

DELIVERY AGREEMENT

This Delivery Agreement is entered into this 13<sup>th</sup> day of December 2007 between the UNITED STATES OF AMERICA, the SOUTHERN NEVADA WATER AUTHORITY (SNWA), and the COLORADO RIVER COMMISSION OF NEVADA (CRCN), (each referred to individually as "Party" or, collectively, as "Parties"). The Parties hereby agree as follows:

I. Recitals.

- A. The Secretary of the Interior (Secretary) issued a Record of Decision (ROD) for the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead on December 13, 2007, which implements Interim Guidelines for the Operation of Lake Powell and Lake Mead (Guidelines).
- B. The Guidelines establish criteria for the development and delivery of Intentionally Created Surplus (ICS) and Developed Shortage Supply (DSS).
- C. SNWA is a Nevada joint powers agency and political subdivision of the State of Nevada, created by agreement dated July 25, 1991, as amended November 17, 1994, and January 1, 1996, pursuant to N.R.S. §§277.074 and 277.120. SNWA is authorized by N.R.S. §538.186 to enter into this Delivery Agreement. SNWA is an existing Contractor and holds an entitlement to the delivery of Colorado River water under Contract No. 2-07-30-W0266 dated March 2, 1992, as amended and restated November 17, 1994.
- D. CRCN is an agency of the State of Nevada, authorized generally by N.R.S. §§538.041 and 538.251 and authorized by N.R.S. §538.161 (6), (7) to enter into this Delivery Agreement. The CRCN, in furtherance of the State of Nevada's responsibility to promote the health and welfare of its people in Colorado River matters, makes this Delivery Agreement to supplement the supply of water in the Colorado River which is available for use in Nevada, augment the waters of the Colorado River and facilitate the more flexible operation of dams and facilities by the Secretary.
- E. CRCN and SNWA have secured the forbearance of certain Contractors through the execution of a Forbearance Agreement dated December 13, 2007, attached hereto as Exhibit "A," in which under specific and limited circumstances the Contractors forbear the exercise of certain rights to Colorado River water otherwise available to them under the Consolidated Decree in Arizona v. California and under contracts entered into under section 5 of the Boulder Canyon Project Act of 1928.

II. Authority.

The Secretary is authorized under the Reclamation Act of 1902 and all acts amendatory thereof and supplementary thereto, including in particular section 5 of the Boulder Canyon Project Act of 1928, to enter into contracts for the delivery of Colorado River water.

III. Definitions.

Defined terms appear in this Delivery Agreement with initial capitalization and shall have the same meaning as in the Guidelines; provided, however:

- A. "Drop 2 Funding Agreement" shall mean the Agreement Among the United States of America, through the Department of the Interior, Bureau of Reclamation; the Colorado River Commission of Nevada; and the Southern Nevada Water Authority for the Funding and Construction of the Lower Colorado River Drop 2 Storage Reservoir Project dated December 13, 2007.
- B. "Guidelines" shall mean the express language of the Interim Guidelines for Operation of Lake Powell and Lake Mead in the Record of Decision issued by the Secretary on December 13, 2007.

IV. Term.

This Delivery Agreement shall become effective upon execution by the Parties and shall remain in effect until such time as all deliveries of ICS and DSS permissible under the terms of the Guidelines and this Delivery Agreement have occurred.

V. Relationship to Guidelines.

The Parties to this Delivery Agreement expressly acknowledge that this Delivery Agreement will be administered in compliance with the terms of the Guidelines. Specific reference in this Delivery Agreement to particular sections of the Guidelines shall not render inapplicable to the Parties those sections not specifically referred to herein.

VI. Approval of Plan.

- A. To the extent SNWA desires to create ICS, SNWA shall submit a plan to create ICS, or a modification to a previously approved plan to create ICS, to the Secretary in accordance with section 3.B.1 of the Guidelines. Under this Delivery Agreement, Tributary Conservation ICS or Imported ICS, for which plans have been approved under this article VI, will be converted to Extraordinary Conservation ICS, in accordance with sections 3.A.1.f and 3.A.1.g of the Guidelines, without submission of an Extraordinary Conservation ICS plan to the

Secretary, and thereafter shall be subject to all provisions applicable to Extraordinary Conservation ICS.

1. For Tributary Conservation ICS to be created as provided in the Virgin and Muddy Rivers Tributary Conservation ICS Project, Exhibit A to the Forbearance Agreement, the Secretary shall approve a plan or modification which meets the requirements of sections 3.A.2 and 3.B.1 of the Guidelines and Exhibit A to the Forbearance Agreement.
  2. For System Efficiency ICS to be created for the benefit of SNWA as provided in the Drop 2 Reservoir System Efficiency Project, Exhibit C to the Forbearance Agreement, the Secretary has determined that, consistent with Pub. L. No. 109-432, 120 Stat. 2922, §396, the Drop 2 Funding Agreement constitutes a valid multi-year plan for creation of System Efficiency ICS under sections 3.A.3 and 3.B.1 of the Guidelines, for the Interim Period as provided in section 8 of the Guidelines, in an amount not to exceed 656,667 acre-feet of which the amount available to SNWA will be determined in accordance with the Drop 2 Funding Agreement.
  3. For Imported ICS to be created as provided in the Coyote Spring Valley Groundwater Imported ICS Project, Exhibit B to the Forbearance Agreement, the Secretary shall approve a plan or modification which meets the requirements of sections 3.A.4 and 3.B.1 of the Guidelines and Exhibit B to the Forbearance Agreement.
- B. To the extent SNWA desires to create DSS, SNWA shall submit a plan to create DSS, or a modification to a previously approved plan to create DSS, to the Secretary in accordance with section 4.B.1 of the Guidelines. DSS may only be created by a project that is approved by the Secretary for creation prior to the Secretary determining a Shortage Condition.
1. For Tributary Conservation DSS to be created as provided in the Virgin and Muddy Rivers Tributary Conservation ICS Project, Exhibit A to the Forbearance Agreement, the Secretary shall approve a plan or modification which meets the requirements of sections 4.A.1 and 4.B.1 of the Guidelines.
  2. For Imported DSS to be created as provided in the Coyote Spring Valley Groundwater Imported ICS Project, Exhibit B to the Forbearance Agreement, the Secretary shall approve a plan or modification which meets the requirements of sections 4.A.2 and 4.B.1 of the Guidelines.
- C. SNWA may combine plans required to be submitted under this article VI, as for example combining a plan to create Tributary Conservation ICS with a plan to create Tributary Conservation DSS; provided, however that the Guideline requirements for each type of plan are fully addressed in the combined plan.

- D. To the extent the Secretary determines that a plan or modification submitted by SNWA in accordance with this article VI does not meet the requirements of the Guidelines or the applicable exhibit to the Forbearance Agreement, the Secretary shall, in writing, inform SNWA as to which matters were determined not to meet the requirements of these sections of the Guidelines or the applicable exhibit to the Forbearance Agreement and permit SNWA to resubmit the plan or modification.
- E. The Secretary's commitment in this article VI to approve in accordance with sections 3.B.1 and 4.B.1 of the Guidelines a plan or modification which meets the requirements specified in this article VI is subject to such environmental compliance as may be required.

VII. Certification and Verification of ICS and DSS.

- A. SNWA shall submit a Certification Report to the Secretary for each type of ICS and DSS created, in accordance with sections 3.D.1 and 4.D.1 of the Guidelines.
- B. The Secretary shall verify the information in the Certification Reports submitted by SNWA for ICS or DSS, in accordance with sections 3.D.2 or 4.D.2 of the Guidelines. If the Secretary determines that insufficient information has been provided in the Certification Report to verify the quantity of ICS or DSS created or to verify that the creation was consistent with this Delivery Agreement or, for ICS, to verify that the creation was consistent with the corresponding exhibit to the Forbearance Agreement, the Secretary shall, in writing, request additional information from SNWA.
- C. For System Efficiency ICS to be created for the benefit of SNWA as provided in the Drop 2 Reservoir System Efficiency Project, Exhibit C to the Forbearance Agreement, the Secretary has determined that, consistent with Pub. L. No. 109-432, 120 Stat. 2922, §396, the Drop 2 Funding Agreement constitutes a verified Certification Report under sections 3.D.1 and 3.D.2 of the Guidelines for System Efficiency ICS in an amount not to exceed 656,667 acre-feet, of which the amount available to SNWA will be determined in accordance with the Drop 2 Funding Agreement.
- D. After review of a Certification Report submitted by SNWA for ICS or DSS, including the review of such additional information as has been requested by the Secretary and provided by SNWA, the Secretary shall provide a final written decision to SNWA, as provided in sections 3.D.2 and 4.D.2 of the Guidelines, which may be appealed by SNWA as provided in sections 3.D.2 and 4.D.2 of the Guidelines.

VIII. Delivery of ICS and DSS.

- A. SNWA shall neither order nor accept delivery of ICS or DSS except in accordance with the terms of the Guidelines, this Delivery Agreement, and, for ICS, the terms of the Forbearance Agreement.
- B. SNWA's existing entitlement to Colorado River water shall remain in full force and effect and with this Delivery Agreement shall govern the delivery of ICS and DSS to SNWA.
- C. ICS. The Secretary shall deliver to SNWA under Contract No. 2-07-30-W0266 dated March 2, 1992, as amended and restated November 17, 1994, the ICS created under the terms of this Delivery Agreement, including any Extraordinary Conservation ICS created by conversion of Tributary Conservation ICS and/or Imported ICS pursuant to section VI.A of this Delivery Agreement, and requested by SNWA, in accordance with section 3.C of the Guidelines and the Forbearance Agreement; provided, however:
  - 1. the Secretary must have determined an ICS Surplus Condition applicable to the Year of the delivery, in accordance with sections 2.B.5 and 3.C.2 of the Guidelines;
  - 2. the Secretary must have verified the creation of the requested ICS in accordance with section 3.D.2 of the Guidelines, provided, however, that for System Efficiency ICS verification is accomplished by article VII.C of this Delivery Agreement;
  - 3. the ICS delivery must be in accordance with 43 C.F.R. Part 417; and
  - 4. nothing in this Delivery Agreement modifies, or is intended to modify, the rights of any person or entity that is not a party to the Forbearance Agreement.
- D. DSS. The Secretary shall deliver to SNWA under Contract No. 2-07-30-W0266 dated March 2, 1992, as amended and restated November 17, 1994, the DSS created under the terms of this Delivery Agreement and requested by SNWA, in accordance with section 4.C of the Guidelines; provided, however:
  - 1. the Secretary must have determined a Shortage Condition applicable to the Year of delivery, in accordance with sections 2.D and 4.C.2 of the Guidelines;
  - 2. the Secretary must have verified the creation of the requested DSS in accordance with section 4.D.2; and
  - 3. the delivery must be in accordance with 43 C.F.R. Part 417.

