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Department of Water Resources

P.O. Box 942836

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Delta Conveyance Scoping Comments

Attn: Renee Rodriguez

**Delivered via Email:** [DeltaConveyanceScoping@water.ca.gov](mailto:DeltaConveyanceScoping@water.ca.gov)

**SUBJECT: Scoping Comments on NOP for the Delta Conveyance Project**

Dear Ms. Rodriguez,

In accordance with the North Delta Water Agency's (NDWA/Agency) statutory mandate assure the lands within the agency a dependable supply of water of suitable quality sufficient to meet present and future needs,<sup>1</sup> the Agency submits these scoping comments on the Notice of Preparation of Environmental Impact Report (EIR) for the Delta Conveyance Project (DCP/Proposed Project). The Agency's specific interest is assuring that construction activities and conveyance operations proposed by the Proposed Project shall avoid interference with local water supply infrastructure and not impair the water availability for agricultural and municipal water users.

Comments herein are intended to facilitate DWR's compliance with the 1981 Contract and to ensure that any significant adverse impacts to water users and Delta channels associated with the Proposed Project are properly described, analyzed, and mitigated in accordance with applicable law. The DCP EIR must acknowledge the potential for construction activities and conveyance operations to have adverse impacts on surface and groundwater diversions facilities and should consider whether the damage to water users from Project activities is a violation of standards in CEQA and NEPA governing disclosure, weighting of impacts, and cumulative effects on environmental and human resources. Adverse impacts within the project area to existing water quality, water surface levels, local diversions, and flood flow velocities that can erode levees should specifically be identified and addressed in the EIR.

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<sup>1</sup> North Delta Water Agency Act, Chapter 283, Special Statutes of 1973.

## **NDWA BACKGROUND**

The Agency was formed in 1973 by a special act of the Legislature to represent northern Delta water users in negotiating a water supply and quality contract with both the United States Bureau of Reclamation and California Department of Water Resources in order to mitigate the water rights impacts of the Central Valley Project and the State Water Project.

NDWA has an ongoing statutory mandate under California law to assure that the lands within the North Delta have a dependable supply of water of suitable quality sufficient to meet present and future beneficial uses.<sup>2</sup> Representing nearly one-half of the legal Delta, the Agency's boundaries encompass approximately 300,000 acres. This includes all of that portion of the Sacramento-San Joaquin Delta, as defined in Water Code Section 12220, situated within Sacramento, Yolo and Solano Counties, including New Hope Tract, Canal Ranch and Staten Island in northeastern San Joaquin County.

In 1981 the NDWA and the Department of Water Resources (DWR/Department) executed the *Contract for the Assurance of a Dependable Water Supply of Suitable Quality* (1981 Contract). The 1981 Contract requires DWR to meet certain water quality criteria that vary from month to month, and from year to year, based on the Four River Basin Index; with the criteria at seven water quality monitoring locations based on the 14-day running average of mean daily electrical conductivity (salinity levels). The 1981 Contract also contains provisions pertaining to physical changes that obligate DWR to avoid or repair damages from hydrodynamic changes, and if necessary, require limitations on the operations of the SWP pumps and reservoirs in order to maintain water quality compliance.

## **PROJECT ALTERNATIVES**

When developing alternatives and mitigation measures in the EIR, we encourage DWR to consider how the size, location, and operation of new SWP conveyance facilities can be designed to improve, rather than degrade, water quality in the Delta.

The alternative analysis in the EIR should not be limited to tunnel projects with only variations in tunnel and intake sizing, and only east side conveyance alignments. Consistent with existing law in the 2009 Delta Reform Act to "reduce reliance on the Delta in meeting California's future water supply needs" (Water Code Section 85057.5), the EIR should include analysis of alternatives that incorporate actions to reduce the demand for water exports from the Delta, e.g., water use efficiency actions, desalination, and other local self-reliance projects in export areas.

## **IN-DELTA WATER SUPPLY AND QUALITY IMPACTS**

Before government reservoirs began withholding much of the Sacramento River system's high winter flows, the Delta channels stored sufficient fresh water to sustain water quality in the northern Delta throughout and often beyond the irrigation season.

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<sup>2</sup> North Delta Water Agency Act, Chapter 283, California Statutes of 1973.

