



US Army Corps
of Engineers

Sacramento District
1325 J Street
Sacramento, CA 95814-2922

Public Notice

Public Notice Number: 199700759

Date: November 17, 2004

Comments Due: December 17, 2004

In reply, please refer to the Public Notice Number

SUBJECT: The U.S. Army Corps of Engineers, Sacramento District, (Corps) is evaluating a permit application from the City of Stockton (City) to construct their proposed Delta Water Supply Project (DWSP) in waters of the United States, including wetlands, in or adjacent to the San Joaquin River. This notice is to inform interested parties of the proposed activity and to solicit comments. This notice may also be viewed at the Corps web site at <http://www.spk.usace.army.mil/regulatory.html>.

AUTHORITY: This application is being evaluated under Section 10 of the Rivers and Harbors Act of 1899 for structures or work in or affecting navigable waters of the United States and/or Section 404 of the Clean Water Act for the discharge of dredged or fill material in waters of the United States.

APPLICANT: City of Stockton, Attn: Mark Madison, Director of Municipal Utilities, 2500 Navy Drive, Stockton, California 95202-1997, telephone (209) 937-8700.

LOCATION: In San Joaquin County, California as shown on the attached drawings. The proposed water intake would be in the San Joaquin River adjacent to the San Joaquin deep water ship channel, at the southwestern tip of Empire Tract, in Township 2 North, Range 4 East, MDB&M. The proposed raw water pipeline would run north from there along Empire Tract Road, then east along the north side of Eight Mile Road, then north along Lower Sacramento Road to an approximately 126-acre site just north of the City of Stockton limits, in Sections 33 and 34, Township 3 North, Range 6 East, MDB&M. A treated water pipeline would parallel Lower Sacramento Road southward from the WTP site to Eight Mile Road, to the existing distribution system in Eight Mile Road, Davis Road and West Lane.

PROJECT DESCRIPTION: To construct a new intake to divert water from the San Joaquin River, a new water treatment plant (WTP) and pipelines for both raw and treated water to deliver water to the City's existing water distribution system. The overall project purpose is to develop a new water supply for municipal and industrial uses for the City. The project study area includes approximately 21.85 acres of waters of the United States, including wetlands. Based on the available information construction of the raw water intake and associated facilities would result in the loss of approximately one acre of these waters, including approximately 0.7 acres of seasonal wetlands. The project would also involve several crossings of other navigable waters of the United States. Two raw-water intake configuration alternatives are currently being considered by the City. The first is an In-River Pier Intake and Pump Station facility. The second is an In-Bank Intake with Land-Side Pump Station facilities. Construction of either alternative would involve dredging in the San Joaquin River work on the adjacent levee, construction of temporary sheet pile coffer dams and placement of fill, including concrete and riprap for project structures. For alternative one, the fish screens, suction well, and pumping plant would be cast-in-place concrete located off-shore in the San Joaquin River. The structure would be connected to the shoreline by an access bridge, which would allow both maintenance access for the fish screens and pumping equipment and support the piping conveying raw water to the WTP. The removable fish screens would be installed in slots in the vertical walls of the structure at suitable elevations to meet resource agency criteria. Water wash pipe grids and flow control louvers, if needed, would be located behind the screens. Pumps and electrical equipment would be located on the operating floor level at approximately 12 feet above mean sea level (msl). The applicant has stated this would provide clearance between the bottom of the access bridge and the 100-year flood stage. The operating floor would be enclosed in a building to provide security, protect equipment, and support an overhead bridge for maintenance purposes. The overall height of the building would be

approximately 23 feet with a roof elevation of 35 feet msl to provide clearance for equipment removal. The structure would be constructed behind an encircling sheet piling cofferdam.

For the in-bank alternative, the fish screens and intake channel would be built into the existing levee near the southwest point of Empire Track. The intake would consist of a cast-in-place concrete structure located on the shore of the San Joaquin River. Removable fish screens would be installed in slots at the opening of the structure at suitable elevations to meet resource agency criteria. Mechanical brushes or other cleaning devices would be incorporated into the design of the fish screens. A setback levee would be constructed behind the existing levee to provide for flood control. The area between the existing and setback levee would be filled to provide an area above flood elevation for the pump station and ancillary facilities. Pumps and electrical equipment would be located at approximately elevation 10 feet msl. A temporary cofferdam would be constructed on the waterside of the levee to facilitate construction of the intake structure, fish screens, and level protection.