IX. Accounting for ICS and DSS.

- A. ICS. The Secretary shall incorporate into the Decree Accounting Report a separate ICS Account for SNWA. The account shall separately identify and report each type of ICS created by SNWA in the manner provided in section 3.D.3 of the Guidelines. The account shall further reflect any reductions for payback obligations, in accordance with section 3.C.7 of the Guidelines, and shall reflect excess deliveries of ICS as an inadvertent overrun until repaid, in accordance with section 3.C.8 of the Guidelines.
- B. DSS. The Secretary shall incorporate into the Decree Accounting Report a separate DSS Account for SNWA. The account shall separately identify and report each type of DSS created by SNWA in the manner provided in section 4.D.3 of the Guidelines. The account shall further reflect any reductions for payback obligations, in accordance with section 4.C.5, and shall reflect excess deliveries of DSS as an inadvertent overrun until repaid, in accordance with section 4.C.6 of the Guidelines.

X. Other Terms.

- A. Signatories to the Forbearance Agreement are intended third-party beneficiaries of this Delivery Agreement solely for the purposes of ensuring compliance with the Guidelines and the Forbearance Agreement and enforcing the provisions of this Delivery Agreement that require compliance and/or consistency with the Guidelines and the Forbearance Agreement. Notwithstanding anything to the contrary contained in this paragraph, no third-party shall accrue any right to ICS or DSS as a result of the third-party beneficiary status conferred in this paragraph.
- B. In accordance with sections 3.C.10 and 4.C.8 of the Guidelines, the books and records of SNWA relating to the creation of ICS or DSS shall be open to inspection by any Party, Contractor or Basin State.
- C. This Delivery Agreement is subject to and controlled by the Colorado River Compact of 1922.
- D. No member of or Delegate to Congress, Resident Commissioner, or official of any Party shall benefit from this Delivery Agreement other than as a water user or landowner in the same manner as other water users or landowners.
- E. This Delivery Agreement shall not be deemed to be a new or amended contract for the purpose of section 203(a) of the Reclamation Reform Act of 1982.
- F. Each Party to this Delivery Agreement represents that the person executing this Delivery Agreement on behalf of such Party has full power and authority to do so, and that his/her signature is legally sufficient to bind the Party on whose behalf he/she is signing.

G. The expenditure or advance of any money or the performance of any obligation of the United States under this Delivery Agreement shall be contingent on appropriation or allotment of funds.

H. Each Party shall comply with all applicable federal or state laws relating to equal opportunity and non-discrimination.

IN WITNESS WHEREOF, the Parties hereto have executed this Delivery Agreement No. 07-XX-30-W0520 the day and year first written above.

Approved as to legal sufficiency:

By: Katherine Ott Verburg  
Field Solicitor

**THE UNITED STATES OF AMERICA**

By: Robert W. Johnson  
Robert W. Johnson, Commissioner  
Bureau of Reclamation

Approved as to form:

By: John J. Entsminger  
John J. Entsminger  
Deputy General Counsel

**SOUTHERN NEVADA WATER  
AUTHORITY**

By: Patricia Mulroy  
Patricia Mulroy  
General Manager

Approved as to form:

By: Jennifer T. Crandell  
Jennifer T. Crandell  
Senior Deputy Attorney General

**COLORADO RIVER COMMISSION  
OF NEVADA**

By: George M. Caan  
George M. Caan, P.E.  
Executive Director

**Contract No. 07-XX-30-W0520**

**Exhibit A**  
**Lower Colorado River Basin Intentionally Created**  
**Surplus Forbearance Agreement**

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**Lower Colorado River Basin Intentionally Created Surplus Forbearance Agreement**

The State of Arizona, acting through the Arizona Department of Water Resources (“ADWR”); the Palo Verde Irrigation District (“PVID”); the Imperial Irrigation District (“IID”); The City of Needles; the Coachella Valley Water District (“CVWD”); The Metropolitan Water District of Southern California (“MWD”); the Southern Nevada Water Authority (“SNWA”); and the Colorado River Commission of Nevada enter into this Lower Colorado River Basin Intentionally Created Surplus Forbearance Agreement (“Forbearance Agreement”) as follows:

**Recitals**

- A. The purposes of this Forbearance Agreement are to:
1. Encourage the efficient use and management of Colorado River water, and to increase the water supply in Colorado River system reservoirs, through the creation, release, and use of Intentionally Created Surplus (“ICS”);
  2. Help avoid shortages to the Lower Basin;
  3. Benefit both Lake Mead and Lake Powell;
  4. Increase the surface elevations of both Lakes Powell and Mead to higher levels than would have otherwise occurred; and
  5. Assure any Contractor that invests in conservation or augmentation to create ICS under this Forbearance Agreement that no Contractor within another state will claim the ICS created by the Contractor.
- B. The Parties to the Forbearance Agreement and their respective authority to forbear are as follows:
1. The Arizona Department of Water Resources, through its Director, is the successor to the signatory agency of the State for the 1922 Colorado River Compact, and the 1944 Contract for Delivery of Water with the United States, both authorized and ratified by the Arizona Legislature, A.R.S. §§ 45-1301 and 1311. Pursuant to A.R.S. § 45-107, the Director is authorized and directed, subject to the limitations in A.R.S. § 45-106, for and on behalf of the State of Arizona, to consult, advise and cooperate with the Secretary of the Interior of the United States (“Secretary”) with respect to the exercise by the Secretary of Congressionally authorized authority relative to the waters of the Colorado River (including, but not limited to, the Boulder Canyon Project Act of 1928, 43 U.S.C. § 617, and the Colorado River Basin Project Act of 1968, 43 U.S.C. § 1501) and with respect to the development, negotiation and execution of interstate agreements. Additionally, under A.R.S. § 45-

105(A)(9), the Director is authorized to “prosecute and defend all rights, claims and privileges of this state respecting interstate streams.”

2. SNWA is a Nevada joint powers agency and political subdivision of the State of Nevada, created by agreement dated July 25, 1991, as amended November 17, 1994, and January 1, 1996, pursuant to N.R.S. §§ 277.074 and 277.120. SNWA is authorized by N.R.S. § 538.186 to enter into this Forbearance Agreement and, pursuant to its contract issued under Section 5 of the Boulder Canyon Project Act of 1928, SNWA has the right to divert ICS released by the Secretary for use within the State of Nevada pursuant to the Consolidated Decree.
3. The Colorado River Commission of the State of Nevada (CRCN) is an agency of the State of Nevada, authorized generally by N.R.S. §§ 538.041 and 538.251. CRCN is authorized by N.R.S. § 538.161 (6), (7) to enter into this Agreement. The CRCN, in furtherance of the State of Nevada’s responsibility to promote the health and welfare of its people in Colorado River matters, makes this Agreement to supplement the supply of water in the Colorado River which is available for use in Nevada, augment the waters of the Colorado River, and facilitate the more flexible operation of dams and facilities by the Secretary.
4. PVID is an irrigation district created under the Palo Verde Irrigation District Act, codified at Section 33-1 *et seq.* of the Appendix to the California Water Code, and delivers Colorado River water in Riverside and Imperial Counties, California, pursuant to its contract issued under Section 5 of the Boulder Canyon Project Act of 1928.
5. IID is an irrigation district created under the California Irrigation District Law, codified at Section 20500 *et seq.* of the California Water Code, and delivers Colorado River water in Imperial County, California, pursuant to its contract issued under Section 5 of the Boulder Canyon Project Act of 1928.
6. CVWD is a county water district created under the California County Water District Law, codified at Section 30000 *et seq.* of the California Water Code, and delivers Colorado River water to portions of its service area in Imperial, Riverside, and San Diego Counties, California, pursuant to its contract issued under Section 5 of the Boulder Canyon Project Act of 1928 and the California Quantification Settlement Agreement.
7. MWD is a metropolitan water district created under the California Metropolitan Water District Act, codified at Section 109-1 *et seq.* of the Appendix to the California Water Code; and delivers Colorado River water to portions of its service area in Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura Counties, California, pursuant to its contracts issued under Section 5 of the Boulder Canyon Project Act of 1928.

8. The City of Needles is a charter city duly authorized and existing under and by virtue of the laws of the State of California and delivers Colorado River water, either directly or by exchange, to portions of Imperial, Riverside, and San Bernardino Counties, California, pursuant to its contracts issued under Section 5 of the Boulder Canyon Project Act of 1928,

NOW, THEREFORE, in consideration of the mutual covenants herein contained, the Parties hereby agree as follows:

## **Article 1 Definitions and Term**

### **1.1 Definitions.**

The definitions in the Interim Surplus Guidelines (“ISG”) described in the Record of Decision dated January 16, 2001, and modified by the ROD are hereby incorporated in this Forbearance Agreement. In addition, each of the following terms shall have the meaning defined here. All defined terms shall be identified by initial letter capitalization.

- A. “Certification Report” shall mean the written documentation provided by a Contractor pursuant to Article 2.5(B) that provides the Secretary with sufficient information to verify the quantity of ICS created and that the creation was consistent with the approved project exhibit, this Forbearance Agreement, the applicable Delivery Agreement, and the ROD.
- B. “Colorado River System” shall have the same meaning as defined in the 1922 Colorado River Compact.
- C. “Consolidated Decree” shall mean the Consolidated Decree entered by the United States Supreme Court in *Arizona v. California*, 126 S.Ct. 1543, 547 U.S. 150 (2006).
- D. “Contractor” shall mean a Boulder Canyon Project Act Section 5 Contractor or an entity receiving Mainstream water pursuant to other applicable federal statute or the Consolidated Decree.
- E. “Delivery Agreement” shall mean an agreement entered into by the Secretary of the Interior and one or more Contractors seeking to create ICS, providing for delivery of ICS according to the terms of this Forbearance Agreement and the ROD.
- F. “Forbearance Agreement” shall mean this Lower Colorado River Basin Intentionally Created Surplus Forbearance Agreement.

- G. “ICS” shall mean intentionally created surplus available for use under the terms and conditions of this Forbearance Agreement and a Delivery Agreement.
1. ICS created through extraordinary conservation, as provided for in Article 2.1 herein, shall be referred to as “Extraordinary Conservation ICS.”
  2. ICS created through tributary conservation, as provided for in Article 2.2 herein, shall be referred to as “Tributary Conservation ICS.”
  3. ICS created through system efficiency projects, as provided for in Article 2.3 herein, shall be referred to as “System Efficiency ICS.”
  4. ICS created through the importation of non-Colorado River System Water, as provided for in Article 2.4 herein, shall be referred to as “Imported ICS.”
- H. “ICS Account” shall mean a record established by the Secretary under the terms of this Forbearance Agreement, a Delivery Agreement, and the ROD.
- I. “ICS Declaration” shall mean a declaration of ICS made by the Secretary pursuant to the ROD, one or more Delivery Agreements and the provisions of this Forbearance Agreement.
- J. “Lower Division States” shall mean the Colorado River Basin States of Arizona, California, and Nevada.
- K. “Mainstream” shall have the same meaning as defined in the Consolidated Decree.
- L. “Parties” shall mean all of the signatories to this Forbearance Agreement.
- M. “ROD” shall mean the Record of Decision issued by the Secretary for the Development of Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead, Particularly Under Low Reservoir Conditions, and including the policy for implementation of ICS.
- N. “Year” shall mean calendar year.

