

Appendix A: Comment Letters and Reclamation's Response to Comments



Emerson, Rain <remerson@usbr.gov>

[EXTERNAL] Time Extension Request for Pump-In Constraints --Possible Clean Water Act Violations DEA-18-007 and FONSI-18-007

Patricia Schifferle <pacificadvocates@hotmail.com>

Tue, Apr 17, 2018 at 10:48 AM

To: "Emerson, Rain" <remerson@usbr.gov>

Cc: "jminton@pcl.org" <jminton@pcl.org>, John Buse <jbuse@biologicaldiversity.org>, "kathryn.phillips@sierraclub.org" <kathryn.phillips@sierraclub.org>, "kyle.jones@sierraclub.org" <kyle.jones@sierraclub.org>, Adam Keats <AKeats@centerforfoodsafety.org>, Conner Everts <connere@gmail.com>, Noah Oppenheim <noah@ifrfish.org>, Barbara Barrigan-Parrilla <barbara@restorethedelta.org>, Carolee Krieger <caroleekrieger7@gmail.com>, Barbara Vlamis <barbarav@aqualliance.net>, Bill Jennings <deltakeep@me.com>, Caleen Sisk <caleenwintu@gmail.com>, Frank Egger <fegger@pacbell.net>, Lloyd Carter <lcarter0i@comcast.net>, Larry Collins <lcollins@sfcraabooat.com>, Bill Kier <kierassociates@att.net>, "Obegi, Doug" <dobegi@nrdc.org>

Dear Ms Emerson,

Schifferle-1

On April 13, 2018, the above groups received late notice regarding the 9 day comment period for the April 2018 release of the Draft Environmental Assessment Delta-Mendota Canal Groundwater Pump-in Program Revised Design Constraints EA-18-007 and FONSI-18-007. <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=61981>

On behalf of the Planning and Conservation League, the Sierra Club, the Southern California Watershed Alliance, Pacific Coast Federation of Fishermen's Associations and California Sportfishing Protection Alliance and others listed above, these groups request an extension of the comment period. The groups have commented extensively on previous proposals to discharge groundwater containing various contaminants in violation of the Clean Water Act and Porter Cologne Water Quality Act provisions designed to prevent the degradation of the waters of the State and Nation.

Schifferle-2

Additionally, the recent release of DOI's relaxation of the Migratory Bird Treaty Act penalties is new information that needs further analysis with regard to the sanctioning of discharge of groundwater containing up to 2 ppb selenium, which USGS studies have shown is not protective enough to prevent reproduction failure and impacts to aquatic life and other species as selenium is known to magnify and concentrate in the food chain. This is especially important to the beneficial uses downstream that include National Fish and Wildlife preserves and endangered species.

Schifferle-3

The groups applaud Reclamation's efforts to tighten the discharge of this contaminated ground water to ensure beneficial uses are protected and the new "constraints" to pumping to try to address the subsidence problem.

Schifferle-4

The above groups have additional comments and despite past participation in these issues did not receive copies of DEA-18-007 and FONSI-18-007 in time to meet the 8 day comment period allotted for public comments. Please consider these comments as preliminary.

↑ Thank you in advance for your assistance. We would appreciate your consideration in extending the deadline from April 19, 2018 by two weeks.

Regards,

Patricia Schifferle

Patricia Schifferle

Director

530 550 0219 v



Pacific Advocates

Response to Patricia Schifferle Electronic Message dated April 17, 2018

Schifferle-1 The commenter requests an extension of the public comment period for Environmental Assessment (EA)-18-007 and asserts that “On April 13, 2018, the above groups received late notice regarding the 9 day comment period” for the draft EA.

Although the National Environmental Policy Act (NEPA) does not require an EA to be released for public review, Reclamation did so with regard to the proposed revised design constraints for the previously approved Delta-Mendota Canal Groundwater Pump-in Program (DMC Groundwater Pump-in Program) in order to be open and transparent, gather public input, and to further inform decision making. Pursuant to 40 CFR 1506.6(b), Reclamation publicly noticed the availability of the draft EA on April 11, 2018. As the DMC Groundwater Pump-in Program has previously undergone public review in a separate EA, Reclamation did not extend the public comment period for this EA. Additional comments by the “above groups” were received by Reclamation on April 19, 2018 and are also being addressed.

Schifferle -2 The commenter asserts that the “recent release of DOI’s relaxation of the Migratory Bird Treaty Act penalties is new information that needs further analysis with regard to the sanctioning of discharge of groundwater containing up to 2 ppb selenium, which USGS studies have shown is not protective enough to prevent reproductive failure and impacts to aquatic life and other species as selenium is known to magnify and concentrate in the food chain”.

It is unclear, but Reclamation is assuming that the “recent release” referenced in the comment is referring to the April 11, 2018 U.S. Fish and Wildlife Service (FWS) internal guidance issued regarding their Solicitor’s M-Opinion on the Migratory Bird Treaty Act (MBTA). The FWS’s internal guidance has no bearing on the DMC Groundwater Pump-in Program or how Reclamation addresses MBTA species.

Reclamation addressed compliance with the MBTA in Section 3.1.2 of EA-18-007.

Reclamation’s standard for selenium concentration in non-Project water introduced into federal facilities is ≤ 2 ppb with no allowance for dilution in the canal. This criterion is based on the Central Valley Regional Water Quality Control Board’s 1996 selenium objective of 2 ppb monthly average for Grasslands wetlands water supply channels. No new objectives or criteria for wetlands has been promulgated by the Water Board. Should revised criteria be put in place, Reclamation’s water quality requirements will be revised accordingly.

Schifferle -3 The comment inaccurately describes groundwater introduced under the Proposed Action as “contaminated groundwater” and “applauds Reclamation’s efforts...to address the subsidence problem”.

Each source of non-Project groundwater must be tested for the full suite of constituents listed in Title 22 and each discharge must be tested to confirm that the non-Project water is consistent, predictable, and acceptable before it enters the DMC. The frequency of testing (weekly for four consecutive weeks, then monthly) are described in the monitoring plan included as Appendix A of EA-18-007. The water quality standards and monitoring conform with federal and state drinking water standards. Contaminated groundwater is not introduced into the DMC.

Schifferle -4 The comment reasserts that they “did not receive of DEA-18-007 and FONSI-18-007 in time to meet the 8 day comment period allotted for public comments” and that Reclamation “consider these comments as preliminary.”

Comment noted. See also Response to Schifferle-1.



CA Save Our Streams Council



April 19, 2018

Brenda Burman (91-00000)
Commissioner of Reclamation
1849 C Street NW
Washington DC 20240-0001

Michael Jackson,
Area Manager, SCC-100 South-Central Office
1243 N. Street
Fresno CA 93727

David Murillo
Mid-Pacific Regional Director
Federal Office Building MP-100
2800 Cottage Way Sacramento CA 95825

Paul Souza
Pacific Southwest Region
Regional Director USFWS
2800 Cottage Way, Suite W-2605
Sacramento, CA 95825

Rain L. Emerson, M.S.
Environmental Compliance Branch Chief
Bureau of Reclamation, South-Central California Area Office
1243 N Street, Fresno, CA 93721

April 19, 2018

Re: Comments regarding draft environmental documents for Delta-Mendota Canal Groundwater Pump-in Program revised design constraints EA-18-007 and FONSI-18-007

Dear Commissioner, Reclamation and U.S. Fish and Wildlife Service:

Coalition-1 Thank you for the opportunity to comment. The ten days provided to review these and related ground water pump-in projects for non-project CVP water discharged into the Delta Mendota Canal (DMC) and, by exchange, the California San Luis Canal (SLC) was extremely brief, especially given that notice was not provided except to the select contractors and water districts involved with the proposed discharges of groundwater. The undersigned have repeatedly requested notification of these proposed projects and yet Reclamation has consistently avoided public notification.

Coalition-2 We find that the discharges of contaminated groundwater into the waters of State and Nation violate the Clean Water Act and State of California Porter Cologne laws designed to protect the beneficial uses of these waters. Incredibly, this federal action also provides an incentive to further overdraft groundwater basins where subsidence is already occurring from over pumping. This action defies common sense. While some may argue a small percentage of ground water discharges and increased pumping are acceptable, there are a growing number of these incremental extractions and discharges that are taking a cumulative toll on public resources. This federal action allows specific individual landowners to evade pollution control laws by passing polluted water downstream where other uses bear the costs.

Summary Comments:

Coalition-3 1. Of the two alternatives presented, we support the no action alternative. Until groundwater sustainability plans pursuant to the State Groundwater Management Act (SGMA) are adopted no additional groundwater pumping from these over-drafted basins should be permitted by Reclamation.

Coalition-4 a. The DEA clearly indicates that, compared to “no action”, the proposed alternative will increase risk of subsidence and degradation of DMC and SLC water quality.

Coalition-5 b. Proposed management actions to mitigate these risks are unproven and past operation of the Pump-In program has demonstrated both subsidence effects and water-quality impacts.

Coalition-6 c. As EPA commented in 2010 on a similar pump-in project, MCL Drinking water standards do not fully protect all the beneficial uses of the canal and *would be subject to NPDES permitting requirements pursuant to the federal Clean Water Act.*¹

Coalition-7 2. A full range of alternatives should be evaluated—not just “no action” and “proposed”. In particular, we urge analysis of an alternative that reduces CVP water exports and groundwater overdraft along with long-term water demand by simply meeting the following conditions that have already been established by law and regulatory decisions:

Coalition-8 a. The Record of Decision for an in-valley disposal option signed by Bureau of Reclamation (Reclamation) in March 2007² required reducing irrigation of 200,000 acres of toxic soils on the West Side of the Southern San Joaquin Valley where selenium, salt, boron and other contaminants are known to be mobilized into the groundwater with irrigation;

¹ EPA Comment letter to WWD April 4, 2010 RE: Notice of Preparation of an Environmental Impact Report (EIR) for the Conveyance of Nonproject Groundwater from the Canalside Project using the California Aqueduct April 4, 2010 from David Smith, Manager NPDES Permits Office (WTR-5) to Russ Freeman, Westlands Water District.

² https://www.usbr.gov/mp/mp150/envdocs/San_Luis_Drainage_Feature_Re-evaluation_ROD.pdf

Coalition-9

- b. Public Law 86-488-[June 3, 1960]³ Section one limits CVP water deliveries to just 500,000 acres in total for the entire San Luis Unit, excluding an extra 200,000 acres in Westlands Water District that increases demand and toxic runoff to groundwater and surface water.

Coalition-10

This alternative, which we refer to as the “regional solution” alternative, would eliminate the need for a pump-in program by combining the requirements of existing law and regulations with the forthcoming SGMA plan.

Coalition-11

- 3. Regardless of which alternative is implemented, monitoring of compliance needs to be more comprehensive, designed and managed by a third party, and there must be full and timely disclosure of data to the public. For example:
 - a. Selenium aquatic contaminant levels require intensive monitoring to ensure the accumulation of selenium in the plant and aquatic does not harm the beneficial uses of receiving waters that serve as critical habitat for endangered species, food sources for fish and wildlife and essential water for National and State wildlife preserves.
 - b. Protocols for biological and water-quality monitoring need to ensure sufficient frequency and duration to capture impacts and data analysis should be conducted by an independent third party and published to ensure that mitigation and monitoring actually is conducted and is publicly available.

Expanded Comments on Specific Issues

1. Insufficient data is provided on proposed mitigation measures to conclude that groundwater discharges will not cause environmental impacts or impact the beneficial uses of water.

The mitigation proposed, while an improvement, is not sufficient to conclude there would be no significant impacts. Following are some of the points of concern:

Coalition-12

- a. No biological monitoring is required to ensure there is no take of endangered species or reproductive failure from the discharge of pollutants, especially selenium and mercury, in concentrations known to impact reproduction and predation. It is essential to account for the bioaccumulation of these contaminants through the food chain, which can lead to reproductive failure, teratogenic effects and death.

Coalition-13

- b. Over half the wells identified in the DEA as part of the proposed program demonstrate even with the limited monitoring provided that they cannot discharge because of excessive concentrations of salt, boron or selenium. Many of the other wells are close to being excluded, indicating that improved data on the program wells would likely show a much higher rate of disqualification. Put another way, the mitigation strategy proposed will likely not avoid periodic sustained conditions that violate the water-quality standards stated for the program. Research shows spikes in selenium have lasting impact because of the magnification in the food chain.

Coalition-14

- c. This proposed federal action would result in a cumulative total of 50,000 AF per year of groundwater introduced into the DMC and would allow use and storage in federal facilities including exports from the Bay-Delta and transfers to Westlands Water District and other districts

³ <https://www.gpo.gov/fdsys/pkg/STATUTE-74/pdf/STATUTE-74-Pg156.pdf> San Luis Act 1960 PL 86-488

Coalition-14
cont.

south of the Delta.⁴ The DEA readily admits, *it is likely that groundwater levels would continue to decline resulting in increased rates of subsidence until SGMA is fully implemented.* DEA@pg16

Coalition-15

d. The 41 points of groundwater discharge into the Delta Mendota Canal along with 1) the various other pump-ins in the same groundwater basin,⁵ 2) similar pump-ins to the California Aqueduct⁶, and 3) other water transfers and resultant exchange programs have not been analyzed collectively as the complex and regional-scale effect on the environment that they are. Taken together, even the existing limited monitoring shows a decline in water quality, with levels of arsenic exceeding drinking water standards and levels of selenium accumulating at levels known to cause reproductive failure, teratogenic effects and death as it magnifies throughout the food chain.

Coalition-16

e. Part of this pump-in program, Panoche's sale of pump-in water to Westlands along with the approval by Reclamation of ground water pump-ins to the California Aqueduct are compounding water quality problems and subsidence structural problems.⁷ In addition, Westlands was allowed to pump from the Delta Mendota basin area into lateral 7 where discharges to the SLC were found to exceed Arsenic MCL levels in 2013.⁸ No selenium

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=11953 Exchange Agreements and/or Warren Act Contracts for Conveyance of Groundwater in the Delta-Mendota Canal – Contract Years 2013 through 2023 (March 1, 2013 – February 29, 2024) Final EA 12-061 January 2013

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=25677 7- day public notice for comment May 2016, Additional Points of Delivery for Panoche Water District's NonProject Groundwater to Westlands Water District FONSI-16-009

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=12132 Water Transfer Program for the San Joaquin River Exchange Contractors Water Authority, 2014–2038

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=17127 Westlands Water District Warren Act Contract for Groundwater Pumping into the Coalinga Canal FONSI-13-042 May 2016

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21022 Westlands Water District Groundwater Warren Act Contract EA-15-001 March 2015

⁵ [Ibid.@ 4](#)

⁵ [Ibid.@ 4](#)

⁶ <https://www.water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Water-Quality/Documents/Water-Quality-Assessment-of-NonProject-Turnins-to-the-California-Aqueduct-2015.pdf?la=en&hash=DF0AAD3515C7170683E17A4D5893207B66D44130>

⁷ <https://www.water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Water-Quality/Documents/Water-Quality-Assessment-of-NonProject-Turnins-to-the-California-Aqueduct-2015.pdf?la=en&hash=DF0AAD3515C7170683E17A4D5893207B66D44130>

⁸ <https://www.water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Water-Quality/Documents/Water-Quality-Assessment-of-NonProject-Turnins-to-the-California-Aqueduct-2013.pdf?la=en&hash=95BF5CC147098F8D4208E93D831FDB3E5D849459>

Coalition-16
cont.