In either alternative, pumps would lift water from the intake and deliver it to the WTP. Three pumps at 200 horsepower would be installed initially, and no more than six pumps would be installed at ultimate capacity. The total required lift to the WTP would be approximately 51 feet for delivery of 30 mgd through an initial 54-inch diameter pipe. For an initial pump station capacity of 30 mgd, the total connected electrical load for the intake facility would vary from 500 to 1,500 kilovolt-amperes (kVA). The relatively large electrical requirements would require substantial improvement of the electrical distribution system in the vicinity of the intake.

The applicant developed a hydraulic analysis to evaluate the potential impact of the DWSP on navigation near the intake due to draw down of the water surface which would apply to both diversion alternatives. Using a maximum diversion of 160 mgd, the applicant calculated the change in water surface elevation would be approximately 0.0006 feet in this area. The applicant has also provided preliminary information describing design and construction of fish screens and has stated, for either intake configuration, the fish screens would be designed to meet the fish screen criteria established by National Oceanic and Atmospheric Administration Fisheries, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game.

The DWSP is proposed as a conjunctive use project that integrates surface water and groundwater management. Treated Delta surface water would be injected, via new wells into the groundwater aquifer underlying the City, for later extraction during periods of limited surface water supply. The DWSP would be developed in phases and WTP capacity would be expanded in increments to keep pace with needs based on the timing of existing supply reductions and increased demand over time. The target date for operation of the Delta Water Supply Project WTP is 2008. Initially the DWSP would be sized with a WTP capacity to treat and deliver up to 30 million gallons per day (mgd) of water. Groundwater injection would not be implemented at the beginning of this phase. The City proposes to initially implement a 10 mgd injection program to test the feasibility of an aquifer storage and recovery program and better define the potential location of the injection/extraction wells. During the next phase, the WTP would be expanded to treat 60 mgd of raw water. Groundwater injection capacity would increase gradually to 42 mgd. as new wells are constructed. Ultimately the WTP would be expanded to treat 160 mgd by 2050, and groundwater injection capacity would increase to 95 mgd.

The WTP would be constructed on approximately 40 acres of a 126-acre parcel located on the west side of Lower Sacramento Road. A treated water pump station would convey water from a clearwell to the City's treated water distribution system. Membrane Water Treatment Plant Configuration Residual facilities for the 30 mgd facility would include backwash equalization basins, backwash treatment systems, and sludge drying lagoons. A minimum of four sludge lagoons would receive sludge from the clarification process and the backwash clarifiers. Approximately 3,500 lbs per day of dry solids would be generated. Dried sludge would be hauled off-site for disposal. The WTP would also include an operations building, maintenance and general storage areas, and chemical feed facilities. Approximately 150,000 cubic yards of earth would need to be excavated during the construction of the intake piping and metering vault, flash mixing chamber, filters, sedimentation / flocculation basins, clearwell / pump station, stabilization basins, equalization basins, plate settlers, and sludge lagoons. The treated water pumping station would be located 30 feet below the existing ground surface.

The treated water pipeline alignment would parallel Lower Sacramento Road southward from the WTP site to Eight Mile Road where it would connect with the existing distribution system. The approximately 66,700-foot raw water

pipeline from the intake site to the WTP would be either be placed in or on the north side of Eight Mile Road with a short south segment along the east levee road of Little Connection Slough. The pipeline route includes crossings of several sloughs, I-5, and the Union Pacific Railroad. These crossings would be accomplished using microtunneling or other trenchless techniques to avoid disruption and environmental impacts. No wetlands or other waters of the U.S. are expected to be filled by construction of the WTP or the treated water conveyance facilities, as the applicant proposes to construct these features primarily within existing roadways and developed areas. An agricultural drainage ditch runs along the northern boundary of the WTP site. However, the applicant has stated this ditch would be avoided during construction of the facilities. Because the project capacity would be constructed in stages, two parallel pipes would be built along the selected alignment. The initial pipeline would be a 54-inch diameter pipeline for project capacities up to 60 mgd. The future pipeline would be a 72-inch diameter pipeline for capacities up to 160 mgd. The applicant has stated the easement for the conveyance pipelines would be at least 90 feet wide to allow sufficient space to maintain the two parallel pipelines buried with a minimum five feet of cover. In most areas, the raw and treated water pipelines would be installed using open cut trenching. In areas where open cut trenching is not possible due to limited construction area, geotechnical conditions, or sensitive areas (i.e., slough crossings, I-5, and the Union Pacific Railroad), the applicant has stated alternative construction techniques such as jacking and boring and directional drilling would be employed to avoid disruption and environmental impacts.

The attached drawings provide additional project details.