1.2 Term of the Forbearance Agreement.

This Forbearance Agreement shall commence on the date of execution by all Parties and shall terminate December 31, 2025; provided, however, that any ICS remaining in an ICS

Account on December 31, 2025, may be released as provided herein until December 31, 2035.

1.3 Extended Term for Tributary Conservation ICS and Imported ICS.

Notwithstanding Article 1.2, the provisions of this Forbearance Agreement for creation, and release in the Year of creation, of Tributary Conservation ICS under Article 2.2 and Imported ICS under Article 2.4, shall continue in full force and effect after termination of this Forbearance Agreement until the earlier of (1) the termination of the period provided in the ROD for the creation, release, and use of Tributary Conservation ICS and Imported ICS, or (2) fifty years from the date of execution of this Forbearance Agreement. The amount of Tributary Conservation ICS and Imported ICS that may be created, released, and used through the end of the extended term provided by this Article 1.3 shall not exceed the amount shown in, and shall be consistent with, the attached Exhibits A and B for Tributary Conservation ICS and Imported ICS. Such ICS may be released during the extended term as provided herein. The obligations of the Parties under Articles 2.5, 2.6, 3, 4, and 5 shall continue with regard to such ICS.

1.4 Seven Colorado River Basin States' Agreement

Notwithstanding Articles 1.2 and 1.3 above, if one or more states withdraw from the agreement dated April 23, 2007, executed by the seven Colorado River Basin states, the Parties to this Forbearance Agreement shall consult to determine whether to continue this Forbearance Agreement in effect or to amend or terminate this Forbearance Agreement. In such event, the terms of this Forbearance Agreement shall continue in effect until the Parties have consulted and agreed to continue, amend, or terminate this Forbearance Agreement. In the event of termination, all Parties shall be relieved from the terms hereof and this Forbearance Agreement shall be of no further force or effect.

**Article 2**  
**Creation and Release of ICS**

2.1 Extraordinary Conservation ICS

Pursuant to procedures set forth in the ROD, any applicable Delivery Agreements, and this Forbearance Agreement, Extraordinary Conservation ICS may be created only through the following activities:

- A. Fallowing of land that currently is, historically was, and otherwise would have been irrigated in the next Year.
- B. Canal lining programs.
- C. Desalination programs in which the desalinated water is used in lieu of Mainstream water.
- D. Extraordinary conservation programs that existed on January 1, 2006.

- E. Demonstration Extraordinary Conservation ICS programs pursuant to a letter agreement entered into between the United States Bureau of Reclamation and the Contractor prior to the effective date of the ROD.
- F. Tributary Conservation ICS created under Article 2.2 hereto and not released in the Year created.
- G. Imported ICS created under Article 2.4 hereto and not released in the Year created.
- H. Other extraordinary conservation measures, including development and acquisition of a non-Colorado River System water supply used in lieu of Mainstream water within the same state, as agreed upon by the Parties pursuant to this Forbearance Agreement.

## 2.2 Tributary Conservation ICS

Pursuant to procedures set forth in the ROD, a Contractor may create Tributary Conservation ICS by purchasing documented water rights on Colorado River System tributaries within the Contractor's state if there is documentation that the water rights have been used for a significant period of years and that the water rights were perfected prior to June 25, 1929 (the effective date of the Boulder Canyon Project Act of 1928). The quantity of Tributary Conservation ICS that may be created shall be limited to the quantity of water set forth in Exhibit A, and shall in no event be more than the quantity of such water the Secretary verifies actually flows into Lake Mead. Any Tributary Conservation ICS not released or deducted pursuant to Article 2.5(C) in the Year it was created will be converted to Extraordinary Conservation ICS at the request of the Contractor and will be subject to all provisions of this Forbearance Agreement applicable to Extraordinary Conservation ICS.

## 2.3 System Efficiency ICS

Pursuant to procedures set forth in the ROD, a Contractor may make contributions of capital to the Secretary for use in Secretarial projects designed to realize efficiencies that save water that would otherwise be lost from the Mainstream in the United States. An amount of water equal to a portion of the water saved may be made available to contributing Contractors by the Secretary as System Efficiency ICS. System efficiency projects are only intended to provide temporary water supplies and System Efficiency ICS will not be available for permanent use. The System Efficiency ICS will be released to the capital contributor on a predetermined schedule of annual deliveries for a period of years as agreed by the Parties.

## 2.4 Imported ICS

Pursuant to procedures set forth in the ROD, a Contractor may create Imported ICS by introducing non-Colorado River System water in that Contractor's state into the Mainstream. Contractors proposing to create Imported ICS shall make sufficient arrangements with the Secretary, contractual or otherwise, to guarantee that the creation of Imported ICS shall cause no harm to the Secretary's management of the Colorado River System. These arrangements shall provide that the Contractor must obtain appropriate permits or other authorizations required by state law and that the actual amount of water introduced to the Mainstream

would be reported to the Secretary on an annual basis. Any Imported ICS not released or deducted pursuant to Article 2.5(C) in the Year it was created will be converted to Extraordinary Conservation ICS at the request of the Contractor and will be subject to all provisions of this Forbearance Agreement applicable to Extraordinary Conservation ICS.

## 2.5 Creation of ICS

A Contractor may create ICS subject to the following conditions:

- A. Pursuant to procedures set forth in the ROD, a Contractor shall submit a plan for the creation of ICS to the Secretary and the Lower Division States demonstrating how all requirements of this Forbearance Agreement will be met in the Contractor's creation of ICS. System Efficiency ICS with an approved multi-year plan shall not require annual approval by the Secretary or consultation with the Lower Division States. Until such plan is reviewed and approved by the Secretary annually in consultation with the Lower Division States, such ICS plan, or any ICS purportedly created through it, cannot be a basis for an ICS Declaration. A Contractor may modify its plan for creation of ICS during any Year, subject to approval by the Secretary in consultation with the Lower Division States.
- B. Pursuant to procedures set forth in the ROD, a Contractor that creates ICS shall submit a Certification Report to the Secretary demonstrating the amount of ICS created and that its creation was consistent with this Forbearance Agreement and the ROD. The Secretary shall verify the information in the Certification Report in consultation with the Lower Division States, and provide a final written decision to the Parties. Any Party may appeal the Secretary's verification of the Certification Report through administrative and judicial processes.
- C. There shall be a one-time deduction of five percent (5%) from the amount of ICS in the Year of its creation. This deduction results in additional water in storage in Lake Mead for future use in accordance with the Consolidated Decree, the Interim Surplus Guidelines, and the ROD. This provision shall not apply to:
  1. System Efficiency ICS created pursuant to Article 2.3 of this Forbearance Agreement because a large portion of the water saved by this type of project will increase the quantity of water in storage.
  2. Extraordinary Conservation ICS created by conversion of Tributary Conservation ICS that was not released in the Year created, pursuant to Article 2.1(F) of this Forbearance Agreement, because 5% of the ICS is deducted at the time the Tributary Conservation ICS is created.
  3. Extraordinary Conservation ICS created by conversion of Imported ICS that was not released in the Year created, pursuant to Article 2.1(G) of this Forbearance Agreement, because 5% of the ICS is deducted at the time the Imported ICS is created.
- D. In addition to the conditions described above, creation of Extraordinary Conservation ICS is subject to the following conditions:

1. Except as provided in Articles 2.2 and 2.4, Extraordinary Conservation ICS can only be created if such water would have otherwise been beneficially used.
2. The maximum total amount of Extraordinary Conservation ICS that can be created during any Year is limited to the following:
  - a. 400,000 acre-feet for California Contractors;
  - b. 125,000 acre-feet for Nevada Contractors; and
  - c. 100,000 acre-feet for Arizona Contractors.
3. The maximum quantity of Extraordinary Conservation ICS that may be accumulated in all ICS Accounts, at any time, is limited to the following:
  - a. 1,500,000 acre-feet for California Contractors;
  - b. 300,000 acre-feet for Nevada Contractors; and
  - c. 300,000 acre-feet for Arizona Contractors.
4. Except as provided in Articles 2.2 and 2.4, no category of surplus water can be used to create Extraordinary Conservation ICS.
5. The quantity of Extraordinary Conservation ICS remaining in an ICS Account at the end of each Year shall be diminished by annual evaporation losses, as determined by the Secretary in consultation with the Lower Division States, provided that such losses shall not exceed three percent (3%). Losses shall be applied annually to the end-of-the-Year balance of Extraordinary Conservation ICS beginning in the Year after the ICS is created and continuing until no Extraordinary Conservation ICS remains in Lake Mead. No evaporation losses shall be assessed during a Year in which the Secretary has declared a shortage.
6. Extraordinary Conservation ICS from a project within a state may only be credited to the ICS Account of a Contractor within that state that has funded or implemented the project creating the ICS, or to the ICS Account of a Contractor within the same state as the funding entity and project and with written agreement of the funding entity.

## 2.6 Request for Release of ICS

A Contractor that has created ICS may request that the Secretary release its ICS subject to the following conditions:

- A. If a Contractor has an overrun payback obligation, as described in the October 10, 2003 Inadvertent Overrun and Payback Policy or Exhibit C to the October 10, 2003 Colorado River Water Delivery Agreement, the Contractor must pay the overrun payback obligation in full before requesting or receiving a release of any ICS. The Contractor may request that the amount of ICS in the Contractor's ICS Account be reduced by the amount of the overrun payback obligation in order to pay the overrun payback obligation.
- B. ICS shall only be released pursuant to an ICS Declaration.



- C. In addition to the conditions described above, a Contractor's request for release of Extraordinary Conservation ICS is subject to the following conditions:
1. The total amount of Extraordinary Conservation ICS that may be released in any Year is limited to the following:
    - a. 400,000 acre-feet for California Contractors;
    - b. 300,000 acre-feet for Nevada Contractors; and
    - c. 300,000 acre-feet for Arizona Contractors;
  2. If the May, 24-month study for that Year indicates that a shortage condition would be declared in the succeeding Year if the requested amounts for the current Year under Article 2.6 were released, the Secretary may release less than the amounts of ICS requested to be released.
  3. If the Secretary releases Flood Control Surplus water, Extraordinary Conservation ICS accumulated in ICS Accounts shall be reduced by the amount of the Flood Control Surplus on an acre-foot for acre-foot basis until no Extraordinary Conservation ICS remains. The reductions to the ICS Accounts shall be shared on a pro-rata basis among all Contractors that have accumulated Extraordinary Conservation ICS unless otherwise agreed to by the Contractors.

#### 2.7 Additional Terms Regarding Creation and Release of ICS

It is the specific intent of the Parties that the terms, conditions and procedures regarding the creation and release of ICS contained in this Article 2 will be applied in conformance with additional terms, conditions and procedures governing the creation and release of ICS contained in any Delivery Agreement.