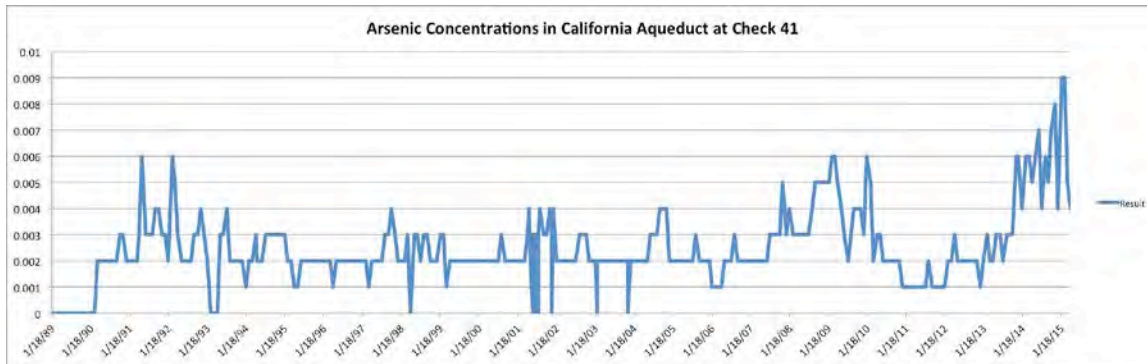
monitoring was conducted. Again in 2015 data show that Arsenic MCL levels were exceeded.⁹

Coalition-17

f. Attached for reference are the State Water Project Contractors' comments from April 2015 regarding water quality and subsidence concerns with the Westlands' pump-in projects. Even the monthly monitoring of selenium for Westlands' discharge of groundwater into the California Aqueduct is already showing cumulative impacts on downstream users and beneficial uses. Equally, structural impacts to the canal and municipal facilities are occurring. Who will pay for these damages resulting from USBR's permit to discharge this groundwater into the waters of the State and Nation are not disclosed?

g. Arsenic concentrations in the California Aqueduct, downstream of where groundwater has been pumped into the SLC canal, increased markedly in 2015 and approached the Maximum Contaminant Level for drinking water of 0.010 mg/L. According to DWR Arsenic exceeded MCL levels at Check 29 and 27 in 2015.

Coalition-18



2. Discharging Selenium into the California Aqueduct and Delta Mendota Canal even at 2 ppb is likely not protective of downstream beneficial uses.

Coalition-19

Since 2002, under the Clean Water Act, Section 303, and the Endangered Species Act, the United States Environmental Protection Agency (EPA) has been required to adopt acute and chronic aquatic life criteria for Selenium, taking into account the bioaccumulation of this contaminant as it magnifies throughout the food chain often causing reproductive failure, teratogenic effects and death. The terms and conditions also included reevaluating and revising selenium criteria for the protection of semi-aquatic wildlife. The recently released peer reviewed United States Geological Survey (USGS) study, also part of the terms and conditions, models the fate and transport of selenium in the San Francisco Bay-Delta Estuary and as

⁹ <https://www.water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Water-Quality/Documents/Water-Quality-Assessment-of-NonProject-Turnins-to-the-California-Aqueduct-2015.pdf?la=en&hash=DF0AAD3515C7170683E17A4D5893207B66D44130> Arsenic exceeds MCL levels at checkpoint 29 and 27

Coalition-19
cont.

↑ agreed, the report will serve as the basis for revised water quality criteria for the protection of wildlife species.¹⁰

3. Without Data or Analysis the following potential impacts are dismissed:

Coalition-20

- a. Compliance with the Migratory Bird Treaty Act and Fish and Wildlife Coordination Act
- b. Compliance with the Endangered Species Act (16 U.S.C. § 1531 et seq.)
- c. Cumulative Impacts of associated transfers and exchanges.

4. Recent Court Cases Compound the DEA's Failure To Analyze the Impacts from the Proposed Groundwater Pump-ins & Transfers on endangered species such as the giant garter snake and Buena Vista Ornate Shrew.¹¹

A recent federal court ruling¹² found that the ten year Reclamation Impact Statement/Environmental Impact Report (“FEIS/R”) violated the National Environmental Policy Act (“NEPA”), 42 U.S.C. §4321 *et seq.*, the Central Valley Project Improvement Act (“CVPIA”), Public Law 102-575, and the California Environmental Quality Act (“CEQA”), Cal. Pub. Res. Code §§ 21000 *et seq.* and that FWS’s approval of the Project’s Final Biological Opinion (“BiOp”) and Incidental Take Statement (“ITS”) violated the Endangered Species Act (“ESA”), 16 U.S.C. §§ 1531 *et seq.* Specifically, the court held that the FEIS/R for these transfers (which would be compounded by the proposed federal action to allow substituted exports from the San Francisco Bay and Sacramento-San Joaquin River estuary as a credit for the pumped in groundwater south of the Delta):

Coalition-21

1. Failed to adequately analyze cumulative biological impacts due to reduced delta outflow
2. Failed to address that mitigation measure GW-1 improperly deferred mitigation because the required monitoring is unenforceable and it provides no performance standards and fails to adequately mitigate for land subsidence. Specifically the NEPA analysis was held inadequate because it failed to evaluate the effectiveness of GW-1
3. Failed to adequately account for changed hydrologic conditions resulting from climate change in the NEPA analysis.
4. Depended on an invalid USFWS’ BiOp for giant garter snake (“GGS”) because it relies on flawed conservation measures
5. Failed to address GGS impacts and mitigation.

Conclusion

The proposed action, while taking some unproven measures to remedy the growing subsidence exacerbated by these groundwater pump-in permitted actions, falls short of halting the damage to federal, state and local facilities from excessive groundwater extraction. Further, the approval of these discharges degrades water quality for downstream users and beneficial uses of the receiving waters. Without adequate monitoring of either water quality or biological effects, sweeping statements about compliance with the Endangered Species Act and Migratory Bird Treaty Act are made without corroborating evidence

Coalition-22

¹⁰ <http://www.epa.gov/region9/water/ctr/>

¹¹ <http://www.aqualliance.net/solutions/litigation/significant-legal-win-for-north-state-10-year-water-transfer-program-failed-analysis-and-disclosure/>

¹² http://www.aqualliance.net/wp-content/uploads/2018/02/AquAlliance10YearMSJ_Order021518.pdf

or data. Relying on MCL standards evades protections and monitoring necessary to protect downstream uses along with aquatic resources, fish and wildlife and the Pacific Flyway.

The DEA should evaluate a full range of alternatives, at the very least to include a third alternative that incorporates the features of the Record of Decision for an in-valley disposal option signed by Bureau of Reclamation (Reclamation) in March 2007 and limits deliveries to the San Luis Unit and Westlands as stated in Public Law 86-488-[June 3, 1960]. Of the two alternatives evaluated, the no action alternative is clearly superior for minimizing water-quality impacts and subsidence, while also not encouraging continued irrigation of marginal land and toxic soils. Finally, whatever action is taken requires improved monitoring, public disclosure of data, and third-party analysis of results.

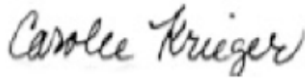
Thank you for the opportunity to provide comment.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
noah@ifrfish.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Barbara Barrigan-Parrilla
Executive Director
Restore the Delta
Barbara@restorethedelta.org



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.org)
caleenwintu@gmail.com



Bill Jennings
Chairman Executive Director
California Sportfishing Protection
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net

Coalition-22
cont.



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Eric Wesselman
Executive Director
Friends of the River
Eric@friendsoftheriver.org

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Larry Collins
President
Crab Boat Owners Association
papaduck8@gmail.com



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Adam Keats
Senior Attorney
Center for Food Safety
akeats@centerforfoodsafety.org

Attachment: State Water Project Contractors comment letter April 10, 2015 to Mr. Ben Lawrence
U.S. Bureau of Reclamation from SWC Terry L. Erlewine General Manager

April 10, 2015

Delivered via e-mail: blawrence@usbr.gov

Mr. Ben Lawrence
U.S. Bureau of Reclamation
1243 "N" Street
Fresno, CA 93721

Subject: Comments Regarding the Draft Environmental Assessment and Finding of No Significant Impact for the Westlands Water District Groundwater Warren Act Contract

Dear Mr. Lawrence:

The State Water Contractors¹ (SWC) appreciate the opportunity to provide comments on the U.S. Bureau of Reclamation's (Reclamation) Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Westlands Water District's Groundwater Warren Act Contract (Proposed Action). As described in the EA, under the Proposed Action, Reclamation would enter into a five-year Warren Act Contract with Westlands Water District (WWD) to introduce up to 30,000 acre-feet per year of non-Central Valley Project (CVP) water into the San Luis Canal in years when the WWD CVP allocation is 20% or less. The period of introduction would be April 1 to August 31. The source of the non-CVP water would be pumped groundwater from deep groundwater wells within WWD, as well as other sources of non-CVP water by way of the Mendota Pool.

The SWC has a significant interest in any project which could affect the structural integrity of, and water quality within, the State Water Project (SWP) system, including the California Aqueduct (Aqueduct). Based on review of the EA, we are concerned with: (1) the lack of a defined process for implementation and coordination of the Proposed Action, (2) potential negative effects on SWP infrastructure, and (3) potential negative effects on SWP water quality.

Coordination and Implementation

DWR operates and maintains, under Federal contract, #14-06-200-9755 with the United States Department of the Interior Bureau of Reclamation, that portion of the California Aqueduct, Reaches 4-7, known as the San Luis Canal as a Joint-use facility

¹ The State Water Contractors (SWC) is a non-profit association of 27 public agencies from Northern, Central and Southern California that receive water under contract from the California State Water Project. The 27 member SWC agencies are: Alameda County Flood Control and Water Conservation District Zone 7, Alameda County Water District, Antelope Valley-East Kern Water Agency, Casitas Municipal Water District, Castaic Lake Water Agency, Central Coast Water Authority, 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, Metropolitan Water District of Southern California, Mojave Water Agency, Napa County Flood Control and Water Conservation District, Oak Flat Water District, Palmdale Water District, San Bernardino Valley Municipal Water District, San Gabriel Valley Municipal Water District, San Geronimo Pass Water Agency, San Luis Obispo County Flood Control and Water Conservation District, Santa Clara Valley Water District, Solano County Water Agency, and Tulare Lake Basin Water Storage District.



DIRECTORS

Dan Flory
President

Antelope Valley-East Kern
Water Agency

Ray Stokes
Vice President

Central Coast Water
Authority

Douglas Headrick
Secretary-Treasurer

San Bernardino Valley MWD

Stephen Arakawa
Metropolitan Water District
of Southern California

Curtis Creel

Kern County Water Agency

Mark Gilkey

Tulare Lake Basin Water
Storage District

Cindy Kao

Santa Clara Valley Water
District

Dan Masnada

Castaic Lake Water Agency

David Okita

Solano County Water Agency

General Manager

Terry Erlewine

for conveyance of both SWP water and CVP water. The Warren Act Contract requirement is mandated under federal law but does not address DWR's concerns regarding its role as operator of the San Luis Canal and DWR's requirement to protect the SWP and the SWC. The Bureau must work together with DWR to make sure both the federal and state operations and federal and state contractors are protected in the implementation of the Proposed Action. It is critical that the implementation of the Proposed Action include an agreement between WWD and DWR, similar to the 2008 and 2014 Agreements, copies of which are attached to this comment letter.

As noted above, in previous years, WWD has worked directly with DWR and the SWC to develop, coordinate, and implement annual programs similar to the Proposed Action. This coordination is important to ensure SWP water supply and water quality are maintained and protected.

In 2012, DWR established a "Water Quality Policy and Implementation Process for Acceptance of Non-Project Water into the State Water Project" (DWR Aqueduct Pump-In Policy) (attached), which WWD has followed in previous years for similar one-year projects. Under the DWR Aqueduct Pump-in Policy, protocols for water quality monitoring and water quality forecasting are defined. The DWR Aqueduct Pump-In Policy also establishes a Facilitation Group to review and coordinate non-project water introduction into the California Aqueduct. Under the DWR Aqueduct Pump-in Policy, policies and protocols, including response plans, are established to ensure SWP water supply and water quality are protected. The SWC request that Reclamation and WWD coordinate with DWR under the established DWR Aqueduct Pump-In Policy.

SWP Infrastructure

The SWC is concerned with the effects of the Proposed Action on SWP infrastructure, particularly the structural integrity of the Aqueduct itself and SWP auxiliary facilities along the Aqueduct. The EA acknowledges that WWD "is in an area with historical as well as recent subsidence." Additionally, the United States Geological Survey (USGS) has monitored subsidence around the Delta Mendota Canal and has found significant and continuing subsidence and is currently studying the impacts of subsidence on the Aqueduct. (See <http://ca.water.usgs.gov/projects/central-valley/delta-mendota-canal-subsidence.html>.) However, the EA states that "groundwater to be conveyed under the Proposed Action is within the range of historical pumping by the district, and would be pumped regardless of whether Reclamation allowed its conveyance in federal facilities." The EA concludes that "any subsidence associated with this use of groundwater would take place regardless of Reclamation's decision." The EA does not provide an analysis or documentation to support this statement. Furthermore, the California Legislature passed historic groundwater legislation that requires groundwater managers to adopt groundwater sustainability plans that manage a groundwater basin so there are not undesirable results. (Cal. Water Code § 10735.2.) Undesirable results include "significant and unreasonable land subsidence that substantially interferes with surface land uses." (Cal. Water Code § 10721 (w)(5).) Therefore it is incorrect to assume that the pumping will occur regardless of the Proposed Action.

Contrary to what the EA states, the SWC is concerned that the Proposed Action would assist and encourage additional groundwater pumping in the WWD. Therefore, additional subsidence, which is irreversible, could potentially be caused by the Proposed Action and would compromise the structural integrity of the Aqueduct, with costly impacts to the SWP. The SWC recommend that Reclamation provide documentation that the Proposed Action would not result in increased groundwater pumping or, if increased groundwater pumping would occur due to the Proposed Action, Reclamation provide analysis and documentation of the effects of the increased groundwater pumping on subsidence in the vicinity of the Aqueduct.

Water Quality

The EA states that the groundwater pumped and conveyed under the Proposed Action “would be required to meet then-current water quality standards prior to approval for introduction to San Luis Canal.” The EA does not discuss or address effects on water quality in the Aqueduct. Although the groundwater pumped and conveyed under the Proposed Action may meet “then-current” water quality standards, which are not clearly defined in the EA, there may still be a degradation in Aqueduct water quality compared with water quality conditions absent the Proposed Action. The SWC suggests that the “then-current” water quality standards be more clearly defined and a quantitative analysis be presented that demonstrates the effect of the Proposed Action on Aqueduct water quality.

Additionally, the EA identifies proposed discharge locations, but does not disclose flow rate or water quality information for those discharge locations. The SWC recommend that discharge locations have the capability to be monitored for flow rates and water quality. This information could then help inform a quantitative analysis, as described above, to demonstrate the effect of the Proposed Action on Aqueduct water quality.

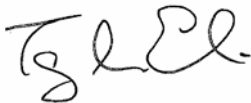
In Summary

Based on these comments, the SWC believes that Reclamation’s EA and FONSI for the Proposed Action do not adequately discuss, analyze, or address potential water quality or infrastructure impacts to the SWP. Additionally, Reclamation’s EA and FONSI for the Proposed Action do not describe any protocol or process that would be implemented to ensure that SWP water quality and infrastructure are not adversely impacted due to implementation of the Proposed Action.

The SWC is concerned with potential costly effects to SWP water quality and irreversible effects on SWP infrastructure. Instead of implementing the Proposed Action, the SWC urge Reclamation and WWD to coordinate directly with DWR on an annual basis, as done in past years, using the defined DWR Aqueduct Pump-In Policy, to ensure that SWP water supply and water quality are maintained and protected with implementation of the Proposed Action until such time as the concerns raised above are addressed.

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future information concerning the proposed project. We would be happy to meet with you to discuss any of our comments. Please contact me at terlewine@swc.org or 916-447-7357 x 203.

Sincerely,



Terry L. Erlewine
General Manager

Attachments

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

AGREEMENT BETWEEN
THE DEPARTMENT OF WATER RESOURCES, OF THE STATE OF
CALIFORNIA,
AND
WESTLANDS WATER DISTRICT
FOR
INTRODUCTION and CONVEYANCE OF LOCAL GROUNDWATER
IN THE CALIFORNIA AQUEDUCT

SWPAO #08052

THIS AGREEMENT is made and entered into as of the 8th day of August, 2008 pursuant to the provisions of the California Water Resources Development Bond Act and other applicable laws of the State of California, between the Department of Water Resources (DWR) of the State of California and Westlands Water District (WWD), a water district, duly organized, existing and acting pursuant to the laws of the State of California. This Agreement may refer to DWR or WWD individually by name, as "Party" or collectively as "Parties".

