, and additional water rights for Delta diversions would need to be obtained to replace the water lost through brine disposal. Additional land would need to be obtained adjacent to the existing facilities. Costs would be substantial as the pipeline for brine discharge would be longer than with the Bollman WTP site, and the institutional and regulatory constraints would be substantially greater. A desalination plant at the Mirant Contra Costa Plant, the Mirant Pittsburg Plant, or the Delta Diablo Sanitation District site would require complex institutional agreements for the joint use of the site, which would be difficult to obtain. Institutional constraints would likely delay implementation of a project, and operational flexibility would be limited. Pipeline costs associated with the Pittsburg and Delta Diablo Sanitation District sites also would be cost prohibitive.

The most cost-effective and environmentally sensitive desalination alternative would be to expand the existing Mallard Slough intake; construct a pipeline parallel to the existing conveyance pipeline from Mallard Slough to convey the water to the Bollman WTP site; construct a desalination plant at the Bollman WTP site and modify the pretreatment facilities there as needed to accommodate the desalination treatment train; and construct a desalination byproduct concentrate disposal pump station and pipeline from the desalination facility to the nearby Suisun Bay. The desalinated water would serve the demands of the treated water customers served by the Bollman and/or Randall-Bold WTPs. Water could be transferred between the plants via CCWD's existing Multi-Purpose Pipeline. Desalination would reduce the overall Contra Costa Canal demands to those of primarily the untreated-water customers, creating an overall reduction in the quantity of diversions from Rock Slough or Old River, and increasing the availability of water from the Los Vaqueros Reservoir to serve these customers. Facilities would be operated for a maximum of 6 months annually, typically during dry years and in late summer and fall.

Currently, CCWD only uses the Mallard Slough intake during the wet season for about 2 to 3 months when water quality is best. This alternative would allow for the maximum use of the existing water rights at Mallard Slough. Additionally, a desalination plant would likely require modification of CCWD's water rights to meet the treatment plant demands and accommodate the additional 20% of water needed with this process for the brine discharge.

4.5.1.3 Desalination Plant with Regional Partners

This alternative involves constructing desalination facilities in conjunction with other regional partners. Many of the technical and environmental aspects of this alternative are the same as those for a CCWD-only project. Current desalination studies include the Bay Area Regional Desalination Project (EBMUD et al. 2003) and the Delta Diablo Sanitation District desalination study (Delta Diablo

Sanitation District 2005). CCWD is involved in each of these studies. The Bay Area Regional Desalination Project is the most comprehensive study and involves CCWD, EBMUD, Santa Clara Valley Water District, and the San Francisco Public Utilities Commission. This project is the best and most current evaluation of potential regional desalination plants in the Bay Area, including CCWD's service area. Note that the project's purpose was to evaluate desalination sites to improve water supply reliability, not improve water quality.

A regional desalination project would consist of one or more desalination facilities with a total capacity of up to 65 MGD. Each of the participating agencies would have somewhat different needs or proposed uses for the regional desalination project. Siting analysis indicated that the Mirant Pittsburg Plant was the best site in Contra Costa County because of the existing intake and outfall structures, relatively high-quality source water for a desalination plant, and proximity to CCWD and EBMUD transmission facilities. (EBMUD et al. 2003.)

General desalination techniques and facility types would be the same as described above for the CCWD-only plant. As with a CCWD-only plant, water rights would need to be increased to meet the increased demands necessary because of the additional water needed with this process for the brine discharge. In addition, a regional desalination alternative would require negotiating and reaching agreement with regional partners in a timely manner on numerous substantial issues such as costs, design, construction, operation, maintenance, operating entity, specific site location, mitigation costs, and others.

4.5.2 Screening Evaluation

4.5.2.1 CCWD-Only Desalination Plant

The screening criteria were applied above to assist in the configuration and selection of the most cost-effective and practical desalination plant project for CCWD. As described above, expansion of the existing Mallard Slough intake and desalination and brine disposal at the Bollman WTP site would best meet the purpose and need/objectives and the screening criteria.

This alternative could potentially meet the project purpose and need/objectives by improving delivered water quality, especially during droughts; protecting and improving health and/or aesthetic benefits to customers; improving operational flexibility; and protecting delivered water quality during most emergencies. While technically and operationally a viable alternative, desalination plants have potentially high construction, operation, and maintenance costs. Regulatory considerations are a concern as adverse environmental effects in the form of high-energy demand and a recovery efficiency for treating water of only 80% (20% of the water supply must be discharged with high brine content and is unusable). Brine disposal is a significant concern. Potentially adverse environmental effects translate directly into potential regulatory constraints, particularly to obtain a National Pollutant Discharge Elimination System permit for discharging the concentrate into the Delta. Additional regulatory constraints include potentially

acquiring additional water rights in the future to offset the loss of water supply to brine disposal.

Based on the screening, the desalination plant alternative with an intake at Mallard Slough and treatment at the Bollman WTP is carried forward for further evaluation in the EIR/EIS, despite some potential limitations with respect to the regulatory, institutional, and cost criteria.

4.5.2.2 Desalination Plant with Regional Partners

The screening criteria were applied above to assist in the configuration and selection of the most cost effective and practical desalination plant project for CCWD with regional partners.

This alternative is unlikely to meet the project purpose and need/objectives of improving delivered water quality because the regional projects currently under consideration all have the purpose of water supply reliability.