### **Article 3 Forbearance**

- 3.1 In the absence of forbearance, surplus water is apportioned for use according to the percentages provided in Article II(B)(2) of the Consolidated Decree. The Parties respectively agree as follows:
- A. ADWR hereby forbears:
    1. Any right the State of Arizona may have to delivery of any ICS released in accordance with the terms and conditions set forth in this Forbearance Agreement and any applicable Delivery Agreement for use within the State of California or the State of Nevada.
    2. Any right the State of Arizona may have to the release and delivery of water for direct delivery domestic use to entities in California or Nevada under a Domestic Surplus as described in any applicable Delivery Agreement and the ROD.
  - B. PVID, IID, CVWD, the City of Needles and MWD hereby forbear:

1. Any right they may have to delivery of any ICS released in accordance with the terms and conditions set forth in this Forbearance Agreement and any applicable Delivery Agreement for use within the State of Arizona or the State of Nevada.
  2. Any right they may have to the release and delivery of water for direct delivery domestic use to entities in Arizona or Nevada under a Domestic Surplus as described in any applicable Delivery Agreement and the ROD.
- C. SNWA and CRCN hereby forbear:
1. Any right SNWA or the State of Nevada may have to delivery of any ICS released in accordance with the terms and conditions set forth in this Forbearance Agreement and any applicable Delivery Agreement for use within the State of Arizona or the State of California.
  2. Any right SNWA or the State of Nevada may have to the release and delivery of water for direct delivery domestic use to entities in Arizona or California under a Domestic Surplus as described in any applicable Delivery Agreement and the ROD.
- 3.2 Notwithstanding the foregoing forbearance of ICS, the Parties only forbear with respect to ICS that is created pursuant to exhibits attached to and incorporated within this Forbearance Agreement. This Forbearance Agreement incorporates Exhibits A through O as of the date of execution. Additional exhibits may be added to this Forbearance Agreement after written approval of all of the Parties. Such approval shall not be unreasonably withheld.
- 3.3 The Parties do not forbear any right to the release or delivery of any water that is not described in Article 3.1.
- 3.4 Forbearance of all Parties is conditioned on the following:
- A. The execution, by the Secretary and any Contractor seeking to create ICS, of a Delivery Agreement providing that the Parties to this Forbearance Agreement are third-party beneficiaries of such Delivery Agreement.
  - B. The adoption by the Secretary of a ROD implementing an ICS program in substantial conformance with the provisions of this Forbearance Agreement and any Delivery Agreement.
  - C. The continued implementation of an ICS program that is in substantial conformance with this Forbearance Agreement and any Delivery Agreement, including:
    1. The availability of the verification and appeal process described in Article 2.5(B);
    2. The establishment and use of an ICS accounting procedure by the Secretary consistent with this Forbearance Agreement and any Delivery Agreement;
    3. The Secretary's annual declaration of Normal, Surplus (other than Quantified Surplus), or Shortage conditions based on conditions in Lake Mead with consideration of the amount of ICS accumulated by the Parties. The determination of the amount of Quantified

- Surplus shall not include the volume of accumulated Extraordinary Conservation ICS; and
4. The termination of Partial Domestic Surplus as defined in the Record of Decision dated January 16, 2001, upon issuance of the ROD.

#### **Article 4**

##### **General Provisions**

- 4.1 The records of any Party to this Forbearance Agreement that relate to the creation of ICS shall be open to inspection by any other Party.
- 4.2 The Parties to this Forbearance Agreement are hereby notified of A.R.S. § 38-511.
- 4.3 The Parties agree to comply with all applicable federal or state laws relating to equal opportunity and non-discrimination.
- 4.4 Except as provided in Article 3, including additional exhibits agreed upon by the Parties pursuant to Article 3.2, nothing in this Forbearance Agreement shall be deemed to diminish or waive the rights of any Party. The failure of any Party to enforce a provision of this Forbearance Agreement shall not be deemed to constitute a waiver of that provision. The execution of, and forbearance in compliance with, this Forbearance Agreement shall not be admissible against any Party in any action except for an action to enforce the terms of this Forbearance Agreement or a Delivery Agreement.
- 4.5 No Party to this Forbearance Agreement shall be considered to be in default in the performance of any obligations under this Forbearance Agreement when a failure of performance shall be due to uncontrollable forces. The term “uncontrollable force” shall mean any cause beyond the control of the party unable to perform such obligation, including but not limited to failure or threat of failure of facilities, flood, earthquake, storm, fire, lightning, and other natural catastrophes, epidemic, war, civil disturbance or disobedience, strike, labor dispute, labor or material shortage, sabotage, restraint by order of a court or regulatory agency of competent jurisdiction, and action or non-action by, or failure to obtain the necessary authorizations or approvals from, a federal governmental agency or authority, which by exercise of due diligence and foresight such party could not reasonably have been expected to overcome. Nothing contained herein shall be construed to require any party to settle any strike or labor dispute in which it is involved.
- 4.6 The Colorado River Board of California is created by, and operates under, California Water Code sections 12500 et seq. The California Water Code charges the CRB and its officers with the duty to confer with representatives of other States in the Colorado River basin, representatives of the United States, and others

concerning problems and measures relating to the development of the Colorado River Basin, the use of the water of the Colorado River System, and the protection of the interests therein of the State, and to negotiate and to make recommendations respecting such problems and measures. Under this authority, the CRB through its officers has participated in the negotiation of, and has made recommendations concerning, this Agreement and its exhibits. Although the CRB and the State of California are not Parties to this Agreement, the Parties agree to include the CRB and its officers in any consultations under this Agreement and in any negotiations related to amendment of this Agreement and its exhibits, including the addition of exhibits under Article 3.2.

## **Article 5**

### **Notices**

#### **5.1 Notices and Requests**

A. All notices and requests required or allowed under the terms of this Forbearance Agreement shall be in writing and shall be mailed first class postage paid to the following entities at the following addresses:

**CRCN:**

Colorado River Commission of Nevada  
555 E. Washington Ave., Suite 3100  
Las Vegas, NV 89101  
Attn: Executive Director, Colorado River Commission

**SNWA:**

Southern Nevada Water Authority  
1001 S. Valley View Boulevard  
Las Vegas, NV 89153  
Attn: General Manager

**PVID:**

Palo Verde Irrigation District  
180 West 14<sup>th</sup> Avenue  
Blythe, CA 92225  
Attn: General Manager

**IID:**

Imperial Irrigation District  
333 E. Barioni Boulevard  
Imperial, CA 92251  
Attn: General Manager

CVWD:  
Coachella Valley Water District  
P. O. Box 1058  
Coachella, CA 92236  
Attn: General Manager/Chief Engineer

City of Needles:  
City of Needles  
817 Third Street  
Needles, CA 92363-2933  
Attention: City Manager

MWD:  
The Metropolitan Water District of Southern California  
700 North Alameda Street  
Los Angeles, CA 90012  
Attn: General Manager

State of California:  
Colorado River Board of California  
770 Fairmont Avenue, Suite 100  
Glendale, CA 91203-1068  
Attn: Executive Director

State of Arizona:  
Arizona Department of Water Resources  
3550 North Central Avenue  
Phoenix, AZ 85012  
Attn: Director

B. Any Party may, at any time, change its mailing address by notice to the other Parties.

## 5.2 Notices and Requests by Facsimile

A. Notices and requests may be given by facsimile among the Parties in lieu of first class mail as provided in Article 5.1. Such facsimiles shall be deemed complete upon a receipt from the sender's facsimile machine indicating that the transmission was satisfactorily completed and after phone communication with administrative offices of the recipient notifying the recipient that a facsimile has been sent.

B. The facsimile numbers of the entities listed in Article 5.1(A) are as follows:

State of Arizona: (602) 771-8681 (Attn: Director)

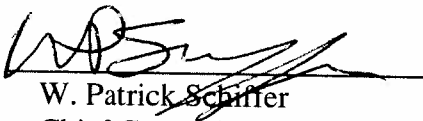
SNWA	(702) 258-3268 (Attn: General Manager)
CRCN	(702) 486-2670 (Attn: Executive Director, Colorado River Commission)
PVID	(760) 922-8294 (Attn: General Manager)
IID	(760) 339-9392 (Attn: General Manager)
CVWD	(760) 398-3711 (Attn: General Manager/Chief Engineer)
City of Needles	(760) 326-6765 (Attn: Mayor/City Manager)
MWD	(213) 217-5704 (Attn: General Manager)
CRB	(818) 543-4685 (Attn: Executive Director)

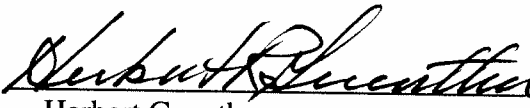
C. Any Party may, at any time, change its facsimile number by notice to the other Parties.

In Witness of this Forbearance Agreement, the Parties affix their official signatures below, acknowledging execution of this document on the 13 day of December, 2007.

Approved as to form:

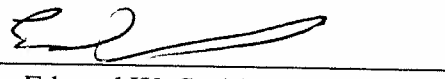
**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**

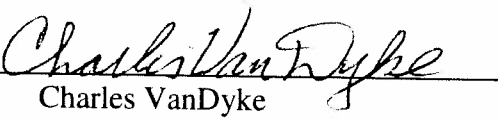
By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:

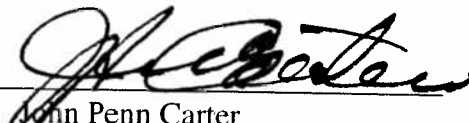
**PALO VERDE IRRIGATION  
DISTRICT**

By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

Attest and Approved:

**IMPERIAL IRRIGATION DISTRICT**

By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

Approved as to form:

By: 

Robert Hargreaves  
City Attorney

**THE CITY OF NEEDLES**

By: 

Jeff Williams  
Mayor

Approved as to form:

By: 

Steven B. Abbott  
Legal Counsel

**COACHELLA VALLEY WATER  
DISTRICT**

By: 

Steven B. Robbins  
General Manager/Chief Engineer

Approved as to form:

By: 

Karen L. Tachiki  
General Counsel

**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

By: 

Jeffrey Wightlinger  
General Manager

Approved as to form:

By: 

John J. Entsminger  
Deputy General Counsel

**SOUTHERN NEVADA WATER  
AUTHORITY**

By: 

Patricia Mulroy  
General Manager

Approved as to form:

By: 

Jennifer T. Crandell  
Deputy Attorney General

**COLORADO RIVER COMMISSION  
OF NEVADA**

By: 

George M. Caan  
Executive Director

Exhibit A  
Southern Nevada Water Authority  
Virgin and Muddy Rivers Tributary Conservation,  
Intentionally Created Surplus (ICS) Project

**Summary:** Nevada state water rights that predate the Boulder Canyon Project Act (BCPA) on the Virgin River have a priority date of pre-1905 and were decreed by the Nevada Supreme Court in 1927. The decree allocated 17,785 acre-feet per year (afy) to the Bunkerville and Mesquite Irrigation Companies, which represents approximately 10% of the annual average flow in the Virgin River above the Irrigation Companies.<sup>1</sup> The Southern Nevada Water Authority (SNWA) currently owns shares in the Bunkerville Irrigation Company representing approximately 3,700 afy of surface water rights.

