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August 6, 2013

Terry Fulp, Regional Director
Bureau of Reclamation
Lower Colorado Region
P.O. Box 61470
Boulder City, Nevada 89006-1470

Subject: IID's 2014 Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus

Dear Mr. Fulp:

Please review the enclosed copy of Imperial Irrigation District's (IID) *2014 Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus* (ICS Plan) in accordance with Section 2.5(A) of the *Lower Colorado River Basin Intentionally Created Surplus Forbearance Agreement* (ICS Forbearance Agreement) dated December 13, 2007.

IID's ICS Plan includes programs that span multiple calendar years (in particular its following program); however, IID acknowledges that the terms of the ICS Forbearance Agreement require annual approval of its ICS Plan by the Secretary in consultation with the Lower Division States. IID's following program term typically extends from July 1 of one year through June 30 of the following year to coincide with local cropping seasons. As such, it does not coincide with the calendar year as initially envisioned under the ICS program. IID continues to request that Reclamation consider approving its ICS Plans for multiple years when approved conservation projects are materially unchanged in order to facilitate following program contracting, a process that must begin many months in advance of the contract term.

While IID is submitting an ICS plan to allow for the creation of up to 25,000 acre-feet of extraordinary conservation in 2014, this request will likely decrease due to IID's focus on implementing water conservation programs to meet its 2014 water transfer and inadvertent overrun payback obligations, which total more than 375,000 acre-feet. IID may modify its water order as appropriate as more information becomes available.

Should you have any questions regarding the IID 2014 ICS Plan, please contact Darren Fillmore at (760) 339-9784.

Sincerely,

Jesse Silva, PE
Water Department Manager

Encl.: IID 2014 ICS Plan

cc: Sandra Fabritz-Whitney, Arizona Department of Water Resources
Jayne Harkins, Colorado River Commission of Nevada
Tanya Trujillo, Colorado River Board of California
Bill Hasencamp, Metropolitan Water District of Southern California
Halla Razak, San Diego County Water Authority
Jim Barrett, Coachella Valley Water District

Imperial Irrigation District
2014 Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus

Introduction

This plan for the creation of Extraordinary Conservation Intentionally Created Surplus (ICS) has been prepared pursuant to the specifications outlined in Section 3.B.1 on page 40 of the *Record of Decision: Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead* signed by the Secretary of the Interior on December 13, 2007.

IID will implement two extraordinary conservation measures with the potential to create ICS in 2014, a fallowing program and a seepage interception program, which are described in this plan and are incorporated as Exhibits D and F to the December 13, 2007, *Lower Colorado River Basin Intentionally Created Surplus Forbearance Agreement* (ICS Forbearance Agreement) among the Arizona Department of Water Resources, the Palo Verde Irrigation District, the Imperial Irrigation District, the City of Needles, the Coachella Valley Water District, Metropolitan, the Southern Nevada Water Authority, and the Colorado River Commission of Nevada.

The projected annual yields of these extraordinary conservation measures for calendar year 2014 are as follows:

Conservation Measure	Annual Conservation Yield
IID On-Farm Fallowing Program	up to 25,000 acre-feet
IID Main Canal Seepage Interception System	up to 12,000 acre-feet
<i>Total Annual Extraordinary Conservation ICS</i>	<i>not to exceed 25,000 acre-feet</i>

Without implementing these Extraordinary Conservation measures for ICS purposes, this water would be diverted by IID for beneficial use within its water service area. The total annual conservation yield of these activities in 2014 is estimated to be up to 25,000 acre-feet, the maximum annual volume of Extraordinary Conservation ICS that IID may create (excluding Excess Extraordinary Conservation ICS) under the December 13, 2007, *California Agreement for the Creation and Delivery of Extraordinary Conservation Intentionally Created Surplus* (California ICS Agreement). Additionally, the accumulated volume of annual conservation created by IID will be equal to or less than the 50,000 acre-feet of Extraordinary Conservation ICS available to IID and similarly described in the California ICS Agreement. At this time, IID does not anticipate creating any Excess Extraordinary Conservation ICS to be delivered to the MWD system.

IID will submit to the United States Bureau of Reclamation (Reclamation) its annual Extraordinary Conservation ICS estimate each year as a line item in its yearly estimate of diversion and any ICS yield estimate decreases within the calendar year will be relayed to Reclamation as mid-year revisions to IID’s estimate of diversion. Mid-year reductions to ICS conserved water estimates would generally be the result of (but not necessarily limited to) (1) the final ‘truing up’ of IID fallowing program provisional conservation yields based on actual

monthly water use and savings, with minor adjustments to account for any contract breaches by the following participants; (2) implementation/contracting for the IID following programs; (3) Reclamation finalization of provisional decree accounting records (in particular accounting changes and true-ups to IID's Inadvertent Overrun and Payback Policy (IOPP) obligations; and (4) operational and maintenance issues affecting the Main Canal Seepage Interception System.