Recitals

- A. DWR operates and maintains the State Water Resources Development System pursuant to the laws of the State of California, involving the development and conveyance of water supplies to public agencies and water districts throughout the State of California.
- B. DWR operates and maintains, under Federal contract #14-06-200-9755 with the United States Department of the Interior Bureau of Reclamation, that portion of the California Aqueduct, Reaches 4-7, known as the San Luis Canal (Aqueduct) as a Joint-use facility for conveyance of State Water Project (SWP) water and Central Valley Project (CVP) water.
- C. Due to critically dry hydrologic conditions in 2008, court ordered restrictions on pumping from the Delta, a reduction in WWD's 2008 CVP water allocations, and rationing of all CVP water south of the Delta, June through August 2008, WWD has a compelling need to transfer its local groundwater supply for use between farmers and landowners within its service area.
- D. This Agreement has been developed in response to the Governor's Proclamation "State of Emergency-Central Valley Region" issued on June 12, 2008.
- E. WWD has committed that they will not propose similar programs in response to future water supply shortage conditions, unless those programs are accompanied by completed CEQA documentation, comply with DWR pump-in policies and demonstrate that economic effects resulting from subsidence associated with the increased groundwater pumping or any water quality degradation for SWP contractors are either fully mitigated or compensation is provided.
- F. WWD has requested DWR to allow WWD to pump into the Aqueduct through DWR approved turn-in structures, up to 20,000 acre-feet of local groundwater originating from wells in the WWD service area, Reaches 4-7, and for DWR to provide conveyance and delivery of this water to WWD turnouts in Reaches 4-7 for use by WWD on agricultural lands only within its service area.
- G. WWD has agreed to provide to DWR, as mitigation to the SWP, water previously acquired by WWD, in an amount equivalent to 10 percent of the total amount of local groundwater pumped into the Aqueduct from WWD. The mitigation water will be made available to the SWP in O'Neill Forebay.

AGREEMENT

DWR agrees to accept, convey, and deliver for WWD up to 20,000 acre-feet of local groundwater within WWD's service area under the following terms and conditions:

1. Pump-in, Conveyance and Delivery of Local Groundwater

- a. DWR will allow pump-in of WWD local groundwater from individual source wells approved by DWR into the Aqueduct, Reaches 4-7 during the period of June 16 through September 30, 2008.
- b. All source wells selected by WWD to provide local groundwater to be pumped into the Aqueduct must be approved by DWR prior to any actual pump-in of local groundwater into the Aqueduct.
- c. DWR will allow and provide conveyance and delivery of WWD local groundwater to turnouts located within Aqueduct Reaches 4-7 during the period of June 16 through September 30, 2008.
- d. DWR shall have no obligation to return any local groundwater introduced into the Aqueduct under this program that does not meet DWR's requirements for water quality or documented measurement.
- e. Any local groundwater introduced into the Aqueduct by WWD which is not accepted for delivery by WWD by September 30, 2008 shall be considered SWP water and will not be available for delivery to WWD.

2. Services Provided

WWD shall assure timely access for DWR personnel to conduct any of the following activities within WWD's service area during the term of this Agreement:

- a. Verification of metering calibration standards and requirements for meters located at the point of entry into the Aqueduct and at the point of delivery out of the Aqueduct.
- b. Collecting of water samples from source wells and at the point of pump-in to the Aqueduct for testing of water quality.
- c. Any other activities deemed necessary by DWR to comply with the terms of this Agreement.

3. Water Quality

- a. Prior to any pump-in approval being granted to WWD by DWR, WWD shall be responsible for water, from each source well pumping local groundwater, to be tested by a certified laboratory and no water shall be pumped into the Aqueduct that exceeds the Maximum Contaminant Levels (MCL) standards or fails to meet the acceptable concentrations of MCL established for the six constituents of concern (COC):

Arsenic	0.01 mg/L
Boron	2.0 mg/L
Bromide	no proposed MCL, to be reviewed on a case by case basis by DWR
Nitrates	45 mg/L
Sulfates	600 mg/L
Total Dissolved Solids	1100 mg/L

- b. DWR staff will conduct routine water quality measurements of the Aqueduct, upstream and downstream of the WWD service area, from Check 13 through Check 21. The results of DWR water quality testing will be available on the DWR Water Data Library website within 2 weeks of sampling.
- c. If any water from a source well providing local groundwater is tested and found to be at, or within, 10 percent of the acceptable MCL concentration, DWR shall re-sample and test that specific well water again. If a second test of groundwater from an individual source well is found not to meet the acceptable MCL concentration, WWD will cause the pump to discontinue pumping water into the Aqueduct immediately and that pump will not be allowed to resume pumping water into the Aqueduct.
- d. All water from each source well must also comply with the California Code of Regulations, Title 22 Water Quality Analysis requirements, as modified for this Agreement, in order to continue to provide local groundwater pumping into the Aqueduct under this Agreement. Within 2 weeks of well start-up, a modified Title 22 Water Quality Analysis shall be provided to DWR. Any source well found not to meet the modified Title 22 primary requirements shall be shut down immediately. During the term of this Agreement, if any modified T22 secondary metal MCL is exceeded in the Aqueduct at Check 21, any pump-in well exceeding the T22 secondary metal MCL shall immediately be shut down by WWD.
- e. DWR's water quality testing results will govern over laboratory results provided by WWD. WWD may request that DWR resample and test a given source well for the COC.

4. Water Operations

- a. WWD shall receive pump-in approval from DWR prior to the introduction of local groundwater into the Aqueduct. WWD shall provide DWR with daily and weekly schedules which shall identify the approved source wells flow rates, locations of pump-in by Aqueduct Mile Post and delivery of local groundwater by Reach.
- b. DWR shall have no obligation to return to WWD any local groundwater pumped into the Aqueduct under this Agreement that does not meet DWR's requirements for water quality or measurement.
- c. Any local groundwater pumped into the Aqueduct by WWD which is not accepted for delivery by WWD by September 30, 2008 shall be considered SWP water.
- d. No pump-in of WWD local groundwater shall be permitted by DWR after September 30, 2008.
- e. DWR will not allow any transfer or exchange of SWP water for local groundwater and will not provide for storage of local groundwater for WWD under this Agreement.
- f. DWR may, upon notice orally by telephone, electronic mail or notice by facsimile transmission and confirmed in writing require WWD to stop the pump-in of local groundwater into the Aqueduct immediately, if, in the judgment of DWR, its continuance could result in disruption of or damage to the SWP, including but not limited to unacceptable degradation of water quality:

5. Water Accounting

- a. At the end of each month from June 16, 2008 through September 30, 2008 during the pump-in and delivery period of local groundwater within Reaches 4-7, WWD shall submit a Water Accounting Statement (WAS) to the following DWR staff at San Luis Field Division and the State Water Project Analysis Office:

Mr. Mandeep S. Bling
Supervising HEP Utility Engineer
Department of Water Resources
San Luis Field Division
31770 Gonzaga Road
Gustine, California 95322
Office Phone: (209) 827-5110
Fax: (209) 827- 0846
E-Mail: bling@water.ca.gov

Ms. Carol L. White
Research Analyst II
Department of Water Resources
State Water Project Analysis Office
Post Office Box 942836
Sacramento, California 94236-0001
Office Phone: (916) 653-6600
Fax: (916) 653-9628
E-Mail: cwhite@water.ca.gov

- b. The WAS will provide documentation to DWR of the total amount of WWD's local groundwater pumped into the Aqueduct within each reach, all deliveries to turnouts by reach, and include conveyance losses calculated at 2 percent.
- c. Any differences between WWD and DWR related to water accounting shall be immediately reconciled and settled monthly. DWR will determine the final water deliveries by reach.
- d. All WWD local groundwater, total pump-in and total deliveries, and conveyance losses must balance to zero by the end of each month.

6. No Impacts to State Water Project

- a. DWR shall accept and convey WWD local groundwater inflow in accordance with a schedule approved by DWR, and at times, amounts, and locations consistent with the overall delivery capability of the SWP.
- b. WWD agrees that DWR will have sole determination of whether conveyance of the groundwater adversely affects SWP operations, including but not limited to, SWP approved allocations, water storage and deliveries, compliance with environmental regulations and water rights permits, flood control, or other SWP purposes.
- c. WWD shall be responsible, as determined by DWR, for any adverse impacts to the SWP or its long-term water contractors, including but not limited to damages to the Aqueduct from subsidence and water quality impacts that may result from the local groundwater pumping into the Aqueduct or conveyance of local groundwater to turnouts within Reaches 4-7.

7. California Environmental Quality Act Exemption

- a. WWD, as lead agency, will be required to provide CEQA compliance prior to any request to DWR for any future pump-in program beyond December 31, 2008.

8. Water Quality Mitigation

- a. As soon as operationally possible after the low point of storage in San Luis Reservoir has been determined for 2008 by DWR and Reclamation, but no later than November 1, 2008, WWD shall agree to provide mitigation to the SWP for water quality impacts. WWD shall make available to the SWP, water previously acquired from KCWA as an in-lieu exchange of purchased Kern River water under separate agreement with WWD, in an amount equivalent to 10 percent of the total pump-in amount of WWD's local groundwater documented by DWR

under this Agreement. Because this Agreement and the 10 percent mitigation rate are a response to a unique, emergency situation, this mitigation shall not be a precedent in responding to similar impacts in future situations.

- b. WWD shall agree to make SWP mitigation water available to DWR for SWP supply at O'Neill Forebay on a mutually agreeable operations schedule.
- c. Mitigation water as described in Articles 8.a. and 8.b. shall be provided to the SWP regardless of the amount of local groundwater delivered to WWD under the terms of this Agreement.
- d. WWD shall be responsible for complying with all applicable laws and regulations including the Federal Endangered Species Act and the California Endangered Species Act and for securing any required consents, permits, reports, and orders to allow DWR to facilitate the return of mitigation water to the SWP.

9. Charges

WWD shall pay DWR for all services provided by DWR related to this Agreement, including:

- a. A one-time Agreement Preparation Fee of \$10,000 to cover DWR's costs for the development, preparation and execution of this Agreement;
- b. A Monthly Administrative Fee of \$700 to cover DWR's costs to administer the Agreement, maintain records, and prepare monthly billings. This fee shall be charged beginning in the month when DWR first accepts local groundwater into the Aqueduct and will be charged each month during pump-in, conveyance or delivery of local groundwater to WWD and until all mitigation water has been accepted by DWR, or this Agreement is terminated.
- c. WWD agrees to pay direct costs incurred by DWR as a result of providing services under this Agreement which otherwise would not have been performed in absence of this Agreement. These costs include, but are not limited to water quality testing, meter calibration, water measurements, and personnel costs of staff time and travel.
- d. A Use-of Facilities fee of \$5.61 per acre-foot for conveyance of local groundwater to turnouts in Reaches 4-7 of the Aqueduct.
- e. Any other costs identified as reasonably incurred by DWR for providing services to WWD under this Agreement.

10. Billings and Payments

- a. Upon execution of this Agreement, DWR shall bill WWD the \$10,000 Agreement Preparation Fee under Article 9.a.
- b. DWR shall bill WWD for the \$700 monthly administrative fee as applicable under Article 9.b.
- c. DWR shall bill WWD for the direct costs of DWR personnel to provide services under Article 9.c. when costs are determined by DWR.
- d. DWR shall bill WWD for the Aqueduct Use-of-Facilities charge under Article 9.d. after deliveries have been confirmed by DWR.
- e. All payments shall be due within 30 days after the date of DWR's invoice.
- f. Interest shall be charged for all delinquent payments. WWD shall pay to DWR accrued interest on all overdue payments at the rate of 1 percent per month from the due date to the date of payment.
- g. All invoices billed under this Agreement should be mailed to:
Ms. Charlotte Dahl
Director of Finance & Administration
Westlands Water District
Post Office Box 6056
Fresno, California 93703-6056
Office phone: (559) 224-1523

11. Liability

- a. DWR shall not be responsible for any use, effects, or disposal of WWD's local groundwater from source wells prior to introduction into the Aqueduct or after the water passes through WWD's turnouts in Reaches 4-7 of the California Aqueduct. Responsibility under the terms of this Agreement shifts from DWR to WWD when the local groundwater passes through WWD's turnouts.
- b. WWD agrees to defend and hold DWR, its officers and employees, jointly or severally, harmless from any direct or indirect loss, liability, lawsuit, cause of action, judgment or claim, and shall indemnify DWR, its officers and employees, jointly or severally, for all lawsuits, costs, damages, judgments, attorneys fees, and liabilities that DWR, its officers and employees incur as result of DWR providing services to WWD under this Agreement, except to the extent resulting from the sole negligence or willful misconduct of DWR.

- c. If DWR is precluded in whole or in part from accepting or delivering local groundwater from or to WWD because of uncontrollable forces, then DWR is relieved from the obligation to deliver the water to the extent it is reasonably unable to complete the obligation due to the uncontrollable force. Uncontrollable forces shall include, but are not limited to earthquakes, fires, tornadoes, floods, and other natural or human caused disasters.
- d. The performance of the parties to this Agreement is contingent upon approval of all governmental agencies with jurisdiction over approval of this Agreement, including without limitation any necessary compliance with applicable environmental laws. If unforeseen conditions prohibit completion of deliveries herein, after partial deliveries are made hereunder, this Agreement will be treated as though rescinded except for responsibilities for liabilities and water already delivered. Unforeseen conditions include, but are not limited to, failure of approvals or withdrawal of approval by any governmental agency with jurisdiction over this Agreement or administrative order with respect thereto.
- e. WWD shall not be entitled to recover any costs, including, but not limited to any charges billed under Article 10 of this Agreement, DWR verification of water accounting costs, or Use-of-Facilities fees paid for conveyance of local groundwater if uncontrollable forces preclude DWR from delivering the local groundwater as described in this Agreement, or this Agreement is rescinded under Article 11.d., or terminated for good cause under Article 12.

12. Term

This Agreement shall be effective from the date when the last Party signs this agreement and shall remain in effect until whichever occurs later: December 31, 2008, or upon final payment to DWR by WWD of all costs attributable to this Agreement including liabilities.

- a. Either party may terminate the Agreement, as set forth below, for good cause. In addition, upon notice to WWD, DWR may terminate this Agreement if the local groundwater pumped into the California Aqueduct does not meet the water quality criteria provided in Article 3 and Attachment 1 or metering standards as required by DWR.
- b. If this Agreement is terminated, WWD shall not be relieved of its obligation to pay any costs incurred under this Agreement nor for payment for liabilities related to services provided by DWR prior to the time of termination.
- c. DWR shall be obligated to return any local groundwater that has been pumped into the Aqueduct and meets the metering and water quality criteria provided under Article 3 and Attachment 1.

- d. Before terminating this Agreement, either party shall provide the other with the specific ground(s) on which it wishes to terminate the Agreement. The party wishing to terminate this Agreement shall provide the other party with a reasonable opportunity to adjust or correct any problems that may have arisen in the implementation of this Agreement. Termination may only take place 5 days after written notice has been provided to the other party unless termination is based on Articles 3, 4.f., or 6 of this Agreement in which case those Articles shall control.

13. Notices

All communications or notices in connection with this Agreement shall be in writing and either hand-delivered or sent by United States first class mail, postage prepaid, facsimile, or electronic mail followed by written notice sent by U.S. mail, and addressed as follows to the appropriate recipient:

Mr. Robert B. Cooke, Chief
State Water Project Analysis Office
Department of Water Resources
Post Office Box 942836
Sacramento, California 94236-0001
Office Phone: (916) 653-4313
Fax: (916) 653-9628
E-Mail: cooke@water.ca.gov

Mr. Mandeep S. Bling
Supervising HEP Utility Engineer
Department of Water Resources
San Luis Field Division
31770 Gonzaga Road
Gustine, California 95322
Office Phone: (209) 827-5110
Fax: (209) 827- 0846
E-Mail: bling@water.ca.gov

Mr. Dave Ciapponi
Deputy General Manager
Westlands Water District
Post Office Box 6056
Fresno, California 93703-6056
Office Phone: (559) 241-6202
Fax: (559) 241-6277
E-Mail: dciapponi@westlandswater.org

Mr. Russ Freeman
Supervisor of Resources
Westlands Water District
P. O. Box 6056
Fresno, California 93703-6056
Office Phone: (559) 241-6241
Fax: (559) 241-6277
E-Mail: rffreeman@westlandswater.org

14. No Precedent

This Agreement is a response to a unique situation, and the parties specifically understand, and agree that this Agreement shall not be considered as a precedent for any DWR agreements or activities of a similar nature in the future.