On the Muddy River, water rights were decreed in 1920 and that decree allocated the entire flow of the Muddy River. On the Lower Muddy River, the entire flow of the river is diverted by the Muddy Valley Irrigation Company (MVIC) for agricultural use. SNWA currently owns shares in the Muddy Valley Irrigation Company representing approximately 7,000 afy of surface water rights and leases approximately 2,000 afy from the LDS Church, which are not represented by MVIC shares. The LDS Church lease is for a term of 20 years, with the option to renew the lease for an additional 20 years.

SNWA anticipates acquiring a total of approximately 30,000 afy of pre-BCPA water rights from entities with rights on the Virgin and Muddy Rivers. Approximately one-third of this amount is expected to come from the Virgin River and two-thirds from the Muddy River. This is consistent with the flow volumes that were analyzed in the Final Environmental Impact Statement, Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead and in the analysis for Lake Mead for the Lower Colorado River Multi-Species Conservation Program.

Retired agricultural water rights will be conveyed to Lake Mead's Overton Arm. The pre-BCPA water rights conveyed to Lake Mead represent the full right that is and has been historically used for agricultural purposes and could have otherwise been diverted from the Virgin or Muddy River and fully consumed by SNWA for municipal purposes.

Virgin and Muddy River rights conveyed to Lake Mead will either pass through their historic points of diversion, flow through the irrigation company ditches and return to the mainstream of the Virgin or Muddy River further downstream or will remain in the mainstream of the Virgin or Muddy River. The full right documented to flow to Lake Mead will be accounted for as Tributary Conservation ICS.

Virgin and Muddy River water rights that will be utilized to create Tributary Conservation pursuant to this Exhibit A of this Forbearance Agreement include both decreed Nevada state water rights that have been in continuous use since at least 1927 and decreed Nevada state water rights with an established history of use prior to 1927 but that have experienced periods of non-

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<sup>1</sup> Annual average Virgin River flow for water years 1931 to 2006 at the U.S. Geological Survey (USGS) Virgin River at Littlefield, AZ gage, No. 09415000 was 176,000 afy.



use in the interim. Per this Exhibit A of this Forbearance Agreement, SNWA is specifically allowed to utilize any and all pre-BCPA Virgin and Muddy River water rights decreed by a Nevada State Court prior to 1928 to create Tributary Conservation ICS regardless of those water rights history of use after 1928.

**Specific Water Rights:** The sources of water that would create Tributary Conservation ICS credits covered by these two projects include:

- i. Estimated 5,702 afy pursuant to 682 preferred shares in the Muddy Valley Irrigation Company<sup>2</sup>
- ii. Estimated 1,460 afy pursuant to 1,921 common shares in the Muddy River Irrigation Company
- iii. 2,001 afy pursuant to Certificate Nos. 6419, 25861, 26316, 26317 and 26318 (decreed Muddy River right not represented by MVIC shares).
- iv. 3,710 afy pursuant to 350 shares of Bunkerville Irrigation Company stock<sup>3</sup>
- v. Any other water rights represented by shares in the Bunkerville, Mesquite and Muddy Valley Irrigation Companies and other pre-1929 decreed rights to the Muddy and Virgin Rivers purchased or contractually acquired by SNWA.

Annual variations in the flow of the Muddy River from any cause will cause fluctuations in the quantity of water available per share in the Muddy Valley Irrigation Company and reduce or increase the quantity of Tributary Conservation ICS that is available.

**Nevada State Approval:** SNWA will acquire necessary approvals from the Nevada Division of Water Resources to allow the Nevada state water rights to be conveyed to Lake Mead to create Tributary Conservation ICS.

**Plan for Creation and Verification of ICS:** Pursuant to Sections 3.B. and 3.D. of the Interim Guidelines for the Operation of Lake Powell and Lake Mead, SNWA shall annually submit a plan to the Secretary of Interior. The annual plan will demonstrate the volume of water rights

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<sup>2</sup> Muddy River water rights were decreed in 1920 by the Tenth (now Eighth) Judicial District Court. Water rights on the lower Muddy River are divided into 2,432 preferred and 5,044 common shares of stock in the Muddy Valley Irrigation Company.

<sup>3</sup> Uses of surface water in Nevada prior to the water law of 1905 are considered vested rights, the quantification of which can only be judicially determined by a Nevada District Court in an adjudication proceeding. The Virgin River surface water uses prior to 1905 have been adjudicated by the Virgin River Decree pursuant to Proof No. 02038 filed by the Bunkerville Irrigation Company, and Proof No. 01968 filed by the Mesquite Irrigation Company. The Virgin River Decree was entered by the Tenth (now Eighth) Judicial District Court on May 14, 1927.

The Decree adjudicated water rights to Virgin River surface flow for irrigation of 1,963.08 acres for a total of 17,785.50 acre feet per year (AFY). The summer duty equals 1.0 cfs of flow for each 70 acres and the winter duty equals 1.0 cfs of flow for each 100 acres for a total duty of 9.06 afy per acre. The summer period is the months of March through September and the winter period is the months of October through February.

owned and/or contractually controlled by SNWA on the Virgin and Muddy Rivers, including any water rights in addition to those specified above that SNWA acquires subsequent to the execution of this Forbearance Agreement. The annual plan will also demonstrate how the Tributary Conservation ICS, as described in this Exhibit A will be created and accounted for to Lake Mead. Such verification plan will, at a minimum, include:

### *Muddy River*

The 1920 Muddy River Decree allocated the entire flow of the Muddy River; therefore it is anticipated that accounting for Muddy River water at Lake Mead will require an annual accounting of the rights owned by SNWA based on actual USGS gage flows and a water budget of the flows on the Lower Muddy River as follows:

#### *A. Muddy River Rights Owned by SNWA:*

1. Upper Muddy River rights owned or contractually controlled by SNWA as quantified in the Muddy River Decree.
2. Shares of the Muddy Valley Irrigation Company owned or contractually controlled by SNWA. MVIC shares are quantified based on a percentage of the total flows (divided by total shares) in the Muddy River at the USGS Muddy River near Glendale, NV gage less the Upper Muddy River rights owned or controlled by SNWA that reach the gage.
3. Nos. 1 and 2 represent the water SNWA would release into the Lower Muddy River for the creation of ICS credits.

#### *B. Muddy River Flows reaching Lake Mead will be calculated as follows:*

Flows measured by USGS at Muddy River near Glendale, NV gage  
- (minus) consumptive uses by agriculture below the Glendale gage  
- (minus) direct uses by industry below the Glendale gage  
- (minus) channel evapotranspiration below Glendale gage to Lake Mead  
- (minus) evapotranspiration from the managed acreage on the Overton  
Wildlife Management Area (WMA)  

---

= Total Flow to Lake Mead

C. If the total amount represented in A is equal to or greater than the amount calculated to reach Lake Mead in B, then SNWA shall be credited with the amount in B.

D. If the total amount in A is less than the amount in B, SNWA shall be credited with the amount in A.

E. Because the total volume of water SNWA currently owns and controls on the Muddy River represents a relatively small percentage of the total flow, conveyance losses of SNWA's current rights are negligible.

F. The total Muddy River flow reaching Lake Mead as calculated in B Above includes flows at the USGS Muddy River at Lewis Avenue at Overton, NV gage located just upstream of the Overton Wildlife Management Area and unmeasured underflow.

*Virgin River*

Because the Virgin River Decree allocated just 10% of the average annual flow in the Virgin River (17,785.50 afy) to irrigate 1,963.08 acres, Tributary Conservation ICS from the Virgin River can be calculated based on the reduction in agricultural acreage as follows:

Virgin River Calculation:

Decrease in total agricultural acreage decreed in the Bunkerville or  
Mesquite Irrigation Companies calculated using remote sensing and a  
Geographic Information System (as limited by the shares controlled by  
SNWA and the acreage it represents)  
x the decreed duty per acre (9.06 acre-feet per acre)  
= Flows to Lake Mead


**Maximum ICS Created Under this Exhibit:** Maximum amount of ICS that may be created by SNWA from these projects in one calendar year is limited to 50,000 acre-feet of Virgin and Muddy River water.


**Use of SNWA 1989 Virgin River Rights:** SNWA will not use Permit Nos. 54077 and 58591 (Nevada state permits for combined duty of 113,000 afy) in the future to support new development on the lands being fallowed near the Virgin River, excepting 5,000 acre-feet of such rights that SNWA is obligated to transfer to the Virgin Valley Water District and which SNWA cannot encumber.

In Witness of this Exhibit A to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13 day of December, 2007.

Approved as to form:


**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**


By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:

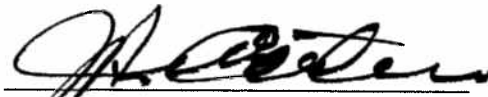
**PALO VERDE IRRIGATION  
DISTRICT**


By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

Attest and Approved:

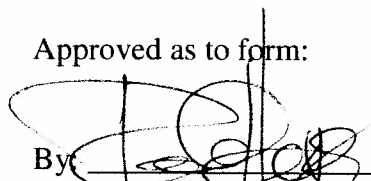
**IMPERIAL IRRIGATION DISTRICT**

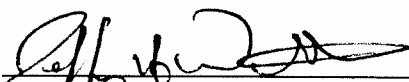
By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

Approved as to form:


**THE CITY OF NEEDLES**


By:   
Robert Hargreaves  
City Attorney

By:   
Jeff Williams  
Mayor

Approved as to form:

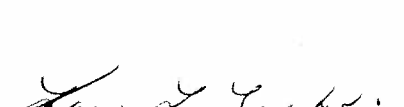
**COACHELLA VALLEY WATER  
DISTRICT**

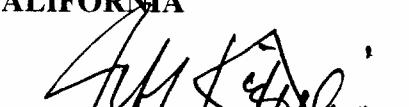
By:   
Steven B. Abbott  
Legal Counsel

By:   
Steven B. Robbins  
General Manager/Chief Engineer

Approved as to form:

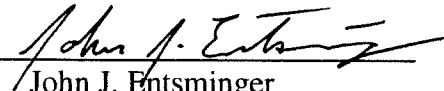
**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**


By:   
Karen L. Tachiki  
General Counsel

By:   
Jeffrey Rightlinger  
General Manager

Approved as to form:

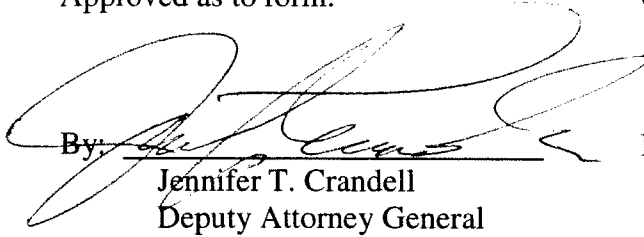
**SOUTHERN NEVADA WATER  
AUTHORITY**

By:   
John J. Entsminger  
Deputy General Counsel

By:   
Patricia Mulroy  
General Manager

Approved as to form:

**COLORADO RIVER COMMISSION  
OF NEVADA**

By:   
Jennifer T. Crandell  
Deputy Attorney General

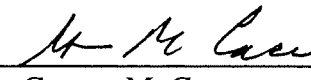
By:   
George M. Caan  
Executive Director

Exhibit B  
Southern Nevada Water Authority  
Coyote Spring Valley Groundwater, Imported Intentionally Created Surplus (ICS) Project

**Summary:** The Southern Nevada Water Authority (SNWA) plans to construct and operate a water transmission system from new and existing wells in Coyote Spring Valley into the existing Moapa Valley Water District (MVWD) storage reservoir in upper Moapa Valley. Major components of the Coyote Spring Project, which would be located on both federal and non-federal lands, include several wells, approximately 16 miles of pipeline, a regulating tank, less than 1 mile of power line, and system improvements by MVWD.