The major differences between the CCWD-only desalination plant and the regional desalination plant are institutional constraints and project purpose. These constraints are clearly described in the August 2005 Technical Memorandum on Institutional Development (EBMUD et al. 2005). Establishing an institutional arrangement between the regional parties would be difficult and time consuming. Additionally, agreements with the current plant owners would be necessary and could prove problematic; costs would increase since a regional desalination project would not be constructed until well beyond 2010 because of the institutional constraints; the substantially longer treated water pipeline would be too costly for the Pittsburg site; and CCWD's operational flexibility would likely be limited by the current plant owner, the regional partners, or both. Potential regulatory constraints are similar to the CCWD-only desalination plant. While technically and operationally a viable alternative, desalination plants have potentially high construction, operation, and maintenance costs and adverse environmental effects are another concern, as described for the CCWD-only plant.

Given the current state of the regional desalination project, a regional desalination project to meet the project purpose and need/objectives is considered too speculative, complex, costly, and fraught with numerous institutional issues that render the alternative incapable of being developed. Therefore, a regional desalination alternative is eliminated from further evaluations.

4.6 Alternatives Carried Forward for Evaluation in the EIR/EIS

Based on the screening evaluation described above, the following alternatives have been carried forward for detailed evaluation in the EIR/EIS:

Screening Alternative Name:	Carried forward to EIR/EIS as:
▸ B2-2 (Alternative Delta Intake – Direct Pipeline Route)	▸ Alternative 1: Alternative Intake with Direct Pipeline Route (Proposed Action)
▸ B2-3 (Alternative Delta Intake – Indirect Pipeline Route)	▸ Alternative 2: Alternative Intake with Indirect Pipeline Route (Indirect Pipeline)
▸ B2-4 (Alternative Delta Intake – Alternative Project Operations	▸ Alternative 3: Alternative Intake with Alternative Project Operations (Modified Operations for Fisheries)
▸ C2-1 (CCWD-Only Desalination Plant)	▸ Alternative 4: Desalination Alternative

In addition to the alternatives above, the No-Action Alternative will be included in the EIR/EIS. These five alternatives are described and further analyzed in EIR/EIS Chapter 3, "Alternatives, Including the Proposed Action."

5 References

Bureau of Reclamation. 1997. *Central Valley Project Water Supply Contracts Under Public Law 101-514 (Section 206) Draft Environmental Impact Statement/Environmental Impact Report*. Sacramento, CA.

CALFED. *See* CALFED Bay-Delta Program.

CALFED Bay-Delta Program. 2000. *Programmatic Record of Decision*. Sacramento, CA.

———. 2004. *Delta Improvements Package Implementation Plan Regarding CALFED Bay-Delta Program Activities in the Delta*. Sacramento, CA.

———. 2005. *Water Quality Program Multi-Year Program Plan (Years 6-9)*. Sacramento, CA.

California Department of Water Resources. 2005. *Flooded Islands Draft Feasibility Study Report*. Prepared by EDAW, Natural Heritage Institute, Moffat & Nichol Engineers, Resource Management Associates, Hanson Environmental, and Hultgren-Tillis Engineers. Sacramento, CA.

Contra Costa Water District. 1992. *Section 404(b)(1) Alternatives Analysis for Meeting Water Quality and Reliability Objectives*. Concord, CA.

———. 1998. *Future Water Supply Implementation Draft Environmental Impact Report*. State Clearinghouse #97072064. Concord, CA.

———. 2000. *Urban Water Management Plan*. Concord, CA.

———. 2003. *Water Treatment Plant Master Plan – Final*. Concord, CA.

———. 2005. *Ten Year Capital Improvement Program for Fiscal Years 2006-2015*. Concord, CA.

Contra Costa Water District and Bureau of Reclamation. 1993. *Final Stage 2 Environmental Impact Report/Environmental Impact Statement for the Los Vaqueros Project*. Concord, CA.

East Bay Municipal Utility District, Sacramento County Water Agency, and Bureau of Reclamation. 2003. *Draft Environmental Impact Report/Environmental Impact Statement for the Freeport Regional Water Project*. Sacramento, CA.

East Bay Municipal Utility District, Contra Costa Water District, Santa Clara Valley Water District, and San Francisco Public Utilities District. 2003. *Bay Area Regional Desalination Project Pre-Feasibility Study Final Report*. Prepared by URS Corporation and Boyle Engineering Corporation. Oakland and Sacramento, CA.

Hanson Environmental, Inc. and Environmental Science Associates. 2004. *Final Draft Delta Fishery and Aquatic Resources Evaluation Technical Memorandum – CALFED Los Vaqueros Reservoir Expansion Studies – Phase 2*. Walnut Creek, CA.

6 Acronyms and Abbreviations

µg/L	micrograms per liter
af	acre-feet
BMPs	Best management practices
CBDA	California Bay-Delta Authority
CCWD	Contra Costa Water District
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CVP	Central Valley Project
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
Delta	Sacramento-San Joaquin River Delta
Delta WQCP	Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary
DFG	California Department of Fish and Game
DWR	California Department of Water Resources
EBMUD	East Bay Municipal Utility District
ED/EDR	electrodialysis/electrodyalisis reversal
EIR	environmental impact report
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
GAC	granular activated carbon
Guidelines	Section 404(b)(1) Guidelines
MCLs	maximum contaminant levels
MGD	million gallons per day
mg/L	milligrams per liter
NEPA	National Environmental Policy Act

NMFS	National Marine Fisheries Service
Reclamation	Bureau of Reclamation
RO	reverse osmosis
ROD	Record of Decision
SWP	State Water Project
SWRCB	State Water Resources Control Board
TDS	total dissolved solids
TOC	total organic carbon
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WTP	water treatment plant