15. Signature Clause

The signatories represent that they have appropriate authorization to enter into this "Agreement for Introduction and Conveyance of Local Groundwater in the California Aqueduct" on behalf of the Party for whom they sign. If WWD requires special written authorization from its Board of Directors, WWD shall deliver to DWR a copy of its Board of Directors resolution and/or other documentation authorizing its signature.

16. Execution in Counterpart

The Parties may execute this Agreement in counterpart. The Parties agree to accept facsimile or PDF (Portable Document Format) signatures as original signatures. The Agreement shall take effect as soon as both Parties have signed.

Immediately after execution, WWD shall transmit a copy of the executed Agreement and any required Board approvals by facsimile or email to Robert B. Cooke, Chief, State Water Project Analysis Office at (916) 653-9628 or cooke@water.ca.gov and to other necessary contacts as listed in Article 13 (Notices).

IN WITNESS WHEREOF, the Parties hereto have entered into this Agreement for Introduction and Conveyance of Local Water in the California Aqueduct.

Approved as to legal form
and sufficiency

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Daniel A. Ardino

Chief Counsel
DEPARTMENT OF WATER RESOURCES

Raphael A. Torres

Raphael A. Torres
Deputy Director

08/16/08

Date

Aug. 6, 2008

Date

Westlands Water District

Thomas W. Bunnifant

Name

General Manager / General Counsel

Title

8/8/2008

Date

ATTACHMENT 1

**CALIFORNIA DEPARTMENT OF WATER RESOURCES
WATER QUALITY STANDARDS FOR ACCEPTANCE
OF WESTLANDS WATER DISTRICT GROUNDWATER INTO THE SWP**

Constituent	Units	Maximum Contaminant Level	Source
Primary			
Aluminum	mg/L	1	(1)
Antimony	mg/L	0.006	(1)
Arsenic	mg/L	0.01	(12)
Barium	mg/L	1	(1)
Bromide	mg/L	N/A	(13)
Beryllium	mg/L	0.004	(1)
Boron	mg/L	2.0	(13)
Cadmium	mg/L	0.005	(1)
Chromium (total)	mg/L	0.05	(1)
Lead	mg/L	0.015	(5)
Mercury (inorganic)	mg/L	0.002	(1)
Nickel	mg/L	0.1	(1)
Nitrates (as NO3)	mg/L	45	(1)
Selenium	mg/L	0.05	(1)
Sulfate *	mg/L	600	(13)
Thallium	mg/L	0.002	(1)
Total Dissolved Solids *	mg/L	1,100	(13)

*** Note: Sulfate and Total Dissolved Solids are treated as primary Constituents of Concern in this agreement, as stated in Article 3.d.**

Secondary

Chloride	mg/L	250	(4)
Copper	mg/L	1	(3)
Iron	mg/L	0.3	(3)
Manganese	mg/L	0.05	(3)
Molybdenum	mg/L	0.01	(10)
Silver	mg/L	0.1	(3)
Sodium	mg/L	69	(9)
Specific Conductance	µS/cm	1,600	(4)
Zinc	mg/L	5	(3)

Total Organic Carbon by Combustion

TOC	mg/L as C	N/A	(11)
-----	-----------	-----	------

Constituent	Units	Maximum Contaminant Level	Source
Organic Chemicals			
Aldicarb	mg/L	0.003	(14)
Atrazine	mg/L	0.001	(2)
Carbaryl	mg/L	0.4	(16)
Carbofuran	mg/L	0.018	(2)
Chlordane	mg/L	0.0001	(2)
Chlorpyrifos	µg/L	0.025	(8)
2, 4-D	mg/L	0.07	(2)
Diazinon	µg/L	0.16	(8)
Dibromochloropane (DBCP)	mg/L	0.0002	(2)
Diquat	mg/L	0.02	(2)
Endothall	mg/L	0.1	(2)
Endrin	mg/L	0.002	(2)
Ethylene Dibromide (EDB)	mg/L	0.00005	(2)
Heptachlor	mg/L	0.00001	(2)
Heptachlor Epoxide	mg/L	0.00001	(2)
Lindane	mg/L	0.0002	(2)
Methiocarb	mg/L	N/A	
Methomyl	mg/L	0.2	(15)
Methoxychlor	mg/L	0.03	(2)
Oxamyl	mg/L	0.05	(2)
2, 4, 5-TP (Silvex)	mg/L	0.05	(2)
Simazine	mg/L	0.004	(2)
Toxaphene	mg/L	0.003	(2)

Sources:

(A) Title 22. The Domestic Water Quality and Monitoring Regulations specified by the State of California Health and Safety Code (Sections 60001-64690.80), as amended March 9, 2008.

(1) Title 22. Table 64431-A

(2) Title 22. Table 64444-A

(3) Title 22. Table 64449-A

(4) Title 22. Table 64449-B

(5) Title 22. Section 64678 (d)

(B) California Regional Water Quality Control Board, Central Valley Region, Fourth Edition of the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins.

(7) Basin Plan, Table III-1

(8) Basin Plan, Table III-2A

(C) Ayers, R. S. and D. W. Westcot, *Water Quality for Agriculture*, Food and Agriculture Organization of the United Nations - Irrigation and Drainage Paper No. 29, Rev. 1, Rome (1985).

(9) Ayers, Table 1

(10) Ayers, Table 21

(D) Total Organic Carbon in Water EPA Method 415.1 (Combustion)

(11) EPA 415.1 (T) Ox

(E) On January 22, 2001 EPA adopted a new standard for arsenic in drinking water at 10 parts per billion (ppb), replacing the old standard of 50 ppb. The rule became effective on February 22, 2002. The date by which systems must comply with the new 10 ppb standard is January 23, 2006.

(12) 40 CFR 141.62(b)(16)

(F) State of California, The Resources Agency Department Of Water Resources Agreement Among The Department Of Water Resources, State Of California, Bureau Of Reclamation, U.S. Department Of Interior And Westlands Water District for Introduction and Conveyance Of Local Groundwater In The California Aqueduct.

(13) SWPAO #08-052

(G) U.S. EPA Water Quality limits for Constituents and Parameters,

(14) U.S. EPA, Maximum Contaminant Levels;

(15) Drinking Water Health Advisories or Suggested No-Adverse-Response Levels (SNARLs) for toxicity other than cancer risk. August 2007 updates.

(16) RSD5, risk specific dose at $10E-5$ $\mu\text{g/L}$.

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

AGREEMENT BETWEEN
THE DEPARTMENT OF WATER RESOURCES OF THE STATE OF CALIFORNIA,
AND
WESTLANDS WATER DISTRICT
FOR
INTRODUCTION AND CONVEYANCE OF LOCAL GROUNDWATER
IN THE CALIFORNIA AQUEDUCT

SWPAO #14010

THIS AGREEMENT is made this 15th day of July, 2014 pursuant to the provisions of the California Water Resources Development Bond Act and other applicable laws of the State of California, between the Department of Water Resources of the State of California (DWR) and Westlands Water District (WWD), a water district, duly organized, existing and acting pursuant to the laws of the State of California. DWR and WWD may be referred to individually by name as "Party" or collectively as "Parties." This Agreement may be referred to as SWPAO #14010.

Recitals

- A. DWR operates and maintains the State Water Resources Development System pursuant to the laws of the State of California, involving the development and conveyance of water supplies to public agencies and water districts throughout the State of California.
- B. DWR operates and maintains, under Federal contract #14-06-200-9755 with the United States Department of the Interior Bureau of Reclamation, a portion of the California Aqueduct, Reaches 4-7, known as the San Luis Canal (hereafter referred to as "Aqueduct"), as a Joint-use facility for conveyance of State Water Project (SWP) water and Central Valley Project (CVP) water.
- C. Due to critically dry hydrologic conditions in 2014, continuing court ordered restrictions on pumping from the Delta, and a 0% 2014-2015 CVP water allocation, WWD has an urgent and compelling need to transfer its local groundwater supply for use among farmers and landowners within its service area.
- D. On January 17, 2014, the Governor issued a Proclamation entitled "A Proclamation of a State of Emergency" and on April 25, 2014, the Governor issued "A Proclamation of a Continued State of Emergency."
- E. WWD intends to pump its groundwater into the Aqueduct and utilize the Aqueduct as an additional way to transport the groundwater between lands with an abundance of groundwater to lands lacking water supplies, all within WWD's service area from June through October in 2014.
- F. WWD has requested DWR's approval to allow WWD to pump into the Aqueduct through DWR approved turn-in structures up to 30,000 acre-feet of local groundwater originating from wells in the WWD service area in Reaches 4-7; and for DWR to provide conveyance and delivery of this water to WWD's turnouts in Reaches 4-7, for use by WWD on agricultural lands only within its service area.
- G. WWD agrees to provide to DWR 13.3 percent (13.3%) of the total amount of its local groundwater pumped into the Aqueduct under this Agreement as mitigation to the SWP.
- H. WWD filed a Notice of Exemption (NOE) on June 12, 2014 in Fresno County and Kings County. The NOE is based on Section 21080(b)(3) of the California Environmental Quality Act (CEQA) and Section 15269(a) of the CEQA Guidelines.

AGREEMENT

DWR agrees to accept, convey, and deliver for WWD up to 30,000 acre-feet of WWD's local groundwater within WWD's service area in Reaches 4-7 of the California Aqueduct, subject to the following terms and conditions:

1. TERM

- a. This Agreement shall be effective upon execution by all parties and shall terminate on October 31, 2014 or upon final payment to DWR by WWD of all costs attributable to this Agreement, whichever occurs later. However, the liability, hold harmless and indemnification obligations in the Agreement shall remain in effect until October 31, 2018 or until any claim or litigation concerning this Agreement asserted to DWR or WWD as of October 31, 2018 is finally resolved, whichever occurs later.
- b. Either party may terminate the Agreement, as set forth below, for good cause. In addition, upon notice to WWD, DWR may terminate this Agreement if the local groundwater pumped into the California Aqueduct under this Agreement does not meet the water quality criteria provided in Article 4 and Attachment 1 of this Agreement or the metering standards as required by DWR.
- c. If this Agreement is terminated, WWD shall not be relieved of its obligation to pay any costs incurred under this Agreement or for payment for liabilities related to services provided by DWR prior to the time of termination.
- d. In the event this Agreement is terminated, DWR shall return to WWD any local groundwater that has been pumped into the Aqueduct and which meets the metering and water quality criteria provided under Article 4 and Attachment 1 of this Agreement.
- e. Before terminating this Agreement, either party shall provide the other with the specific ground(s) on which it wishes to terminate the Agreement. The party wishing to terminate this Agreement shall provide the other party with a reasonable opportunity to adjust or correct any problems that may have arisen in the implementation of this Agreement. Termination may only take place five days after written notice has been provided to the other party unless termination is based on Articles 3.g., 4, or 7 of this Agreement in which case those Articles shall control.

2. UNIQUENESS OF AGREEMENT

This Agreement is a response to a unique situation, and the parties specifically understand and agree that this Agreement shall not be considered as a precedent for future agreements or DWR activities.

3. GENERAL PROVISIONS FOR WWD'S PUMP-IN AND CONVEYANCE

- a. DWR will allow the introduction of up to 30,000 acre-feet of WWD's local groundwater from individual source wells approved by DWR into the Aqueduct in Reaches 4-7 from June through October 31, 2014.
- b. All source wells selected by WWD to provide local groundwater to be pumped into the Aqueduct must be approved by DWR prior to any actual pump-in of local groundwater into the Aqueduct.
- c. DWR shall have no obligation to return any WWD's local groundwater introduced into the Aqueduct under this Agreement that does not meet DWR's requirements for water quality or documented measurement.
- d. Any local groundwater introduced into the Aqueduct by WWD which WWD does not accept for delivery by October 31, 2014 shall be considered SWP water and will not be available for delivery to WWD.
- e. For any WWD's local groundwater pumped into the Aqueduct under this Agreement, two percent (2%) will be used to account for canal losses due to evaporation and seepage.
- f. WWD agrees to provide to DWR 13.3% of the total amount of its local groundwater pumped into the Aqueduct under this Agreement as mitigation to the SWP. WWD will take 84.7% of the total amount of local groundwater pumped into the Aqueduct under this Agreement.
- g. DWR may, upon notice by phone or electronic email, require WWD to stop the pump-in of its local groundwater into the Aqueduct immediately, if, in the judgment of DWR, its continuance results in the disruption of or damage to the SWP, including but not limited to unacceptable degradation of water quality.
- h. WWD shall assure timely access for DWR personnel to conduct any of the following activities within WWD's service area during the term of this Agreement:

- (i) Verification of metering calibration standards and requirements for meters located at the point of entry into the Aqueduct and at the point of delivery out of the Aqueduct.
- (ii) Collection of water samples from source wells and at the point of pump-in to the Aqueduct for testing of water quality.
- (iii) Any other activities deemed necessary by DWR to comply with the terms of this Agreement.

4. WATER QUALITY

- a. WWD shall conduct collection of water samples from source wells that will be used to pump-in local groundwater into the Aqueduct for testing of water quality. Prior to DWR granting any pump-in approval to WWD, WWD shall be responsible for water sampling and testing of each source well pumping local groundwater by a certified chemical analysis laboratory (State Water Resources Control Board Environmental Laboratory Accreditation Program (formerly the California Department of Public Health ELAP)).
- b. DWR shall approve all source wells proposed to participate in the groundwater pump-in program prior to discharging any groundwater in the Aqueduct. No water shall be pumped into the Aqueduct that exceeds the T-22 Maximum Contaminant Levels (T-22 MCL) standards (listed at <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalinformation.aspx>) or fails to meet the acceptable concentrations of Modified T-22 MCL established for twelve constituents of concern (COC) listed in the following table:

<u>Constituent of Concerns</u>	<u>MCL</u>
Arsenic	0.01 ppm (mg/L)
Bromide	No proposed MCL, to be reviewed on a case by case basis by DWR
Total Chromium	0.05 ppm
Chloride	250 ppm
Nitrate (as NO ₃)	45 ppm
Sulfate	600 ppm
Total Dissolved Solids (TDS)	1100
Total organic carbon	None
Conductivity	None
Hexavalent chromium	0.010 mg/L
Gross alpha	15 pC/L
Uranium	20 pC/L

- c. In addition to the one time Title 22 sampling required before pump-in, WWD shall sample for COC's from each well weekly for the first four weeks to determine that the water quality of the discharge is consistent, predictable, and reliable as stated in the "Department of Water Resources Water Quality Policy and Implementation Process for Acceptance of Non-Project Water into the State Water Project," dated October 13, 2012 or a later date if modified by DWR. WWD shall perform this sampling quarterly after the first four weeks.
- d. DWR staff will conduct routine water quality measurements of the Aqueduct, upstream and downstream of the WWD service area, from Check 13 through Check 21. The results of DWR water quality testing will be distributed to interested parties as well as posting to the Water Data Library website (<http://www.water.ca.gov/waterdatalibrary/>).
- e. Any source well found not to meet the T-22 MCL or the acceptable concentration of Modified T-22 MCL established for seven COC's shall stop pumping immediately. DWR will notify WWD either by phone or electronic mail to stop the pump-in of its local groundwater into the Aqueduct immediately, as determined by DWR, if the source well that provides local groundwater into the Aqueduct failed to meet the T-22 requirements or the acceptable concentration of Modified T-22 MCL established for seven COC's.