SNWA will convey its 9,000 afy of permitted water rights (see below) and possibly additional water rights granted by the Nevada Division of Water Resources, through the Coyote Spring Project. The water will then be conveyed through the MVWD's municipal supply system and discharged at a point to be determined either on the Muddy River or within the Muddy Valley Irrigation Company's irrigation system. The water would then be allowed to flow down the Muddy River to Lake Mead at which point the water becomes Imported ICS credited to SNWA's ICS Account.

**Specific Nevada State Water Rights:**

1. 9,000 afy pursuant to Permit Nos. 49414, 49660 to 49662 and 49978 to 49987.
2. Water permitted for appropriation by the Nevada State Engineer pursuant to Application Nos. 54055 through 54059, inclusive.
3. Any effluent generated by the direct use of water rights specified in paragraphs 1 and 2 above by the Moapa Valley Water District or other municipal agency outside of the Las Vegas Valley and treated and discharged to Lake Mead in accordance with all applicable state and federal laws.

**Nevada State Approval:** SNWA will acquire necessary approvals from the Nevada Division of Water Resources to permit the Nevada state water rights to be conveyed to Lake Mead to create Imported ICS and Developed Shortage Supply. SNWA's state groundwater rights are subject to a monitoring plan mandated by the Nevada State Engineer that will determine effects, if any, of SNWA's groundwater development in the Coyote Spring Valley on the Muddy River.

**Verification Plan:** Pursuant to Sections 3.B. and 3.D. of the Interim Guidelines for the Operation of Lake Powell and Lake Mead, SNWA shall annually submit a plan to the Secretary of the Interior demonstrating how the Imported ICS described in this Exhibit B will be accounted for at Lake Mead. Coyote Spring water introduced into the Muddy River Channel in the Lower Moapa Valley will be metered and will be in addition to SNWA Muddy River Tributary Conservation ICS that will be in the channel as derived from the flows in the Muddy River at the U.S. Geological Survey Glendale gage.

Consumptive use by evapotranspiration in the Muddy River Channel and Overton Wildlife Management Area will be accounted for in the Muddy River Verification Plan for the Tributary Conservation ICS.


**Maximum ICS Created Under this Exhibit:** Maximum amount of water that may be created by SNWA from these projects in one calendar year is limited to 15,000 acre-feet.

In Witness of this Exhibit B to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13 day of December, 2007.

Approved as to form:


**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**


By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:

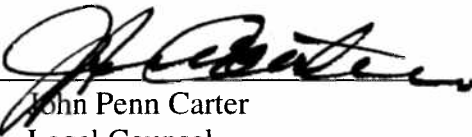
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DISTRICT**

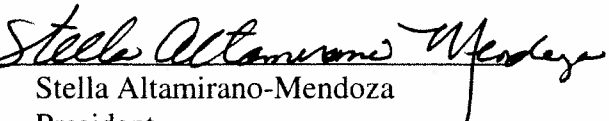
By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

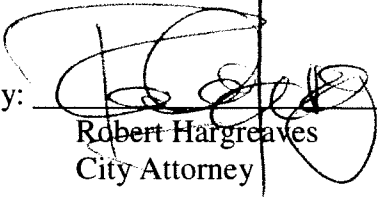
Attest and Approved:

**IMPERIAL IRRIGATION DISTRICT**

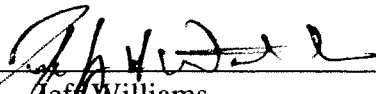
By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President


Approved as to form:

By:   
Robert Hargreaves  
City Attorney


**THE CITY OF NEEDLES**

By:   
Jeff Williams  
Mayor


Approved as to form:

By:   
Steven B. Abbott  
Legal Counsel

**COACHELLA VALLEY WATER DISTRICT**

By:   
Steven B. Robbins  
General Manager/Chief Engineer

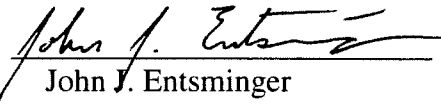
Approved as to form:

By:   
Karen L. Tachiki  
General Counsel

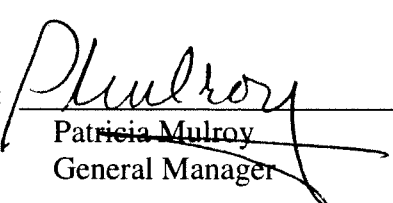
**THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

By:   
Jeffrey Kightlinger  
General Manager

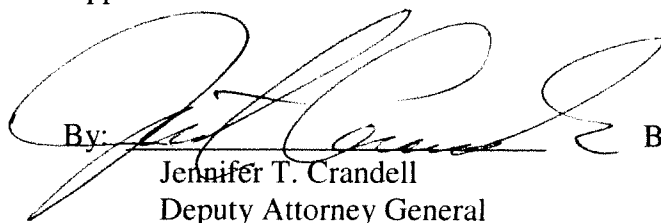
Approved as to form:

By:   
John J. Entsminger  
Deputy General Counsel

**SOUTHERN NEVADA WATER AUTHORITY**

By:   
Patricia Mulroy  
General Manager

Approved as to form:

By:   
Jennifer T. Crandell  
Deputy Attorney General

**COLORADO RIVER COMMISSION OF NEVADA**

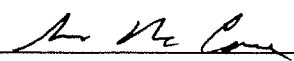
By:   
George M. Caan  
Executive Director



Exhibit C  
Drop 2 Reservoir System Efficiency Project

1. **Type:** System Efficiency ICS project that will save water that would otherwise be non-storable and lost to the Colorado River Mainstream in the United States through the construction of Drop 2 Reservoir near the All-American Canal in California (*see* §3(A)(3) of the *Interim Guidelines for the Operation of Lake Powell and Lake Mead*).
2. **Purpose:** Provide Southern Nevada Water Authority (SNWA) with an assured interim water supply in accordance with §8 of the Agreement Concerning Colorado River Management and Operations effective as of April 23, 2007. In addition, provide interim supplies to others as discussed below.
3. **Project Description:** In 2005, Reclamation completed a study to identify potential alternatives for replacing lost storage capacity at Senator Wash Dam, reduce excess deliveries to Mexico, improve lower river operational control, and avoid mismatches in water orders and diversions from the river below Parker Dam. The study determined that building a small reservoir near the All-American Canal was the best alternative to meet these objectives for saving Colorado River water. This reservoir would allow Reclamation to store water that would be otherwise un-storable so it is available to augment the water supply available for use in the lower basin.

In general, the Project consists of (i) a reservoir approximately 615 acres in size with a capacity of about 8,000 acre-feet, (ii) an inlet canal about 6.5 miles long to connect the All-American Canal and the reservoir, and (iii) inverted siphon and outlet canal connecting the reservoir to the All-American Canal. Location: Former Brock Ranch Research Center.

The Project is currently estimated to (i) cost \$172 million to design and construct (ii) have a useful life of at least 50 years, and (iii) generate at least 3.5 million acre-feet of saved water over its estimated useful life.

In December 2006, Congress directed the Secretary to design and provide for the construction, operation, and maintenance of a regulated water storage facility at or near the All-American Canal to provide additional storage capacity to reduce non-storable Colorado River flows below Parker Dam. The Project is this facility. Congress directed the Secretary to do so “without delay,” “upon the date of enactment of this Act,” and “notwithstanding any other provision of law.”

4. **Capital Contribution:** Negotiated among the Secretary, SNWA, and Colorado River Commission of Nevada (CRC). Central Arizona Water Conservation District (CAWCD) and Metropolitan Water District of California (Metropolitan) can each elect to participate at a later date based on the terms and conditions of the agreement for the construction and funding of the Project, Contract No. 07-XX-30-W0516, as executed December 13, 2007, hereinafter referred to as the “Drop 2 Funding Agreement.”

5. **Quantity of System Efficiency ICS:** The total amount of System Efficiency ICS credited to SNWA, CAWCD, and Metropolitan's ICS Accounts from this Project will be determined as follows:

A. If actual Project costs total \$172 million or less:

1. SNWA will be credited 600,000 acre-feet;
2. If CAWCD and Metropolitan elect to participate, each will be credited 100,000 acre-feet and contribute 1/6 of actual Project costs, not to exceed \$28,666,667. SNWA's account will be deducted the same amount (200,000 acre-feet);
3. If either Metropolitan or CAWCD elect not to participate and the other elects to additionally participate, then that party will be credited an additional 50,000 acre-feet and contribute an additional 1/12 of the actual project costs, not to exceed \$14,333,333 for a total contribution of 1/4 of the actual project costs, not to exceed \$43,000,000. SNWA's account will be deducted the same amount (50,000 acre-feet for additional participation and 150,000 acre-feet in total).

B. If actual Project costs total more than \$172 million but less than \$206 million CAWCD and/or Metropolitan's contribution and benefit will remain the same and SNWA will:

1. Receive an additional acre-foot for every \$600 contributed above and beyond \$172 million;
2. SNWA will solely fund any Project costs in excess of \$172 million, not to exceed \$206 million.

6. **Availability of ICS to SNWA, CAWCD, and Metropolitan:** As provided in the Drop 2 Funding Agreement, the Secretary shall credit each Contractor's ICS Account at the time of the capital contribution. Also, the Secretary shall deliver ICS to the Contractors pursuant to the attached "Schedule for Annual Deliveries of System Efficiency ICS" below.
7. **System Benefit:** Amount of water by which Lake Mead will be enhanced because of this Project: Full system advantage of Drop 2 Reservoir Project (estimated to be at least 3.5 million acre feet over the life of the Project), less maximum amount of System Efficiency ICS credited to SNWA, CAWCD, and Metropolitan pursuant to paragraph 5.
8. **Reclamation Authority:** Authority: Reclamation Act of 1902, 32 Stat. 388, as amended and supplemented, including in particular, Boulder Canyon Project Act, 45 Stat. 1057, Act of March 4, 1921, 41 Stat. 1404, Act of January 21, 1927, 44 Stat. 1010, chapter 47, designated

the Colorado River Front Work and Levee System, as amended and P.L. 109-432, 120 Stat. 2922 §396.