Imperial Irrigation District
Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus
On-Farm Fallowing Program

Project Description

Extraordinary Water Conservation created by an IID fallowing program is described in Exhibit D of the ICS Forbearance Agreement.

IID's Fallowing Program is a voluntary program that allows willing landowners or lessees with landowner consent to contract with IID to receive payment for forgoing all delivery of irrigation water throughout the term of the agreement, usually one to two years. The program creates conserved water for various purposes including:

- Transfer to the San Diego County Water Authority (SDCWA)
- Mitigation of environmental impacts resulting from reduced inflow to the Salton Sea
- Compliance with any inadvertent overrun obligations under the IOPP
- Limitation of IID's Priority 3 diversions to 3.1 million acre-feet annually
- Creation of Extraordinary Conservation Intentionally Created Surplus (ICS)

The price for conserved water by fallowing is determined annually by the IID Board of Directors. Applications are sent to solicit participants to conserve water by fallowing agricultural fields in exchange for payment. IID uses a random selection process to contract the necessary amount of fallowing acreage required to meet annual conservation goals. Eligibility criteria require that a field be at least 10 acres in size and have been irrigated for crop production during each of the previous three years (excluding the years contracted with IID for fallowing); each field's participation in an IID Fallowing Program is limited to three out of every five years. Additionally, the fallowing participants must warrant that the fallowed lands would have been planted for agricultural production during the fallowing term, and designate the crops that would have been grown on the participating fields had those lands not participated in the IID Fallowing Program.

Initial program parameters were established in the Phase I On-Farm Fallowing Program Plan¹. This document was updated in 2006² and is anticipated to be revised further in 2013 or 2014. Additional minor program changes have been periodically incorporated into IID's template agreement with participants. Links to annual fallowing program summary information, which includes the agreement templates, can be accessed from IID's fallowing webpage³.

Since 2003, IID has conducted over a dozen separate fallowing programs yielding over 950,000 acre-feet of conserved water by paying participants over \$73 million to fallow approximately 170,000 acres of agricultural lands. IID is currently administering its 2013-14 fallowing program.

¹ www.iid.com/fallowingprograms2004plan

² www.iid.com/fallowingprograms2006plan

³ www.iid.com/fallowingprograms

Term of the Activity

IID's fallowing program was initially designed with a 12-month term to coincide with field leases based on cropping seasons that generally run from July 1 of one year through June 30 of the following year. In 2009, IID began offering these mid-year contracts with a 24-month term to accommodate local lease schedules and farm planning considerations. The 2013-2014 fallowing program offers 12 to 18-month terms with start dates ranging from January 1, 2013 to July 1, 2013, and an end date of June 30, 2014. Additionally, IID anticipates administering calendar year and midyear fallowing programs in 2014 with start dates of January 1 and July 1. IID intends to manage fallowing programs through 2017 as per the QSA and related agreements.

Estimated Volume of Water to be Conserved

Up to 25,000 acre-feet of conserved water is anticipated to be created annually for ICS purposes from IID on-farm fallowing programs. This amount will vary based on the number of contracted fields and the conservation yields associated. Conserved water yield estimates for fallowed fields are determined individually based on a ten-year running average of water delivery history (excluding high and low years) and are reviewed for material trend deviation in recent years and crops grown during the previous three years.

Consumptive use reduction accounting occurs at IID's Imperial Dam (Station 60) diversion point to account for total losses from the field to Imperial Dam for participating fields in the IID fallowing programs. IID will utilize the transportation loss accounting methodology described in Reclamation's December 3, 2007 letter to IID for the IID Fallowing Programs.

Proposed Methodology for Verification of the Amount of Water Conserved

IID monitors fields enrolled in the Fallowing Program to ensure that no irrigation water is delivered during the term of the contracts. For most participants, delivery gates are locked to prevent water delivery to fields participating in the Fallowing Program. Instances where the same gate supplies a participating field and other water uses, physical obstructions such as berms or secondary gates/locks are employed. Additionally, IID's water order entry and delivery tracking software locks the accounts of fallowed fields and does not allow the placement of water orders on participating fields. This provides a verifiable record that irrigation water was not delivered to these fields.