- f. DWR may identify additional COC's upon review of the T-22 data and any additional COC's shall be added to the monitoring as determined by DWR.
- g. DWR reserves the right to collect water samples for water quality testing for the COC from any WWD's source well or at any point of water entry into the Aqueduct.
- h. If any water from a source well providing WWD's local groundwater is tested by DWR and found to exceed the identified MCL's, DWR shall order that source well to stop pumping immediately, that source well will not be allowed to resume pumping, and WWD will not receive credit for that water introduced into the Aqueduct.
- i. DWR's water quality testing results will govern over laboratory results provided by WWD. WWD may request that DWR resample and test a given source well for the COC's.
- j. WWD shall provide to DWR for review the followings:
 - (i) The net flow weighted groundwater projection prior to a well pumping.
 - (ii) Well analysis data from each well tested for COC's within five days of sampling.
 - (iii) The T-22 Water Quality Analyses results within 30 days of the analysis.
- k. WWD shall identify anticipated water quality changes within the San Luis Canal (SLC) by using a daily model and providing results to DWR on a daily basis. WWD shall monitor water quality changes daily at Check 13 and 21, and shall update the model daily to reflect changes in the upstream water quality of the SLC, changes in demands, and pump-ins in Reaches 4 through 7. WWD shall provide DWR with a day-to-day prediction of downstream water quality.
- l. If the TDS concentration at Check 21 rises to within 90% of the maximum concentration established by DWR, then WWD shall initiate a consultation process with DWR to evaluate the cause of the increase and initiate shutdown procedures of the pump-in-program. WWD shall run model simulations to quantify anticipated improvements in the SLC water quality resulting from shutdown. The participating wells with the highest TDS concentrations will be targeted first, continuing to the wells with the lowest concentrations until canal water quality stabilizes or improves. When TDS

concentrations at Check 21 improve, wells will be brought on-line to commence pumping only after approval of the startup with DWR.

- m. WWD shall direct all water quality testing data, test results, or questions regarding water quality issues related to this Agreement to:

Barry Montoya
Water Quality Section
Environmental Assessment Branch
Division of Operation & Maintenance
CA Department of Water Resources
(916) 653-4383 office
(916) 653-8250 fax
E-Mail: bmontoya@water.ca.gov

5. WATER OPERATIONS

- a. WWD shall request and must receive approval from DWR prior to the introduction of any local groundwater into the Aqueduct under this Agreement.
- b. WWD shall provide DWR with daily and weekly schedules which shall identify the approved source wells flow rates, locations of pump-in by Aqueduct Mile Post, and delivery of local groundwater by Reach.
- c. DWR will not allow any transfer or exchange of SWP water for local groundwater and will not provide for storage of local groundwater for WWD under this Agreement.

6. WATER DELIVERY RECORDS

- a. DWR will maintain monthly records for the pump-in, conveyance and delivery of WWD's local groundwater under this Agreement. WWD shall certify to DWR's State Water Project Analysis Office the total amount of local groundwater pumped into the Aqueduct within each reach and all deliveries to turnouts by reach by the end of each month under the term of this Agreement. WWD shall also submit water accounting related to this Agreement to the following staff at San Luis Field Division.

Mr. Mandeep S. Bling
Supervising HEP Utility Engineer
Department of Water Resources
San Luis Field Division
31770 Gonzaga Road
Gustine, California 95322
Office Phone: (209) 827-5110
Fax: (209) 827- 0846
E-Mail: bling@water.ca.gov

- b. WWD and DWR shall immediately reconcile water accounting under this Agreement and settled the water accounting monthly. DWR will determine the final water deliveries by reach under this Agreement.
- c. All WWD local groundwater, total pump-in and total deliveries, conveyance losses and mitigation water, must balance to zero by the end of each month.

7. NO IMPACTS

- a. This Agreement shall not be administered or interpreted in any way that would cause adverse impacts to SWP approved Table A water or to any other SWP approved water allocations, water deliveries, or SWP operations or facilities. WWD shall be responsible, as determined by DWR, for any adverse impacts that may result from all services provided by DWR under this Agreement.
- b. WWD agrees that DWR will have sole determination of whether conveyance of the groundwater adversely affects SWP operations, including but not limited to, SWP approved allocations, water storage and deliveries, compliance with environmental regulations and water rights permits, flood control, or other SWP purposes.
- c. WWD shall be responsible, as determined by DWR, for any adverse impacts to the SWP or its long-term water contractors, including but not limited to damages to the Aqueduct from subsidence and water quality impacts that may result from the local groundwater pumping into the Aqueduct or conveyance of local groundwater to turnouts within Reaches 4-7.

8. WATER DELIVERY SCHEDULES

- a. DWR shall accept and convey WWD local groundwater inflow in accordance with a schedule which has been reviewed and approved by DWR. DWR's approval is dependent upon the times and amounts of the delivery and the overall delivery capability of the SWP. DWR shall not be obligated to deliver the water at times when such delivery would adversely impact SWP operations, facilities, or other SWP contractors.
- b. WWD shall submit revised monthly water delivery schedules for approval to the State Water Project Analysis Office, Water Deliveries Section, indicating timing and point of delivery requested under to this Agreement with reference to SWPAO #14010. Revised schedules shall be sent by electronic mail to SWPDeliveries@water.ca.gov or by FAX to (916) 653-9628, Attention: Chief, Water Deliveries Section.
- c. WWD shall submit weekly schedules for the pump-in, conveyance and delivery of WWD's local groundwater under this Agreement to the San Luis Field Division, Water Operations Section, indicating timing and point of delivery requested with reference to SWPAO #14010. Schedules shall be sent by electronic mail to slwtrops@water.ca.gov or by FAX to (209) 826-3446, Attention: Chief, Water Operations Section.
- d. WWD shall submit all weekly water schedules described above by 10:00 a.m. Wednesday, for the following week, Monday through Sunday, to the appropriate field division Water Operations Section for the SWP contractor.
- e. WWD shall also concurrently send weekly water schedules by electronic mail or fax to the State Water Project Operations Control Office:
 - (i) Water Management Branch
Water_deliv_sched@water.ca.gov
FAX to (916) 574-2785
Attention: Chief, Water Management Branch
 - (ii). Power Management and Optimization Branch
Water_deliv_sched@water.ca.gov
FAX to (916) 574-2785
Attention: Chief, Power Management and Optimization Branch
 - (iii). Pre-Scheduling Section
Presched@water.ca.gov
FAX to (916) 574-2782
Attention: Chief, Pre-Scheduling Section

9. CHARGES

WWD shall pay to DWR for all services provided by DWR related to this Agreement, including but not limited to:

- a. A one-time Agreement Preparation Fee of \$10,000 to cover DWR's costs for the development, preparation and execution of this Agreement;
- b. A Monthly Administrative Fee of \$700 to cover DWR's costs to administer the Agreement, maintain records, and prepare monthly billings. This fee shall be charged beginning in the month when DWR first accepts local groundwater into the Aqueduct and will be charged each month during pump-in, conveyance or delivery of local groundwater to WWD and until all mitigation water has been accepted by DWR, or this Agreement is terminated.
- c. WWD agrees to pay direct costs incurred by DWR as a result of providing services under this Agreement which otherwise would not have been performed in absence of this Agreement. These costs include, but are not limited to water quality testing, meter calibration, water measurements, and personnel costs of staff time and travel.
- d. A Use-of Facilities fee of \$7.33 per acre-foot for conveyance of local groundwater to turnouts in Reaches 4-7 of the Aqueduct.
- e. In addition to the charges identified above, WWD agrees to pay to DWR any additional identified demonstrable increases in cost that would otherwise be borne by DWR or by the SWP contractors not signatory to this Agreement as a result of DWR providing service under this Agreement.
- f. All payments shall be due within 30 days after the date of DWR's invoice. Interest shall be charged for all delinquent payments. WWD shall pay to DWR accrued interest on all overdue payments at the rate of 1 percent per month from the due date to the date of payment.

10. COMPLIANCE WITH APPLICABLE LAWS AND OBTAINING APPROVALS

- a. The pump-in, conveyance and delivery of WWD's local groundwater under this Agreement shall be contingent on, and subject to, any necessary approvals and shall be governed by the terms and conditions of such approval(s) and any other applicable regulation in effect at the time of delivery. WWD shall be responsible for complying with all applicable laws and regulations and for securing any required consent, permit, or order.

- b. Pursuant to the Governor's Executive Order of April 25, 2014, DWR's responsibilities under CEQA have been temporarily suspended for actions to move water to areas of need.

11. LIABILITY

- a. DWR is not responsible for the use, effects, or disposal of WWD's local groundwater from source wells prior to introduction into the Aqueduct or after the water passes through WWD's turnouts in Reaches 4-7 of the California Aqueduct. Responsibility under the terms of this Agreement shifts from DWR to WWD when the local groundwater passes through WWD's turnouts.
- b. WWD agrees to defend and hold DWR, its officers and employees, harmless from any direct or indirect loss, liability, lawsuit, cause of action, judgment or claim, and shall indemnify DWR, its officers and employees, for all lawsuits, costs, damages, judgments, attorneys fees, and liabilities that DWR, its officers and employees incur as result of DWR providing services to WWD under this Agreement, except to the extent resulting from the sole negligence or willful misconduct of DWR.
- c. If uncontrollable forces preclude DWR from accepting or delivering water from or to WWD under this Agreement, either partially or completely, then DWR is relieved from the obligation to deliver the water under this Agreement to the extent that DWR is reasonably unable to complete the obligation due to the uncontrollable force. Uncontrollable forces shall include, but are not limited to earthquakes, fires, tornadoes, floods, and other natural or human caused disasters. WWD shall not be entitled to recover any administrative costs or other costs incurred under this Agreement if uncontrollable forces preclude DWR from delivering the water.
- d. The performance of the parties to this Agreement is contingent upon approval of all governmental agencies with jurisdiction over approval of this Agreement, including without limitation any necessary compliance with applicable environmental laws. If unforeseen conditions prohibit completion of deliveries herein, after partial deliveries are made hereunder, this Agreement will be treated as though rescinded except for responsibilities for liabilities and water already delivered. Unforeseen conditions include, but are not limited to, failure of approvals or withdrawal of approval by any governmental agency with jurisdiction over this Agreement or administrative order with respect thereto.

12. DISPUTE RESOLUTION

In the event of dispute regarding interpretation or implementation of this Agreement, the Director of DWR and general manager of WWD shall endeavor to resolve the dispute by meeting within 30 days after the request of a Party. If the dispute is unresolved, the Parties shall use the services of a mutually acceptable consultant in an effort to resolve the dispute. Parties involved in the dispute shall share the fees and expenses of the consultant equally. If a consultant cannot be agreed upon, or if the consultant's recommendations are not acceptable to the Parties, and unless the Parties otherwise agree, the matter may be resolved by litigation and any Party may at its option pursue any available legal remedy, including, but not limited to, injunctive and other equitable relief.

13. ASSIGNMENT OF AGREEMENT

Without the prior written consent of DWR and WWD, this Agreement shall not be assignable by WWD in whole or in part.

14. MODIFICATION OF AGREEMENT

No modification of the terms and conditions of this Agreement shall be valid unless made in writing and signed by the Parties to this Agreement.

15. PARAGRAPH HEADINGS

The paragraph headings of this Agreement are for the convenience of the Parties and shall not be considered to limit, expand, or define the contents of the respective paragraphs.

16. TERMS TO BE REASONABLE

Where the terms of this Agreement provide for actions to be based upon the opinion, judgment, approval, review, or determination of any party, such terms are to be construed as providing that such opinion, judgment, approval, review, or determination be reasonable.

17. SIGNATURE CLAUSE

The signatories represent that they have appropriate authorization to enter into this Agreement on behalf of the Party for whom they sign. A copy of any resolution or other documentation authorizing WWD to enter into this Agreement, if such resolution or authorization is required, shall be provided to DWR.

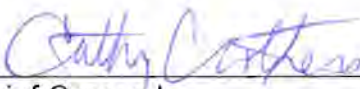
18. EXECUTION IN COUNTERPART

This Agreement may be executed in counterpart. The Parties agree to accept facsimile or electronically scanned signatures as original signatures. The Agreement shall take effect as soon as both Parties have signed. Immediately after execution, WWD shall transmit a copy of the executed Agreement by facsimile or electronic file to Robert B. Cooke, Chief, State Water Project Analysis Office at (916) 653-9628 or swpao-chief@water.ca.gov.


IN WITNESS WHEREOF, the Parties hereto have entered into this Agreement

Approved as to legal form
and sufficiency

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES



✓ Chief Counsel
Department of Water Resources



Carl A. Torgersen
Deputy Director

7-11-2014

Date

7/15/14

Date

WESTLANDS WATER DISTRICT

Name

Title

Date

cc: Mr. Terry Erlewine, General Manager
State Water Contractors
1121 L Street, Suite 1050
Sacramento, California 95814

18. EXECUTION IN COUNTERPART

This Agreement may be executed in counterpart. The Parties agree to accept facsimile or electronically scanned signatures as original signatures. The Agreement shall take effect as soon as both Parties have signed. Immediately after execution, WWD shall transmit a copy of the executed Agreement by facsimile or electronic file to Robert B. Cooke, Chief, State Water Project Analysis Office at (916) 653-9628 or swpao-chief@water.ca.gov.

IN WITNESS WHEREOF, the Parties hereto have entered into this Agreement

Approved as to legal form
and sufficiency

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Chief Counsel
Department of Water Resources

Carl A. Torgersen
Deputy Director

Date

Date

WESTLANDS WATER DISTRICT



Name

CHIEF OPERATING OFFICER

Title

July 10, 2014

Date

cc: Mr. Terry Erlewine, General Manager
State Water Contractors
1121 L Street, Suite 1050
Sacramento, California 95814

**ATTACHMENT 1
TABLE 1**

MCLs, DLRs, and PHGs for Regulated Drinking Water Contaminants				
(Units are in milligrams per liter (mg/L), unless otherwise noted.)				
Last Update: July 1, 2014				
This table includes:				
California's maximum contaminant levels (MCLs)				
Detection limits for purposes of reporting (DLRs)				
<u>Public health goals (PHGs) from the Office of Environmental Health Hazard Assessment (OEHHA)</u>				
Also, PHGs for NDMA and 1,2,3-Trichloropropane (which are not yet regulated) are included at the bottom of this table.				
	MCL	DLR	PHG	Date of PHG
<i>Chemicals with MCLs in 22 CCR §64431—Inorganic Chemicals</i>				
Aluminum	1	0.05	0.6	2001
Antimony	0.006	0.006	0.02	1997
Antimony	--	--	0.0007	2009 draft
Arsenic	0.010	0.002	0.000004	2004
Asbestos (MFL = million fibers per liter; for fibers >10 microns long)	7 MFL	0.2 MFL	7 MFL	2003
Barium	1	0.1	2	2003
Beryllium	0.004	0.001	0.001	2003
Cadmium	0.005	0.001	0.00004	2006
Chromium, Total - OEHHA withdrew the 0.0025-mg/L PHG	0.05	0.01	withdrawn Nov. 2001	1999
Chromium, Hexavalent	0.010	0.001	0.00002	2011
Cyanide	0.15	0.1	0.15	1997
Fluoride	2	0.1	1	1997
Mercury (inorganic)	0.002	0.001	0.0012	1999 (rev2005)*
Nickel	0.1	0.01	0.012	2001
Nitrate (as NO ₃)	45	2	45	1997
Nitrite (as N)	1 as N	0.4	1 as N	1997
Nitrate + Nitrite	10 as N	--	10 as N	1997
Perchlorate	0.006	0.004	0.006	2004
Perchlorate	--	--	0.001	2012 draft
Selenium	0.05	0.005	0.03	2010
Thallium	0.002	0.001	0.0001	1999 (rev2004)