ADDITIONAL INFORMATION:

The project area is generally agricultural land near urbanizing areas. The City has provided a Biological Assessment for the project.

The City has conducted a comprehensive feasibility study to evaluate potential sources of supplemental water supply to meet the long-term water needs for the City's Metropolitan Area. Development of a Delta water supply was identified as the preferred alternative to meet the City's water supply needs and objectives. These objectives are (1) to replace declining surface water supplies, (2) to protect and restore groundwater resources, and (3) to provide adequate water supply to support planned growth. The applicant asserts the primary purpose of the project is to provide a secure, reliable supply of water for the City of Stockton Metropolitan Area to meet the current and future water needs, to reduce dependence on groundwater, and to improve overall water quality. The City as the Lead Agency for the California Environmental Quality Act (CEQA) is preparing an Environmental Impact Report (EIR). The City presently relies on groundwater and receives additional surface water supplies through Stockton East Water District (SEWD) and interim water transfers from Oakdale Irrigation District (OID) and South San Joaquin Irrigation District (SSJID). In the future, surface water availability to SEWD is projected to decrease as interim water transfers with SSJID and OID expire sometime between 2009 and 2019, and as SEWD relinquishes some of the extra water it now receives from the New Hogan Reservoir system.

Alternatives. The applicant has provided limited information concerning project alternatives. The applicant has stated preliminary siting for all landside facilities (i.e., pipelines and WTP) has been done to avoid wetlands and waters to the extent possible. Discharges of dredged or fill material into waters of the U.S., including wetlands, would be limited to construction of the intake facilities. The amount and type of material discharged would depend on the intake configuration selected. Additional information concerning project alternatives may be available from the applicant or their agent.

Mitigation. The Corps requires that applicants consider and use all reasonable and practical measures to avoid and minimize impacts to aquatic resources. If the applicant is unable to avoid or minimize all impacts, the Corps may require compensatory mitigation. A specific detailed wetland mitigation plan for the project has not been provided to the Corps.

OTHER GOVERNMENTAL AUTHORIZATIONS: The City filed a water rights application (A030531) with the State Water Resources Control Board in 1996 for the right to divert water from the San Joaquin River. Water quality certification or a waiver, as required under Section 401 of the Clean Water Act from the State or Regional Water Quality Control Board is required for this project. The applicant has not applied for water quality certification. The applicant identified other authorizations, including a Stream Alteration Agreement from the California Department of

Fish and Game, and an encroachment permit from the State Reclamation Board, among others will be necessary for this project.

HISTORIC PROPERTIES: Based on the available information, including the applicant's June 2004 "Stockton delta Water Supply Project Cultural Resources Assessment", cultural resources are not located within the Corps permit area.

ENDANGERED SPECIES: The proposed activity may affect Federally-listed endangered or threatened species or their critical habitat. The Corps will initiate consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service, pursuant to Section 7 of the Endangered Species Act, as appropriate.

ESSENTIAL FISH HABITAT: The proposed project may adversely affect Essential Fish Habitat. The Corps will initiate consultation with the National Marine Fisheries Service, pursuant to Magnuson-Stevens Fishery Conservation and Management Act, as appropriate.

The above determinations are based on information provided by the applicant and our preliminary review.

EVALUATION FACTORS: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the described activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the described activity, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the described activity will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people. The activity's impact on the public interest will include application of the Section 404(b)(1) guidelines promulgated by the Administrator, Environmental Protection Agency (40 CFR Part 230).

The Corps is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

SUBMITTING COMMENTS: Written comments, referencing Public Notice 199700759, must be submitted to the office listed below on or before December 17, 2004. Michael Finan, U.S. Army Corps of Engineers, Sacramento District, Delta Office, 1325 J Street, Room 1480, Sacramento, California 95814-2922; Email: Michael.C.Finan@usace.army.mil

The Corps is particularly interested in receiving comments related to the proposal's probable impacts on the affected aquatic environment and the secondary and cumulative effects. Anyone may request, in writing, that a public hearing be held to consider this application. Requests shall specifically state, with particularity, the reason(s) for holding a public hearing. If the Corps determines that the information received in response to this notice is inadequate for thorough evaluation, a public hearing may be warranted. If a public hearing is warranted, interested parties will be notified of the time, date, and location. Please note that all comment letters received are subject to release to the public through the Freedom of Information Act. If you have questions or need additional information please contact the applicant or the Corps' project manager Michael Finan, 916-557-5324, Michael.C.Finan@usace.army.mil.

Attachments: 6 drawings