IID will continue to cooperate with Reclamation in coordinating semiannual verification inspections of five percent of the total acreage enrolled in the Fallowing Program. When Reclamation schedules the visit, IID will provide a list of enrolled fields and acreages from which Reclamation may randomly select a sample of fields representing five percent of total enrolled acreage. Data sets detailing baselines and conservation volumes for selected fields will be provided to Reclamation during the semiannual inspection visits.

Regulatory Approvals

IID has completed an environmental assessment of proposed water conservation and transfer activities and diversion limitations pursuant to the California Environmental Quality Act (CEQA), as set forth in a *Final EIR/EIS for the IID Water Conservation and Transfer Project* certified by IID in June 2003, as supplemented by an *Amended and Restated Addendum* thereto certified by IID in October 2003.

Imperial Irrigation District
Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus
Main Canal Seepage Interception System

Project Description

Extraordinary Water Conservation created by an IID seepage recovery program is described in Exhibit F of the ICS Forbearance Agreement.

IID's Main Canal Seepage Interception System is the first efficiency conservation program to be implemented to meet IID's water transfer obligations under the QSA and other related agreements. This project consists of the installation and operation of pump stations, collection sumps, and appurtenant structures in open drains that run parallel to certain reaches of main canals located in areas of highly permeable soils. These open drains were constructed along main canals decades ago to intercept and carry seepage to the Salton Sea to relieve adjacent agricultural lands of high water tables associated with canal seepage. The Main Canal Seepage Interception System is estimated to have the capacity to collect 30,000-40,000 acre feet of water from existing interceptor drains and pump seepage back into the main canals to supply downstream water users and reduce IID's delivery at Imperial Dam. In total, 22 pumping stations were constructed at the lower ends of interceptor drains and are operated to maintain drain water levels within six inches of historical levels to prevent interference with normal drainage and induction of additional seepage from the main canals.

This seepage recovery project was designed primarily to provide conserved water for transfer under the QSA; however, because the construction schedule for this project outpaced the conserved water delivery schedule required by the QSA, this extraordinary conservation project may produce conserved water in excess of the transfer requirements. As such, the excess conserved water is available for use by IID for other purposes including overrun payback and ICS until such time that the full conservation yield of this seepage recovery project is transferred under the QSA.

The first pump stations completed under the project began conserving water in 2008 and the final pump stations were completed in 2009. The total capital cost was \$7,290,000 and annual operation and maintenance costs average about \$500,000.

Term of the Activity

IID Main Canal Seepage Interception System was substantially built and operational in 2009. Excess conserved water from this seepage recovery project is estimated to be available for payback and ICS purposes in 2014 based on current extraordinary conservation yield estimates and water transfer and delivery schedules.

Estimated Volume of Water to be Conserved

IID's Main Canal Seepage Interception System consists of 22 pump stations with total recovery capacity estimated at up to 40,000 acre-feet per year. However, Section 1 of the California ICS Agreement limits the annual creation of Extraordinary Conservation ICS by IID to not more than 12,000 acre-feet from seepage recovery projects.

Consumptive use reduction accounting occurs at IID's Imperial Dam (Station 60) diversion point to account for total losses from the Main Canal Seepage Interception Systems to Imperial Dam. IID will utilize the same transportation loss accounting methodology, described in detail in Reclamation's December 3, 2007 letter to IID, as that used for its following programs.

Proposed Methodology for Verification of the Amount of Water Conserved

Intercepted seepage water pumped to the main canal will be continuously metered and the data reported electronically to IID's Operations Center where it will be subject to quality control procedures and stored in a relational database. Electrical conductivity readings of the intercepted water will also be monitored for salinity to ensure there are no significant local water quality impacts from this project.

Seepage recovered through the Main Canal Seepage Interception System will be reported to Reclamation on a quarterly and annual basis. All measurements are subject to verification by Reclamation for accuracy and two of the project pumps are visited semi-annually by Reclamation staff to verify operational status and metering data. These verification site visits are documented in a Reclamation report entitled "IID Extraordinary Conservation Program Verification" that summarizes site conditions (including photographs of the pumping station) and documents water records and flow data to confirm implementation of this extraordinary conservation measure.

Regulatory Approvals

IID has completed an environmental assessment of proposed water conservation and transfer activities and diversion limitations pursuant to the California Environmental Quality Act (CEQA), as set forth in a *Final EIR/EIS for the IID Water Conservation and Transfer Project* certified by IID in June 2003, as supplemented by an *Amended and Restated Addendum* thereto certified by IID in October 2003.