### Schedule for Annual Deliveries of System Efficiency ICS

Year	Maximum Delivery to Each Party (acre-feet)		
	SNWA	Metropolitan	CAWCD
2008	0	100,000 total (annual maximum: see notes 2 and 3 below)	0
2009			
2010			
2011	100,000 total (annual maximum of 40,000)		
2012			
2013			
2014			
2015			
2016	Remaining balance in SNWA's ICS Account per the Drop 2 Funding Agreement (annual maximum of 40,000)	Remaining balance in Metropolitan's ICS Account per the Drop 2 Funding Agreement (annual maximum of 25,000; see note 4 below)	100,000 total (annual maximum of 65,000 less any water used by SNWA and/or Metropolitan in any year)
2017			
2018			
2019			
2020			
2021			
2022			
2023			
2024			
2025			
2026			
2027			
2028			
2029			
2030			
2031			
2032			
2033			
2034			
2035			
2036			
Total Maximum	See note 4 below	100,000 (see note 5 below)	100,000 (see note 5 below)

1. All annual maximum values represent the calendar year maximum annual consumptive use of System Efficiency ICS. The actual System Efficiency ICS ordered and used may be less.

2. 2008-2010: If Metropolitan elects to participate, only Metropolitan may take delivery of System Efficiency ICS with an annual maximum use of 34,000 acre-feet. In accordance with Section 3.C.5. of the Guidelines, if the May 24-Month Study indicates that any ICS requested to

be delivered by Metropolitan will cause a Shortage Condition to be determined in the succeeding year, then the Secretary may deliver less than the amount of ICS requested to be delivered to Metropolitan. If a shortage is declared by the Secretary in accordance with Section 2.D. of the Guidelines in 2011 or 2012, then Metropolitan must payback any System Efficiency ICS used by Metropolitan from 2008 through 2010 in the shortage year. Metropolitan shall effect payback in the same manner as provided in Reclamation's Inadvertent Overrun and Payback Policy, 69 FR 12202, March 15, 2004, unless the Parties agree on an alternative method of payback. If Metropolitan has implemented a shortage allocation plan to reduce deliveries to its member agencies or the return of such water would cause Metropolitan to implement such a shortage allocation plan in that year, then the Parties shall meet and confer to discuss alternative methods of payback. Any System Efficiency ICS that is paid back under this provision shall be restored to Metropolitan's ICS Account. If Metropolitan does not elect to participate, no parties may request delivery of System Efficiency ICS during this period.

3. 2011-2015: SNWA may take delivery of System Efficiency ICS with an annual maximum use of 40,000 acre-feet not to exceed 100,000 acre-feet in total. If Metropolitan elects to participate and has not received delivery of 100,000 acre-feet of System Efficiency ICS from 2008 through 2010, or has paid back any System Efficiency ICS in 2011 or 2012, Metropolitan may use an additional 25,000 acre-feet per year of System Efficiency ICS, not to exceed 100,000 acre-feet in total from 2008 through 2015. The only years in which delivery of System Efficiency ICS would exceed 40,000 acre-feet per year are the years in which Metropolitan is using System Efficiency ICS as described above. The total amount of System Efficiency ICS used by SNWA and Metropolitan will not exceed 200,000 acre-feet. CAWCD will not request delivery of System Efficiency ICS during this period if CAWCD elects to participate.

4. 2016-2036: The annual maximum delivery of System Efficiency ICS is 65,000 acre-feet. SNWA may take delivery of System Efficiency ICS with an annual maximum use of 40,000 acre-feet up to 500,000 acre-feet plus any unused System Efficiency ICS from 2011 to 2015 plus any System Efficiency ICS available as a result of the Project costs exceeding \$172 million pursuant to Section 7 of the Drop 2 Funding Agreement, minus any System Efficiency ICS used by CAWCD and/or Metropolitan if they elect to participate. If Metropolitan and CAWCD elect to participate and Metropolitan has not received delivery of 100,000 acre-feet of System Efficiency ICS from 2008 through 2015, after accounting for any System Efficiency ICS payback in 2011 or 2012, Metropolitan may use an additional 25,000 acre-feet per year of System Efficiency ICS, not to exceed 100,000 acre-feet in total from 2008 through 2036. CAWCD may take delivery of an annual maximum of 65,000 acre-feet of System Efficiency ICS less any System Efficiency ICS used by SNWA and/or Metropolitan in any year not to exceed 100,000 acre-feet in total from 2016 through 2036. The only years in which delivery of System Efficiency ICS would exceed 40,000 acre-feet are the years in which Metropolitan and/or CAWCD are using System Efficiency ICS as described above.

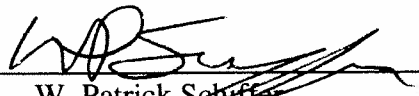
5. If either CAWCD and/or Metropolitan do not elect to participate, and the other Elector executes an additional Notice of Election to Participate, that Elector's Maximum Delivery increases from 100,000 acre-feet in total to 150,000 acre-feet in total and that total is deemed substituted in Notes 3 and 4 above. SNWA will not request delivery of System Efficiency ICS associated with the Project in an amount greater than 40,000 acre-feet in any year.

In Witness of this Exhibit C to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13 day of December, 2007.


Approved as to form:

**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**

By:

  
W. Patrick Schiffer  
Chief Counsel

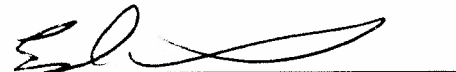
By:

  
Herbert Guenther  
Director

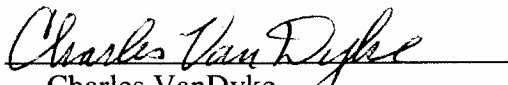
Attest:

**PALO VERDE IRRIGATION  
DISTRICT**

By:

  
Edward W. Smith  
General Manager

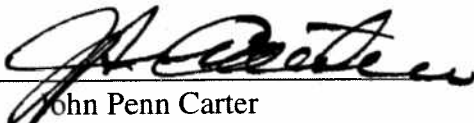
By:

  
Charles VanDyke  
Chair

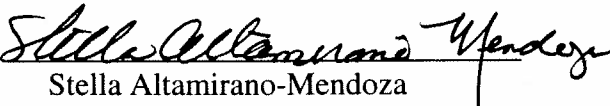
Attest and Approved:

**IMPERIAL IRRIGATION DISTRICT**

By:

  
John Penn Carter  
Legal Counsel

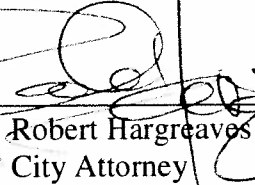
By:

  
Stella Altamirano-Mendoza  
President

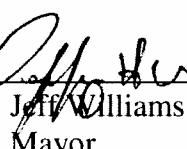
Approved as to form:

**THE CITY OF NEEDLES**

By:

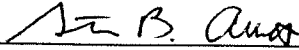
  
Robert Hargreaves  
City Attorney


By:

  
Jeff Williams  
Mayor

Approved as to form:

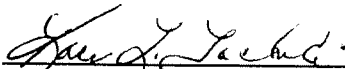
**COACHELLA VALLEY WATER  
DISTRICT**

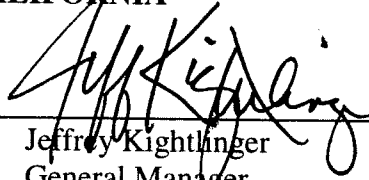
By:   
Steven B. Abbott  
Legal Counsel

By:   
Steven B. Robbins  
General Manager/Chief Engineer

Approved as to form:

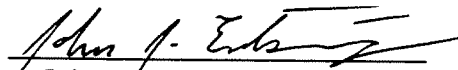
**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

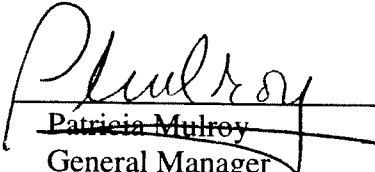
By:   
Karen L. Tachiki  
General Counsel

By:   
Jeffrey Kightlinger  
General Manager

Approved as to form:

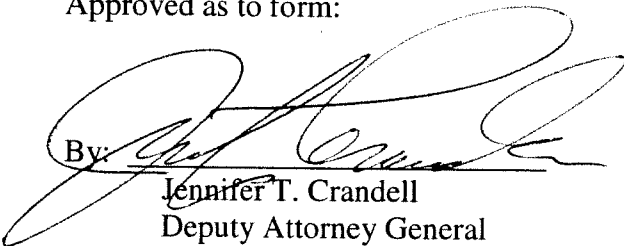
**SOUTHERN NEVADA WATER  
AUTHORITY**

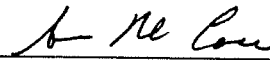
By:   
John J. Entsminger  
Deputy General Counsel

By:   
~~Patricia Mulroy~~  
General Manager

Approved as to form:

**COLORADO RIVER COMMISSION  
OF NEVADA**

By:   
Jennifer T. Crandell  
Deputy Attorney General

By:   
George M. Caan  
Executive Director

## **EXHIBIT D**

### **IID Extraordinary Water Conservation Project – Fallowing**

Contractor: Imperial Irrigation District

Term: 2008 through 2026

Category: Extraordinary conservation programs that existed on January 1, 2006

Conservation Activity: Land fallowing.

The purpose of this activity is to conserve water for transfer to San Diego County Water Authority (SDCWA), mitigation of Salton Sea salinity impacts and to create Extraordinary Conservation ICS.

Conservation Implementation:

- a) Continuation of the IID 2007-2008 Conservation Plan implementing procedures established by the IID Board of Directors for the 2007-2008 growing season, and annually thereafter as a component of the IID fallowing program to create ICS.
- b) If the program is oversubscribed with eligible fields the fields selected for fallowing will be by a random selection process and reviewed for environmental impacts and administration costs.
- c) Gates will be locked for participating fields; or, if shared gate, delivery ditch will be blocked or other physical obstruction to water delivery will be implemented.
- d) Computerized crop codes will be modified to prevent water orders from being processed for participating fields.
- e) IID will pay growers for fallowing with a maximum payment for 6 af/acre, plus grower will pay for weed control.
- f) Absent the creation of ICS by IID, such water would have been beneficially used within the IID service area.

Verification and Accounting:

- a) Conserved water yield estimate for fallowed fields will be based on the previous year's water history, the recent 10 year Water History Baseline (minus high and low years), and reviewed for material trend deviations in recent years and crops grown during preceding three years.
- b) Fallowed field locations will be provided promptly after grower fallowing contract execution deadline.
- c) IID staff will monitor fields to verify canal water not being delivered.