Copper and Lead, 22 CCR §64672.3				
<i>Values referred to as MCLs for lead and copper are not actually MCLs; instead, they are called "Action Levels" under the lead and copper rule</i>				
Copper	1.3	0.05	0.3	2008
Lead	0.015	0.005	0.0002	2009
Radionuclides with MCLs in 22 CCR §64441 and §64443—Radioactivity				
[units are picocuries per liter (pCi/L), unless otherwise stated; n/a = not applicable]				
Gross alpha particle activity - OEHHA concluded in 2003 that a PHG was not practical	15	3	none	n/a
Gross beta particle activity - OEHHA concluded in 2003 that a PHG was not practical	4 mrem/yr	4	none	n/a
Radium-226 + Radium-228	5	--	--	--
Strontium-90	8	2	0.35	2006
Tritium	20,000	1,000	400	2006
Uranium	20	1	0.43	2001
Chemicals with MCLs in 22 CCR §64444—Organic Chemicals				
(a) Volatile Organic Chemicals (VOCs)				
Benzene	0.001	0.0005	0.00015	2001
Carbon tetrachloride	0.0005	0.0005	0.0001	2000
1,2-Dichlorobenzene	0.6	0.0005	0.6	1997 (rev2009)
1,4-Dichlorobenzene (p-DCB)	0.005	0.0005	0.006	1997
1,1-Dichloroethane (1,1-DCA)	0.005	0.0005	0.003	2003
1,2-Dichloroethane (1,2-DCA)	0.0005	0.0005	0.0004	1999 (rev2005)
1,1-Dichloroethylene (1,1-DCE)	0.006	0.0005	0.01	1999
cis-1,2-Dichloroethylene	0.006	0.0005	0.1	2006
trans-1,2-Dichloroethylene	0.01	0.0005	0.06	2006
Dichloromethane (Methylene chloride)	0.005	0.0005	0.004	2000
1,2-Dichloropropane	0.005	0.0005	0.0005	1999
1,3-Dichloropropene	0.0005	0.0005	0.0002	1999 (rev2006)
Ethylbenzene	0.3	0.0005	0.3	1997
Methyl tertiary butyl ether (MTBE)	0.013	0.003	0.013	1999
Monochlorobenzene	0.07	0.0005	0.07	2014
Styrene	0.1	0.0005	0.0005	2010
1,1,2,2-Tetrachloroethane	0.001	0.0005	0.0001	2003
Tetrachloroethylene (PCE)	0.005	0.0005	0.00006	2001
Toluene	0.15	0.0005	0.15	1999
1,2,4-Trichlorobenzene	0.005	0.0005	0.005	1999

1,1,1-Trichloroethane (1,1,1-TCA)	0.2	0.0005	1	2006
1,1,2-Trichloroethane (1,1,2-TCA)	0.005	0.0005	0.0003	2006
Trichloroethylene (TCE)	0.005	0.0005	0.0017	2009
Trichlorofluoromethane (Freon 11)	0.15	0.005	1.3	2014
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1.2	0.01	4	1997 (rev2011)
Vinyl chloride	0.0005	0.0005	0.00005	2000
Xylenes	1.75	0.0005	1.8	1997
(b) Non-Volatile Synthetic Organic Chemicals (SOCs)				
Alachlor	0.002	0.001	0.004	1997
Atrazine	0.001	0.0005	0.00015	1999
Bentazon	0.018	0.002	0.2	1999 (rev2009)
Benzo(a)pyrene	0.0002	0.0001	0.000007	2010
Carbofuran	0.018	0.005	0.0017	2000
Chlordane	0.0001	0.0001	0.00003	1997 (rev2006)
Dalapon	0.2	0.01	0.79	1997 (rev2009)
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0.00001	0.0000017	1999
2,4-Dichlorophenoxyacetic acid (2,4-D)	0.07	0.01	0.02	2009
Di(2-ethylhexyl)adipate	0.4	0.005	0.2	2003
Di(2-ethylhexyl)phthalate (DEHP)	0.004	0.003	0.012	1997
Dinoseb	0.007	0.002	0.014	1997 (rev2010)
Diquat	0.02	0.004	0.015	2000
Endrin	0.002	0.0001	0.0018	1999 (rev2008)
Endothal	0.1	0.045	0.094	2014
Ethylene dibromide (EDB)	0.00005	0.00002	0.00001	2003
Glyphosate	0.7	0.025	0.9	2007
Heptachlor	0.00001	0.00001	0.000008	1999
Heptachlor epoxide	0.00001	0.00001	0.000006	1999
Hexachlorobenzene	0.001	0.0005	0.00003	2003
Hexachlorocyclopentadiene	0.05	0.001	0.002	2014
Lindane	0.0002	0.0002	0.000032	1999 (rev2005)
Methoxychlor	0.03	0.01	0.00009	2010
Molinate	0.02	0.002	0.001	2008
Oxamyl	0.05	0.02	0.026	2009
Pentachlorophenol	0.001	0.0002	0.0003	2009
Picloram	0.5	0.001	0.5	1997
Polychlorinated biphenyls (PCBs)	0.0005	0.0005	0.00009	2007
Simazine	0.004	0.001	0.004	2001

2,4,5-TP (Silvex)	0.05	0.001	0.003	2014
2,3,7,8-TCDD (dioxin)	3×10^{-8}	5×10^{-9}	5×10^{-11}	2010
Thiobencarb	0.07	0.001	0.07	2000
Toxaphene	0.003	0.001	0.00003	2003
*OEHHA's review of this chemical during the year indicated (rev20XX) resulted in no change in the PHG.				
**The DLR for Bromate is 0.0010 mg/L for analysis performed using EPA Method 317.0 Revision 2.0, 321.8, or 326.0.				

**Attachment Table Modified Title 22 Secondary Maximum Contaminant Levels
(Title 22 Table 64449-A)**

Constituent	Units	Maximum Contaminant Level
Secondary		
Aluminum	mg/L	0.2
Chloride	mg/L	250
Copper	mg/L	1
Iron	mg/L	0.3
Manganese	mg/L	0.05
Silver	mg/L	0.1
Zinc	mg/L	5

DEPARTMENT OF WATER RESOURCES WATER QUALITY POLICY AND IMPLEMENTATION PROCESS FOR ACCEPTANCE OF NON-PROJECT WATER INTO THE STATE WATER PROJECT

It is the Department of Water Resources (DWR) policy to assist with the conveyance of water to provide water supply, and to protect the State Water Project (SWP) water quality within the California Aqueduct. To facilitate this policy DWR provides the following implementation process for accepting non-project water into the SWP (Policy). For purposes of this document, SWP and California Aqueduct are interchangeable and the same.

POLICY PROVISIONS

DWR shall consider and evaluate all requests for Non-Project (NP) water input directly into the SWP conveyance facilities based upon the criteria established in this document. NP water shall be considered to be any water input into the SWP for conveyance by the SWP that is not directly diverted from the Sacramento-San Joaquin Delta or natural inflow into SWP reservoirs.

The proponent of any NP water input proposal shall demonstrate that the water is of consistent, predictable, and acceptable quality.

DWR will consult with State Water Project (Contractors), existing NP participants and the Department of Public Health (DPH) on drinking water quality issues relating to NP water as needed to assure the protection of SWP water quality.

Nothing in this document shall be construed as authorizing the objectives of Article 19 of the SWP water supply contracts or DPH drinking water maximum contaminant levels to be exceeded.

This Policy shall not constrain the ability of DWR to operate the SWP for its intended purposes and shall not adversely impact SWP water deliveries, operation or facilities.

EVALUATING NP WATER PROPOSALS

DWR shall use a two-tiered approach for evaluating NP water for input into the California Aqueduct.

NP Tier 1

Tier 1 NP pump-in proposals (PIP) shall exhibit water quality that is essentially the same, or better, than what occurs in the California Aqueduct. PIP's considered to be tier 1 shall be approved by DWR (see baseline water quality tables 1 through 4).

NP Tier 2

Tier 2 PIP's are those that exhibit water quality that is different and possibly worse than in the California Aqueduct and/or have the potential to cause adverse impacts to the Contractors. Tier 2 PIP's shall be referred to a NP Facilitation Group (FG), which would review the project and if needed make recommendations to DWR in consideration of the PIP.

SWC Facilitation Group

This advisory group consists of representatives from each Contractor that chooses to participate and DWR. The group shall review tier 2 PIP's based on the merits, impacts, mitigation, water quality monitoring, cost/benefits or other issues of each PIP and provide recommendations to DWR. Upon initial review of tier 2 PIP by DWR, it shall then be submitted to the FG for review. A consensus recommendation from the FG would be sought regarding approval of the PIP. DWR shall base its decision on the merits of the PIP, recommendations of the FG and the PIP's ability to provide overall benefits to the SWP and the State of California.

Blending Water Sources

Blending of multiple water sources prior to inflow into the SWP is acceptable and may be preferred depending upon water quality of the PIP. Blending of water in this manner may be used to qualify a project as NP Tier 1.

Mixing (blending) within the California aqueduct can be considered but shall not be adjacent to municipal and industrial (M&I) delivery locations. PIP's that are coordinating water discharged to maintain or improve SWP water quality are an example of the mixing approach. The PIP shall demonstrate by model or an approach acceptable to DWR and the FG that the water is adequately mixed before reaching the first M&I customer. Generally NP PIP's that involve mixing with SWP water shall be considered NP Tier 2.

Baseline Water Quality

To aid in developing and evaluating PIP's both historical and current SWP water quality levels shall be considered. A representative baseline water quality summary is shown in Tables 1 through 4, using historical SWP water quality records at O'Neill Forebay.

NP IMPLEMENTATION PROCESS

Project Proposals

The NP project proponent requesting to introduce water into the SWP shall submit a detailed PIP to DWR. The proponent shall demonstrate that the NP water is of

consistent, predictable and reliable quality, and is responsible for preparing and complying with any and all contracts, environmental documents, permits or licenses that are necessary consistent with applicable laws, regulations, agreements, procedures, or policies.

Project Description

The proponent will submit to DWR a PIP describing the proposed program, identifying the water source(s), planned operation, characterizing the inflow water quality and any anticipated impacts to SWP water quality and/or operations. The PIP should be submitted at least one month prior to proposed start up to allow for DWR and FG review. The PIP shall include:

- Project proponent names, locations, addresses, and contact person(s).
- Maps identifying all sources of water, point of inflow to the SWP and ultimate fate of the introduced water.
- Terms and conditions of inflow, timing, rates and volumes of inflow, pumping, conveyance and storage requirements.
- Construction details of any facilities located adjacent to the SWP including valves, meters, and pump and piping size.
- All potential impacts and/or benefits to downstream SWP water contractors.
- Detailed water quality data for all sources of water and any blend of sources that will be introduced into the SWP.
- Identify anticipated water quality changes within the SWP.
- Identify other relevant environmental issues such as subsidence, ground water overdraft or, presents of endangered species.
- Provide performance measures and remedial actions that will be taken in the event projected SWP water quality levels are not met.
- Reference an existing contract or indicate that one is in process with DWR to conduct a PIP.

Water Quality Monitoring

In order to demonstrate that the water source(s) are of consistent, predictable, and acceptable quality the NP proponent shall monitor water quality. The proponent shall, for the duration of the program, regularly report on operations as they affect water quality, monitoring data and water quality changes. Both DPH title 22 and a short list of Constituents of Concern (COC) shall be monitored for based upon one of the following water quality monitoring options.

Constituents of Concern Current COC are Arsenic, Bromide, Chloride, Nitrate, Sulfate, Organic Carbon, and Total Dissolved Solids. These COC's may be changed as needed.

Water Quality Monitoring Options NP proponents shall select one of the testing options below and perform all water quality testing and provide analytical results in

a timely manner as described herein. Monitoring shall be conducted for initial well start-up, periodic well re-testing and on-going testing during operation. Well data should be no more than three years old. Title 22 results should be provided to DWR and the FG within two weeks of testing and COC results within one week of testing, unless other schedules are agreed upon by DWR and the FG.

Option 1 - Baseline tests for Individual Wells

Well Start-up: Title 22 tests are required for all wells participating in the program prior to start-up. An existing title 22 test that is no more than three years old may be used. A Title 22 test may be substituted for any well near a similar well with a Title 22 test of record.

Well Re-testing: Title 22 test for all wells participating every three years.

Ongoing Monitoring: COC tests are required for all discharge locations to the SWP at start up and quarterly thereafter for new programs and resumption of established programs. New programs or those with constituents that may potentially degrade the SWP shall conduct at least weekly COC sampling of all discharge locations until the proponent demonstrates that the NP water is of consistent, predictable and reliable quality. Once the nature of the discharge has been clearly established, the COC tests are required quarterly for each discharge point.

Option 2 - Baseline tests for Representative Wells

Well Start-up: COC tests of record are required for all wells participating in the program and Title 22 tests of record are required for representative wells comprising a subset of all wells. This would typically be a group of wells that are manifold together and discharge to one pipe. Representative wells shall be identified on a case-by-case basis to be representative of the manifold area, well proximity, and water levels.

Well Re-testing: Same as required in Option 1.

On-going Monitoring: COC tests are required for all discharge locations to the SWP at start up and monthly thereafter for the duration of the program and annually at each well. New programs or those with constituents that may potentially degrade the SWP shall conduct weekly COC sampling of all discharge locations until the proponent demonstrates that the NP water is of consistent, predictable and reliable quality.

Option 3 – Self Directed

A PIP may propose a water quality monitoring program for approval by DWR and the FG that is different from options 1 or 2. It must include COC and title 22 testing

that will fully characterize water pumped into the SWP and be at an interval to show a consistent, predictable and reliable quality.

Analytical Methods

Analytical laboratories used by project proponents shall be DPH certified by the Environmental Laboratory Accreditation Program (ELAP) and use EPA prescribed and ELAP accredited methods for drinking water analysis. Minimum Reporting Levels must be at least as low as the DPH required detection limits for purposes of reporting (DLR). The current DLRs are listed on the DPH website at [Http://www.cdph.ca.gov/certlic/drinkingwater/Pages/MCLsandPHGs](http://www.cdph.ca.gov/certlic/drinkingwater/Pages/MCLsandPHGs). DWR shall continue to use Bryte Chemical Laboratory as it's analytical and reference lab.

Flow Measurements

The project proponent shall maintain current, accurate records of water production rate and volume from each source, as well as, each point of discharge into the SWP. All flow measurements shall be submitted to regularly to DWR.

RECONSIDERATION

If an NP proponent disagrees with the FG or DWR decision or feels that there is an overriding benefit of the proposal, the proponent may request reconsideration from DWR on the basis of overriding public benefit or water supply deficiency. DWR shall consider these requests on a case-by-case basis.

ONGOING PROGRAM

Any NP Proponent who has successfully established a NP water inflow program (Including existing Kern Fan Banking Projects, Kern Water Bank, Pioneer and Berrenda Mesa Projects, Semitropic Water Storage District Wheeler Ridge Mariposa Water Storage District and Arvin Edison Water Storage District) may reinitiate the program by notifying DWR at least ten days before inflow is scheduled to begin and provide the following information:

- Updated water quality data and/or updated modeling that adequately reflects the quality of water to be introduced into the SWP.
- Turn-in location.
- Expected rate and duration of inflow. DWR shall notify the FG of this reinitiating of inflow.
- Water quality monitoring schedule that meets the objective of this policy.

FUTURE NP PROGRAMS

Future NP projects should be planned and designed considering the following items:

- Projects involving water quality exceeding primary drinking water standards shall show that the water shall be treated or blended before it enters the SWP to prevent water quality impacts.
- The project proponent of a Tier 2 proposal should clearly identify and establish that water inflow shall be managed and operated such that poor quality water will be blended with better quality water so that SWP water quality will not be degraded upon acceptable levels as determined by the FG and DWR.
- If a significant water supply deficiency exists and it is recommended by the FG that raw water quality criteria be set aside to ensure adequate supply, such action shall be subject to approval by the DPH.
- The project proponent of a NP inflow program which degrades SWP water quality shall identify mitigation to downstream water contractors for water quality impacts associated with increased water supply or treatment costs.

DWR ROLE

DWR shall seek, as needed, DPH or SWC recommendations on changes or additions to this document governing the NP water quality projects. The FG shall review proposed changes or additions prior to implementation by DWR, as needed.

DWR and or the United States Bureau of Reclamation (for San Luis Canal inflow) shall have ultimate responsibility for approving the water quality of all NP inflow, as well as, the oversight of monitoring and tracking the water quality of operating programs. DWR shall also ensure that the proponents of the NP inflow program perform according to their proposals, and will take appropriate action in the event of non-conformance.