Primary factors influencing water quality in the Cache Slough Complex are freshwater flows from the Sacramento River that are conveyed through Steamboat and Miner Sloughs and tidal action. In general, the river flow in Steamboat and Miner Sloughs is higher when the Delta Cross Channel (DCC) is closed, so tidal exchange varies with both Sacramento River flow and DCC operation. The installation of multiple 3,000 cfs diversion intakes on the Sacramento River will alter the hydrodynamics in the Delta both upstream and downstream of the intakes, including freshwater flows to the Cache Slough Complex.

The primary source of domestic water for homes and businesses located in the Delta is groundwater from individual wells. Counties require permits for these wells and therefore have a database of their location. Irrigation of farmland in the Delta relies on both diversion of surface water and pumping of groundwater. Surface water diversions within NDWA occur by two principal methods: siphons and electric pumps. The siphon systems within NDWA were designed with historic landside and water surface elevations in north Delta channels as a base line. If the elevation differential between these two elevations (referred to as "head") is not sufficient, the siphon will not work. When water surface elevations in Delta channels are lowered, longer durations are necessary to apply the same amount of water under existing conditions.

If an electric pump is needed to replace a siphon, the costs are quite substantial. On many islands, power lines are not present at the land side base of the levee and there is not enough voltage to supply the power needed for new power draws on the existing utility company system. For example, the cost of stringing new wires and poles are approximately \$50,000 per quarter mile. In addition, a new pump column, impellor and motor of sufficient size to replace a 12-inch siphon's water flow costs an additional \$25,000. The labor to install the pumping facility is an additional \$8,000. Permit costs and timelines need to be factored in as well.

There are thousands of individual diversion pipes, primarily agricultural siphons located in the Delta channels, and many municipal and agricultural groundwater wells that will need to be protected from construction and operation of the Proposed Project. The EIR should provide an adequate analysis of the project's impacts to water supply and quality, water diversion infrastructure, and to the water channels and embankments. DWR should commit to immediately repair any damage to existing water supply infrastructure, including underground wells, caused by the Proposed Project construction and operation; and be required to provide alternative water source (temporary or permanent) to impacted water users, if necessary. In addition, the water quality of these agricultural and municipal water supplies must not be impaired by dewatering and discharge activities during Proposed Project construction or by the operation of three new proposed intakes on the Sacramento River.

The Water Supply Chapter in prior BDCP and WaterFix EIRs failed to include a section describing the impacts to local water supplies (groundwater wells and surface diversions) within the project area as a result of construction and operation of new water conveyance and export facilities.

Specific components NDWA requests are addressed in the EIR for the DCP are:

- In the Water Supply Chapter of the EIR, include a section describing impacts to the hundreds of municipal and agricultural underground wells and diversion intakes in the rivers and channels located in the Project Area: changes in water surface levels affecting performance of individual diversion intakes, particularly gravity-fed siphons and increased pumping costs;
- Avoid or mitigate interference with operation and performance of local underground wells and surface water diversion infrastructure.
- Avoid or mitigate impairment of the water quality of agricultural and municipal water supplies.
- Analyze how requirements imposed on operation of the project, such as spring outflow criteria, will be met when DCP Project facilities are operational and whether water stored in upstream reservoirs for use to maintain 1981 Contract's salinity criteria will be impacted.
- Effects Analysis should include modeling of changes in salinity levels at all seven water quality monitoring stations identified in the 1981 Contract.
- Effects Analysis should include modeling of changes in water surface levels and hydrodynamics (water velocities and reverse flows).
- Consider providing an alternative water source to mitigate adverse impacts to existing water supply infrastructure and water quality in the north Delta.
- Conduct cumulative effects analysis on water quality in the Cache Slough Complex from the operation of three 3,000 cfs intakes on the Sacramento River when combined with restoration of fish habitat in Cache Slough Complex, including the Yolo Bypass.

### **CONCLUSION**

The Proposed Project is extremely large, with a long-term construction timeline, and hundreds of potential adverse impacts during construction and operation of the new conveyance facilities. We encourage DWR to organize the EIR in a way to allow the true nature, extent, and scope of these environmental impacts to be discernible to the general public and permit decision-makers.

Thank you for considering our comments regarding water quality and supply impacts in the Project Area when developing the EIR for the Delta Conveyance Project.

Sincerely,



Melinda Terry,  
Manager