Project Proposal Review Process

Upon receipt of a proposal for PIP, DWR shall review it for adequacy. DWR shall consider all PIPs based upon these guidelines. Review shall take no more than one month after receiving a complete program proposal. If necessary, DWR will convene timely meetings with the FG during the review. At a minimum the review will include

- Examination of all documents and data for completeness of the PIP.
- Notification of the affected Field Divisions, and the FG has been received by DWR.
- Consideration by DWR of comments from all parties before the final decision.
- Upon completion of the review DWR will notify the proponent and FG of the acceptance of the PIP or explain the reason(s) for rejecting it.
- DWR may reconsider a decision on a PIP based upon a recommendation from the FG. Reconsideration by DWR will be on a case-by-case basis.

Periodic Review

DWR may schedule periodic reviews of each operating NP inflow with input from the FG. As part of the review, program proponents shall provide the following information:

- Summary of deliveries to the Aqueduct.
- Water quality monitoring results.
- Proposed changes in the program operation.

The review may result in changes in monitoring and testing required of the program proponent as a result of;

- New constituents being added to the EPA /DPH list of drinking water standards.
- Changes in the maximum contaminant levels for the EPA/DPH list of drinking water standards.
- Identification of new constituents of concern.
- Changes in the water quality provided by the program.
- Changes in constituent background levels in the California Aqueduct.

This procedure shall recognize emerging contaminants and/or those detrimental to agricultural viability as they are identified by the regulatory agencies and shall set appropriate standards for water introduction based upon ambient levels in the California Aqueduct or State Notification Levels. Emerging contaminants are those that may pose significant risk to public health, but as yet do not have an MCL. Currently the Office of Environmental Health Hazard Assessment and the DPH establish Public Health Goals and Notification Levels, respectively. These levels, though not regulated, do provide health-based guidance to water utilities and can require public notification if exceeded.

Water Quality Review

DWR shall track and periodically report to the FG on water quality monitoring results on the SWP from NP water inflow and make all water quality data available to the public upon request.

- DWR shall review analyze and maintain all records of water quality testing conducted by the proponent of the well(s), source(s) and discharge(s) into the SWP.
- DWR shall determine what additional water quality monitoring, if any, is necessary within the SWP to ensure adequate protection of SWP water quality. DWR shall conduct all water quality monitoring within the SWP.
- DWR may prepare periodic reports of NP projects.

On-site Surveillance

The appropriate Field Division within DWR will be responsible for review and approval of all construction activities within the SWP right-of-way. Plans showing the discharge system piping, valves, sampling point, meters and locations must be submitted and approved prior to any construction. In addition, the appropriate Field Division will be responsible for confirmation of all meter readings and water quality monitoring conducted by the proponent.

- Field division staff may visit, inspect, and calibrate meters and measure flow conditions at each source or point of inflow into the SWP.
- Flow meters, sampling ports and anti-siphon valves must be conveniently located near the SWP right-of-way.
- Field division staff may collect water samples at each source or point of discharge into the SWP.
- The appropriate Field Division shall conduct additional water quality monitoring within the SWP, if deemed necessary, to assure compliance with the NP Inflow Criteria.
- DWR shall monitor aqueduct water quality and analyze several “split samples” of the water at the point of introduction into the aqueduct to ensure consistent analytical results.

POLICY APPROVAL

Approval Recommended
Date _____

David V. Starks
Chief, Division of Operations and Maintenance
Department of Water Resources

Approved
Date _____

Carl A. Torgersen
Deputy Director State Water Project
Department of Water Resources

Table A1 HISTORICAL WATER QUALITY CONDITIONS 1988 TO 2011 AT O'NEILL FOREBAY OUTLET (mg/L)

Parameter	Mean	Min.	Max.	Std. Dev.
Aluminum	0.03	0.01	0.527	0.05
Antimony	0.002	0.001*	0.005	0.002
Arsenic	0.002	0.001	0.004	0.001
Barium	0.05	0.05	0.068	0.002
Beryllium	0.001*	0.001*	0.001*	0.000
Bromide	0.22	0.04	0.54	0.16
Cadmium	0.003	0.001	0.005	0.002
Chromium	0.004	0.001	0.011	0.002
Copper	0.004	0.001	0.028	0.003
Fluoride	0.1	0.1	0.5	0.1
Iron	0.037	0.005	0.416	0.050
Manganese	0.009	0.005	0.06	0.007
Mercury	0.001	0.0002	0.001	0.0004
Nickel	0.001	0.001	0.004	0.0005
Nitrate	2.9	0.2	8.1	1.6
Selenium	0.001	0.001	0.002	0.0001
Silver	0.003	0.001	0.005	0.002
Sulfate	42	14	99	15
Total Organic Carbon	4.0	0.8	12.6	1.6
Zinc	0.007	0.005	0.21	0.01

*These values represent reporting limits. Actual values would be lower

Table A2 O'Neill Forebay Outlet Total Dissolved Solids Criteria by Water Year Classification, 1988-2011 (mg/L)

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Wet	227.2	262.5	295.4	228.9	213.8	231.2	184.4	226.5	181.5	171.4	195.7	157.3
Near Normal	317.9	324.7	351.7	295.4	268.1	302.7	270.0	285.1	230.1	211.9	170.9	202.6
Dry	286.4	319.6	370.0	362.0	344.2	305.2	240.4	278.2	307.3	234.8	269.0	336.6
Critical	256.6	312.9	372.9	367.0	361.0	335.0	307.1	291.8	335.1	325.7	339.4	328.8

* Year type is based on water year classification. Below normal and above normal year types have been combined into one designation called "near normal."

Table A3 O'Neill Forebay Outlet Bromide Criteria by Water Year Classification, 1988-2011 (mg/L)

Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Wet	0.19	0.24	0.28	0.13	0.10	0.12	0.12	0.17	0.12	0.12	0.13	0.10
Near Normal	0.31	0.31	0.34	0.21	0.15	0.15	0.18	0.22	0.15	0.15	0.14	0.19
Dry	0.25	0.29	0.35	0.35	0.24	0.20	0.17	0.24	0.27	0.13	0.29	0.41
Critical	0.26	0.28	0.32	0.37	0.33	0.27	0.22	0.22	0.28	0.28	0.32	0.37

* Year type is based on water year classification. Below normal and above normal year types have been combined into one designation called "near normal."

Table A4 O'Neill Forebay Outlet Total Organic Carbon Criteria by Water Year Classification, 1988-2011 (mg/L)

Year Type*	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Wet	2.8	2.9	3.9	5.2	4.8	3.8	3.9	3.4	3.1	3.2	3.1	2.7
Near Normal	3.7	4.1	4.0	7.0	6.3	5.6	4.7	4.4	4.0	3.3	3.3	3.4
Dry	3.0	3.0	4.0	5.7	4.8	5.7	4.5	3.6	3.7	2.9	2.9	2.7
Critical	2.8	3.1	3.3	4.9	6.0	5.7	4.7	4.0	3.8	3.9	4.0	3.5

* Year type is based on water year classification. Below normal and above normal year types have been combined into one designation called "near normal."

Response to Coalition Comment Letter dated April 19, 2018

Coalition-1 Reclamation disagrees with the comment that asserts that Reclamation has “consistently avoided public notification” and that the notice for Environmental Assessment (EA)-18-007 “was not provided except to the select contractors and water districts involved with the proposed discharges of groundwater.”

Although the National Environmental Policy Act (NEPA) does not require an EA to be released for public review, Reclamation did so with regard to the proposed revised design constraints for the previously approved Delta-Mendota Canal Groundwater Pump-in Program (DMC Groundwater Pump-in Program) in order to be open and transparent, gather public input, and to further inform decision making. Pursuant to 40 CFR 1506.6(b), Reclamation publicly noticed the availability of the draft EA on April 11, 2018 and did not send this to just “the select contractors and water districts involved with the proposed discharges of groundwater.”

Coalition-2 The comment inaccurately describes the proposed action analyzed in EA-18-007 as discharge of “contaminated groundwater into water of the State and Nation” in violation of the “Clean Water Act and State of California Porter-Cologne Laws” as well as providing an “incentive to further overdraft groundwater basins where subsidence is already occurring.”

The Proposed Action analyzed in EA-18-007 is the incorporation of additional design constraints into the previously approved DMC Groundwater Pump-in Program in order to address the Program’s potential contribution to subsidence along the DMC. The current program allows the annual cumulative introduction of up to 50,000 acre-feet (AF) of groundwater into the DMC over a 10 year period. Under the current Program, each source of non-Project groundwater must be tested for the full suite of constituents listed in Title 22 and each discharge must be tested to confirm that the non-Project water is consistent, predictable, and acceptable before it enters the DMC. The frequency of testing (weekly for four consecutive weeks, then monthly) are described in the monitoring plan included as Appendix A of EA-18-007. The water quality standards and monitoring conform with federal and state drinking water standards.

Further, the additional design constraints added by Reclamation to the Program limit the amount of water that can be pumped by incorporating limitations on introduction of groundwater into the DMC based on zones, CVP agricultural allocations, and shut-off triggers for participating wells that ensure groundwater pumping will not exceed maximum depth to groundwater experienced in a particular well. Specific, water quality monitoring, groundwater monitoring, and reporting requirements are described in Section 2.2.2 and Appendix A of EA-18-007.

Coalition-3 The commenter supports the No Action Alternative and states that Reclamation should not permit groundwater pumping until groundwater sustainability plans pursuant to the State Groundwater Management Act (SGMA) have been adopted.

Reclamation does not have authority or jurisdiction to “permit” groundwater pumping. Reclamation’s action is limited to approving (or not) the introduction of groundwater into the DMC pursuant to the Warren Act of 1911. As described in Section 3.2.2, groundwater provides approximately 37% (~509,687 AF) of overall water supplies from 7,132 wells in the Delta-Mendota Subbasin and approximately 2% (~19,198 AF) of overall water supplies from 7,267 wells in the Tracy Subbasin (DWR 2018b). The 47 wells (40 in Delta-Mendota and 7 in Tracy) are a very small portion of the total wells (0.6% and 0.1%, respectively) within the basins that pump groundwater. Trends in groundwater pumping in the Action area are anticipated to continue in a similar manner as it has in the past under both the No Action and Proposed Action alternatives, with pumping increasing during drought years and decreasing during wet years at least in the short-term. Groundwater pumping sustainability will be addressed through development of groundwater sustainability plans pursuant to SGMA by 2020 for the Delta-Mendota Subbasin and 2022 for the Tracy Subbasin. In the meantime, the shutoff triggers and resumption triggers included in the design constraints have been developed to avoid contribution of the participating wells on overdrafting groundwater levels and increasing rates of subsidence in the Action area (see Section 2.2.2 and 3.2.2).

Coalition-4 Reclamation disagrees that the draft EA “clearly indicates that, compared to ‘no action’, the proposed alternative will increase risk of subsidence and degradation of DMC and SLC water quality. Water quality requirements that conform to State and Federal requirements have been in place for the previously improved DMC Groundwater Pump-in Program. None of the groundwater introduced into the DMC is introduced into the San Luis Canal (referred to as SLC in the comment letter). Reclamation closely measures salinity and selenium concentrations along the DMC and has not demonstrated any water quality impacts attributable to the conveyance of non-Project water in this canal. Furthermore, the San Luis & Delta-Mendota Water Authority (Authority) and the U.S. Geological Survey (USGS) monitor subsidence along the DMC and have not determined that subsidence effects were attributable to the conveyance of non-Project water in the DMC.

Coalition-5 Reclamation disagrees that “past operation of the Pump-in program has demonstrated both subsidence effects and water-quality impacts”. See Response to Coalition-4. The proposed design constraints that manage individual participating wells to specific levels above the maximum depth to groundwater for each of the wells will allow for specific control over groundwater at each location. Managing wells and extractions in this manner has proven effective in this subbasin including the regions (zones) that are prone to subsidence. The

depth to water at any given location will be monitored monthly and kept far below historical maximum depths, exceedance of which the USGS has determined relates directly to triggering and contributing to land subsidence.

Coalition-6 This comment asserts that in 2010 the EPA commented on a Notice of Preparation filed by Westlands Water District on an unrelated project stating that “MCL Drinking water standards do not fully protect all the beneficial uses of the canal and would be subject to NPDES permitting requirements pursuant to the federal Clean Water Act.”

The comment does not clarify what other “beneficial uses” are not being protected by MCL drinking water standards for the San Luis Canal. Reclamation has not received comments from the EPA regarding NPDES permitting on the Proposed Action. Further, as described previously, and in EA-18-007, each source of non-Project groundwater must meet Reclamation’s water quality requirements which are protective of beneficial uses in the DMC.

Coalition-7 The comment asserts that “a full range of alternatives should be evaluated” and “urge analysis of an alternative that reduces CVP water exports and groundwater overdraft along with long-term water demand...”

In accordance with the Department of the Interior’s NEPA regulations (43 CFR Part 46.310), EAs are not required to develop alternatives unless there are issues related to unresolved conflicts concerning alternative uses of available resources. As described in Section, 1.2 of EA-18-007, the purpose of the project is to provide additional water supplies for CVP contractors located along the DMC while minimizing potential contribution from the DMC Groundwater Pump-in Program to subsidence impacts and chronic lowering of groundwater levels along the DMC. It is unclear how an alternative that includes further reduction of CVP water exports would meet the need for the Project or prevent overdraft. See also Responses to Coalition-3 through Coalition-5.

Coalition-8 The comment is correct that the 2007 Record of Decision for the San Luis Drainage Feature Re-evaluation included a requirement for retirement of 200,000 acres of drainage impacted land in the San Luis Unit. Implementation of this drainage plan is underway. However, it is unclear how this comment relates to the DMC Groundwater Pump-in Program or Reclamation’s analysis in EA-18-007.

Coalition-9 Reclamation disagrees that Section 1 of Public Law 86-488, which authorized the construction of the San Luis Unit of the Central Valley Project, “limits CVP water deliveries to just 500,000 acres in total for the entire San Luis Unit”. The law specifically states, “for the principal purpose of furnishing water for the irrigation **of approximately** five hundred thousand acres of land in Merced, Fresno, and Kings Counties, California hereinafter referred to as the Federal San Luis unit service area, and as incidents thereto of furnishing water for municipal and

domestic use and providing recreation and fish and wildlife benefits, the Secretary of the Interior (hereinafter referred to as the Secretary) is authorized to construct operate, and maintain the San Luis unit as an integral part of the Central Valley project” (emphasis added). It is unclear what is being referenced in the statement, “excluding an extra 200,000 acres in Westlands Water District that increases demand and toxic runoff to groundwater and surface water.”

- Coalition-10 It is unclear what is being referenced in this comment or how “combining requirements of existing law and regulations with the forthcoming SGMA plan” would “eliminate the need for a pump-in program.” As described in Section 1.2 of EA-18-007, “DMC water service contractors need to find alternative sources of water to fulfill existing demands when Central Valley Project (CVP) water allocations are insufficient. The purpose of the project is to provide additional water supplies for CVP contractors located along the DMC while minimizing potential contribution from the DMC Groundwater Pump-in Program to subsidence impacts and chronic lowering of groundwater levels along the DMC.”

The Proposed Action is consistent with existing law and regulations. Any additional constraints placed on groundwater pumping due to SGMA and the “forthcoming” sustainability plans will also be incorporated into the Program.

- Coalition-11 The comment states that “Regardless of which alternative is implemented, monitoring of compliance needs to be more comprehensive, designed and managed by a third party, and there must be full and timely disclosure of data to the public.”

Reclamation does not understand how this comment is relevant to the Proposed Action. Reclamation closely monitors the concentration of selenium, salinity, and trace metals in the DMC. Reclamation uses advanced QA/QC protocols to verify the accuracy of all field and laboratory measurements. All DMC flow and water quality data are posted on the internet and are compiled in quarterly reports that have been shared with the public.

- Coalition-12 The comment is correct that no biological monitoring of selenium is required to ensure no take of listed species as take is not expected (see Section 3.1.2 of EA-18-007). As described previously, the concentration of selenium in each source of non-Project groundwater may not exceed 2 ppb (also referred to as $\mu\text{g/L}$) prior to introduction into the DMC. This criterion is based on the Central Valley Regional Water Quality Control Board’s 1996 selenium objective of 2 ppb monthly average for Grasslands wetlands water supply channels. No new objectives or criteria for wetlands has been promulgated by the Water Board. Should revised criteria be put in place, Reclamation’s water quality requirements will be revised accordingly. It should be noted that the amount of flow in the DMC from non-Project water is far exceeded by the flow from the Delta, as shown in Figures 1 and 2.

Figure 1. Comparison of Flow in the Upper DMC (acre-feet/month)

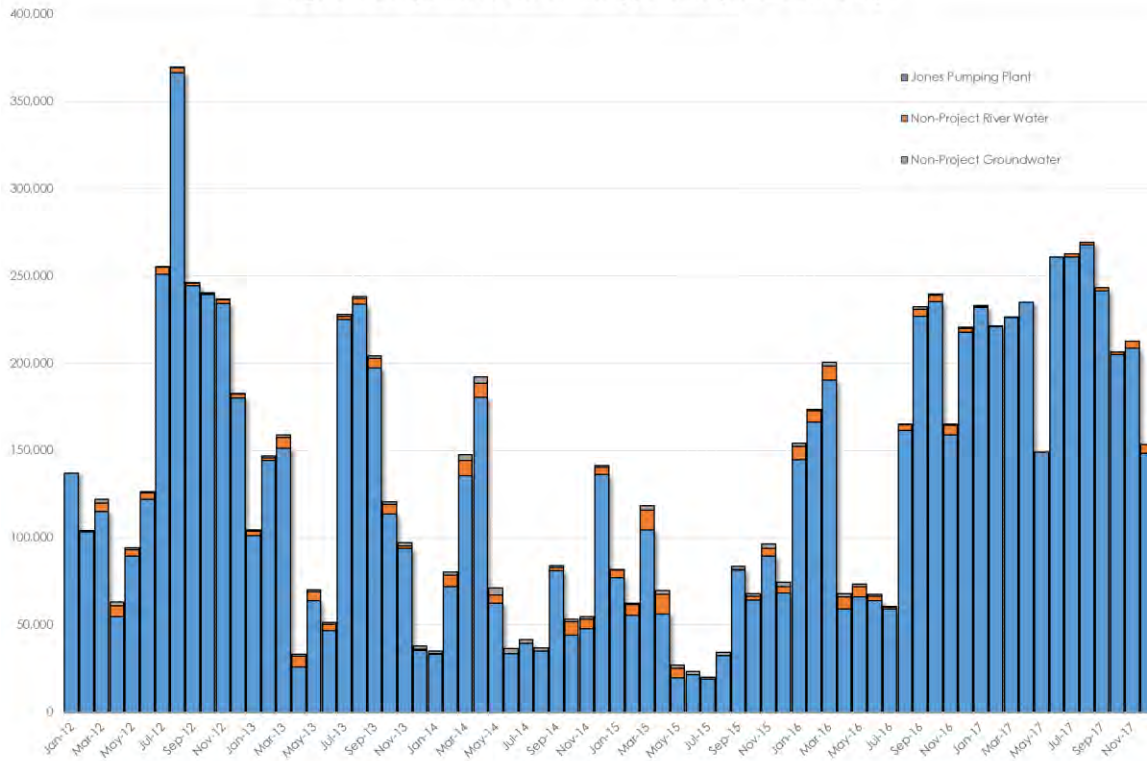
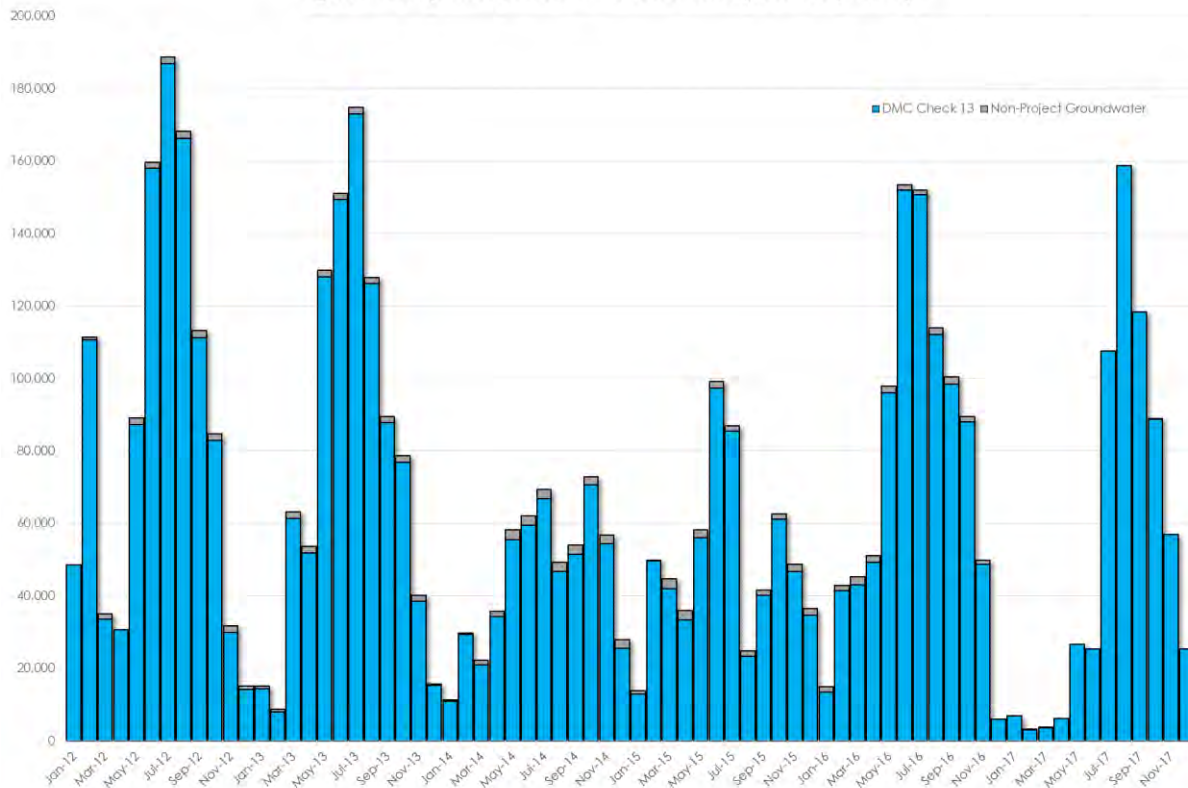
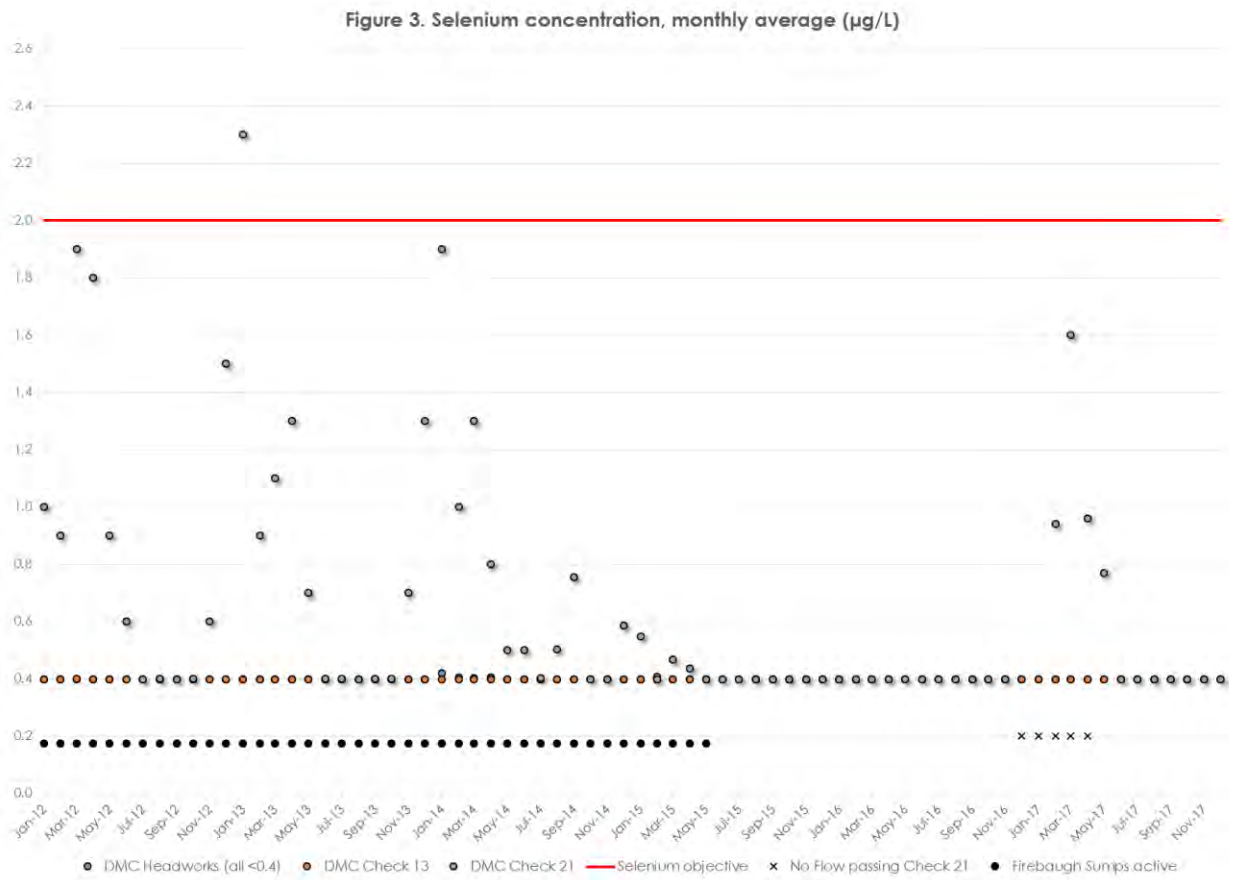


Figure 2. Comparison of Flow in the Lower DMC (acre-feet/month)



As shown in Figure 3, monthly average selenium concentrations between January 2012 and November 2017 have predominately remained below the 2 ppb criteria for selenium. Variations in selenium concentration between January 2012 and May 2015, including the one monthly average exceedance in January 2013, was attributable to the introduction of shallow groundwater water from the Firebaugh Sumps and not the DMC Groundwater Pump-in Program. Since discontinuation of the Firebaugh Sumps in May 2015, selenium concentrations have predominately remained below the detectable limit of 0.4 ppb. Variations above 0.4 ppb but below 1 ppb were due to storm events that introduce naturally occurring selenium through storm flows that enter the DMC. Similar exceedances occurred in winter 2017 when no flow passed the terminus into the Mendota Pool. Based on daily composite data, the monthly average concentration of selenium in the DMC has met the 2 ppb monthly average objective for the duration of the current program to convey non-Project water in the DMC, except for one month at Check 21.



Coalition-13 Reclamation disagrees that “the mitigation strategy proposed will likely not avoid periodic sustained conditions that violate the water-quality standards stated for the program.” As disclosed in Table 3 of EA-18-007, most of the wells do not meet current water quality standards and will not be allowed to pump into the DMC. See also Responses to Coalition-4 and Coalition-12.

Coalition-14 The comment is a general summary of the Proposed Action described in EA-18-007. However, the comment incorrectly asserts that the project includes “exports from the Bay-Delta”. As described in Section 2.2 of EA-18-007, “San Luis Water District, Panoche Water District, and Pacheco Water District require an exchange with Reclamation in order to deliver a portion of the non-Project Water from the San Luis Canal. Exchanged water would be used by Reclamation to meet CVP demands downstream of the points of introduction and a like amount of CVP water would be delivered to the respective districts participating in the exchange.” The “like amount of CVP water” is water that is already diverted under Reclamation’s water rights south of the Delta and would not include additional exports beyond those already permitted.

Coalition-15 The comment incorrectly asserts that this project in addition to “pump-ins in the same groundwater basin...similar pump-ins to the California Aqueduct...other water transfers and resultant exchange programs” should be “analyzed collectively as the complex and regional-scale effect on the environment that they are” and that “even the limited monitoring shows a decline in water quality with levels of arsenic exceeding drinking water standards and levels of selenium accumulating at levels known to cause reproductive failure, teratogenic effects and death as it magnifies through the food chain.”

As described previously, EA-18-007 analyzed the inclusion of additional design constraints on the previously approved DMC Groundwater Pump-in Program. This project is not interrelated or interdependent to any other “pump-in” or water transfer or exchange. This action is not a “regional-scale” project that requires “regional-scale” analysis, rather it is specific project designed to address existing water needs within specific contractors’ service areas while minimizing potential contribution of the Program to ongoing subsidence in the Action Area.

As described previously, all sources of non-Project groundwater must be tested for the full suite of Title 22, including arsenic and selenium. Reclamation does not have any laboratory data for the DMC to support the assertion that “arsenic has exceeded the drinking water standard” (10 ppb) or the unspecified level of selenium “accumulating at levels to cause reproductive failure.” See Response to Coalition-12.

Coalition-16 The comment conflates the Proposed Action with projects on the California Aqueduct/San Luis Canal and Lateral 7 and assert that the projects “exceeded Arsenic MCL levels” in 2013 and 2015 and did not have “selenium monitoring.”

The comment is not relevant to the Proposed Action on the DMC covered in EA-18-007. All introduction of non-Project water from Westlands Water District’s Lateral 7 into the San Luis Canal in 2013 and 2015 were in accordance with California regulations and Reclamation’s water quality requirements, including those for selenium.

Coalition-17 The comment refers to State Water Project Contractors’ comments regarding water quality and subsidence concerns from a Westlands Water District groundwater pump-in project on the San Luis Canal. The comment does not raise specific issues or concerns related to the environmental analysis presented in EA-18-007. As such, no changes have been made to the EA and no further response is required.

Coalition-18 The comment refers to arsenic levels in the California Aqueduct/San Luis Canal in 2015 outside the Action area covered in EA-18-007.

The chart included in the comment does not provide units of measurement or the source of data but apparently shows arsenic measurements in the California Aqueduct in Kern County, many miles away from the San Luis Unit and in no way connected to the DMC. It is well documented that high concentrations of arsenic occur in groundwater in Kern County. The referenced DWR reports document volume and water quality impacts of the California Department of Water Resources’ program to convey Kern County groundwater in the California Aqueduct at Check 41. The same reports do not identify any arsenic problems attributable to the conveyance of non-Project water from Westlands Water District, as measured at Check 21.

Coalition-19 The comment asserts that “discharging selenium into the California Aqueduct and Delta Mendota Canal even at 2 ppb is likely not protective of downstream beneficial uses.”

See Response to Coalition-12.

Coalition-20 The comment asserts that Reclamation dismissed compliance with the Migratory Bird Treaty Act and the Endangered Species Act as well as potential cumulative impacts of associated transfers and exchanges “without data or analysis”.

Reclamation addressed compliance with the Migratory Bird Treaty Act and the Endangered Species Act in Section 3.1.2.

It is unclear what is being referenced as “associated transfers and exchanges”. Reclamation addressed cumulative impacts in Section 3.1.1 through 3.1.9 and 3.22.

Coalition-21 The comment asserts that a recent court order (*AquAlliance v. U.S. Bureau of Reclamation*, Case 1:15-cv-00754-LJO-BAM, filed 2/15/2018) on a separate and unrelated project that involves transfers of water from north of the Delta to south of the Delta somehow “compounds the DEA’s failure to analyze impacts from the Proposed Groundwater pump-ins...on endangered species such as the giant garter snake and Buena Vista Ornate Shrew.”

Reclamation addressed impacts to listed species from the Proposed Action in Section 3.1.2 of EA-18-007. Further, the DMC Groundwater Pump-in Program does not impact the quantity of water exported through the Delta. The separate and unrelated issues identified in *AquAlliance v. U.S. Bureau of Reclamation* are presently being addressed in a supplemental analysis pursuant to that court order.

Coalition-22 The comment is a general conclusory comment that summarizes specific comments provided previously in the comment letter. Responses to the comments are addressed above.