- d) Consumptive use reduction accounting will be at IID's diversion point at Imperial Dam (Station 60) by taking into account total losses from field to the Dam. IID shall verify in Spring and Fall 5% of randomly selected fallowed fields for locked gates or physical obstruction in delivery ditch.
- e) In addition to field verification by IID, the USBR shall conduct an independent annual verification with its own staff, in the same manner as provided in the MWD-Funded Palo Verde Irrigation District Forbearance and Fallowing Program
- f) Measurement accuracy – assume Station 60 accuracy is comparable to All American Canal at Pilot Knob.<sup>1</sup>
- g) The amount of water conserved by the IID Land Fallowing project to be devoted to the creation of ICS credits is limited to the quantities set forth in the following *Limitations on Creation of EC ICS* section and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007.

*Limitations on Creation of ECICS*

- a) The total amount of EC ICS that IID may create in any year pursuant to Exhibits D, E, and F is limited to the amount of Colorado River water that, if added to the sum of its consumptive use and the maximum amounts of water that could be transferred to other California Colorado River contractors pursuant to the schedules in the Quantification Settlement Agreement, would not result in an Inadvertent Overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.
- b) The amount of annual EC ICS created shall not exceed 25,000 acre-feet per year for storage in Lake Mead.

In Witness of this Exhibit D to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13 day of December, 2007.

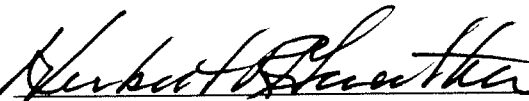
Approved as to form:

**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**

By:

  
W. Patrick Schiffer  
Chief Counsel

By:

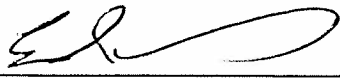
  
Herbert Guenther  
Director


<sup>1</sup> Accuracy of Annual Volume from Current-Meter Based Stage-Discharges, Clemmens and Wahlin, ASCE Peer Review, May 2004.



Attest:

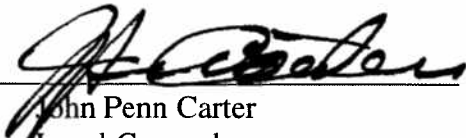
**PALO VERDE IRRIGATION  
DISTRICT**

By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

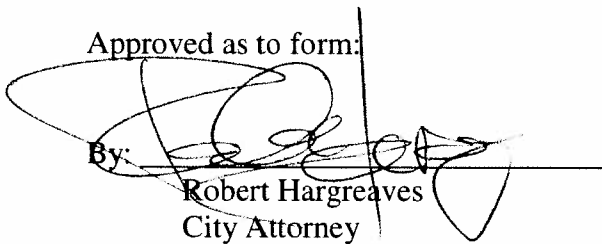
Attest and Approved:

**IMPERIAL IRRIGATION DISTRICT**

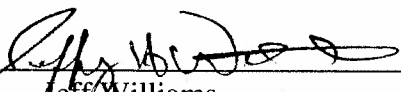
By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

Approved as to form:

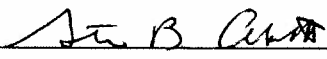
By:   
Robert Hargreaves  
City Attorney

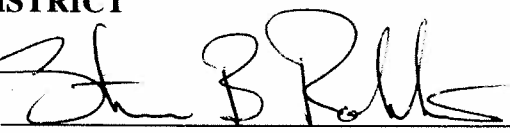
**THE CITY OF NEEDLES**

By:   
Jeff Williams  
Mayor

Approved as to form:

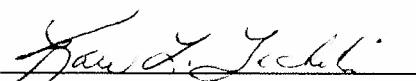
**COACHELLA VALLEY WATER  
DISTRICT**

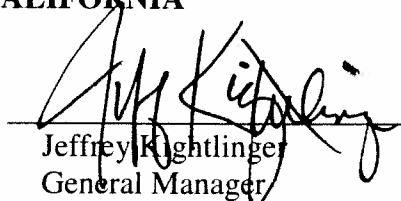
By:   
Steven B. Abbott  
Legal Counsel

By:   
Steven B. Robbins  
General Manager/Chief Engineer

Approved as to form:

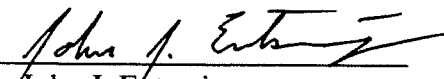
**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

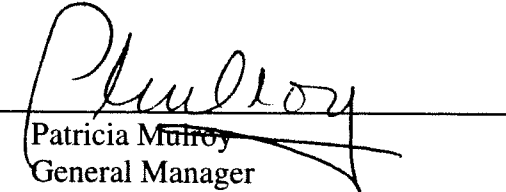
By:   
Karen L. Tachiki  
General Counsel

By:   
Jeffrey Knightlinger  
General Manager

Approved as to form:

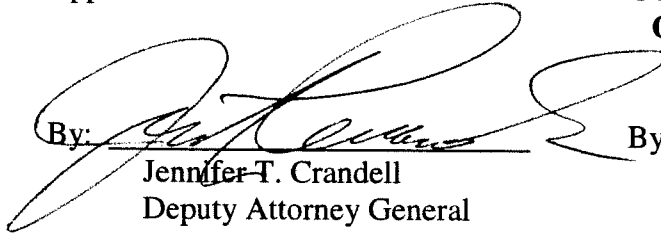
**SOUTHERN NEVADA WATER  
AUTHORITY**


By:   
John J. Entsminger  
Deputy General Counsel

By:   
Patricia Mulroy  
General Manager

Approved as to form:

**COLORADO RIVER COMMISSION  
OF NEVADA**

By:   
Jennifer T. Crandell  
Deputy Attorney General

By:   
George M. Caan  
Executive Director

## **EXHIBIT E**

### **IID Extraordinary Water Conservation Project – Tailwater Recovery**

Contractor: Imperial Irrigation District

Term: 2008 through 2026

Category: Extraordinary conservation programs that existed on January 1, 2006.

Conservation Activity: Other – On-Farm Tailwater Recovery Systems (TRS)

The purpose of this activity is to conserve water to transfer to Metropolitan Water District of Southern California (MWD) and San Diego County Water Authority (SDCWA) and to create Extraordinary Conservation ICS for water conserved beyond the amounts necessary to satisfy the Quantification Settlement Agreement.

Conservation Implementation:

- a) TRS consists of a means of collecting tailwater at the lower end of a field and conveying it back to the head of the field or another field for re-application.
- b) Key components of a TRS system include a pond to temporarily store tailwater, a permanent or mobile pump to lift water back to the head of the field, and a modified tailwater ditch at the bottom of the field with one or more drop boxes to convey surface runoff into the pond without appreciable soil erosion.
- c) Physical configurations of TRS can be differentiated based on the amount of storage capacity available to capture tailwater runoff and based on the capacity to convey tailwater to a field heading to offset deliveries. TRS are expected to result in savings of between 0.1 and 2.6 acre feet per acre annually with a typical savings on the order of 0.4 to 0.8 acre feet per acre.
- d) IID would establish a TRS program through which growers would be compensated for the amount of delivery water reduced as a result of the implementation of TRS, recognizing both capital and operation and maintenance costs.
- e) Absent the transfer of water to MWD and SDCWA or creation of ICS by IID, such water would have been beneficially used within the IID service area.

Verification and Accounting:

- a) IID staff will verify water conservation from TRS through the use of meters to ensure reduced water deliveries.
- b) TRS conservation will be determined by the use of a formula procedure adopted by the Conservation Verification Committee for the 1988 IID/MWD Water Conservation Program. An acre-foot of tailwater pumping results in 0.81 acre-feet of water conservation. This information is contained in the “Administrative Guide to Verification of IID/MWD Conservation Program Water Savings” dated October 1, 2002. Excerpt attached hereto.

- c) Deliveries reduced through the use of TRS shall be measured and shall be reported and recorded on a monthly and annual basis to the Parties and to United States Bureau of Reclamation (USBR).
- d) All measurements are subject to verification by USBR for accuracy.
- e) That portion of the TRS delivery reduction volume to be devoted to the creation of ICS credits is limited to the quantities set forth in the following *Limitations on Creation of EC ICS* section and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007.

*Limitations on Creation of ECICS*

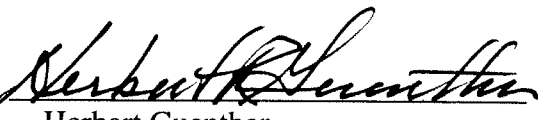
- a) The total amount of EC ICS that IID may create in any year pursuant to Exhibits D, E, and F is limited to the amount of Colorado River water that, if added to the sum of its consumptive use and the maximum amounts of water that could be transferred to other California Colorado River contractors pursuant to the schedules in the Quantification Settlement Agreement, would not result in an Inadvertent Overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.
- b) The amount of annual EC ICS created shall not exceed 25,000 acre-feet per year for storage in Lake Mead.

In Witness of this Exhibit E to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13 day of December, 2007.

Approved as to form:

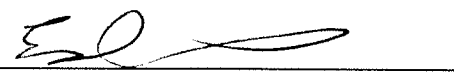
**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**

By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:


**PALO VERDE IRRIGATION  
DISTRICT**

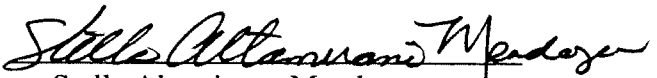
By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

Attest and Approved:

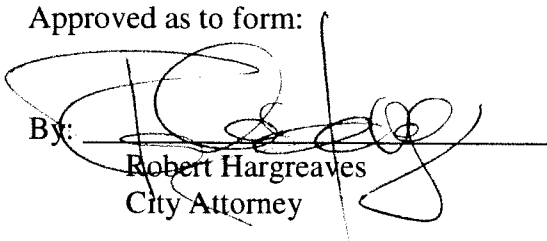
**IMPERIAL IRRIGATION DISTRICT**


By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

Approved as to form:


**THE CITY OF NEEDLES**


By:   
Robert Hargreaves  
City Attorney

By:   
Jeff Williams  
Mayor

Approved as to form:

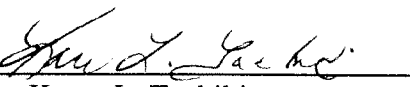
**COACHELLA VALLEY WATER DISTRICT**

By:   
Steven B. Abbott  
Legal Counsel

By:   
Steven B. Robbins  
General Manager/Chief Engineer

Approved as to form:

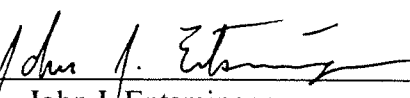
**THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

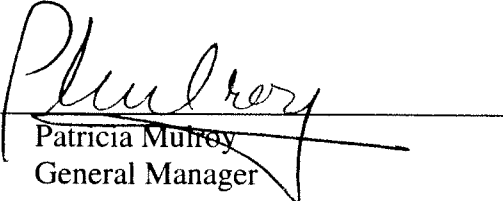
By:   
Karen L. Tachiki  
General Counsel

By:   
Jeffrey Kightlinger  
General Manager

Approved as to form:

**SOUTHERN NEVADA WATER AUTHORITY**

By:   
John J. Entsminger  
Deputy General Counsel

By:   
Patricia Mulvey  
General Manager

Approved as to form:

**COLORADO RIVER COMMISSION  
OF NEVADA**

By: \_\_\_\_\_

Jennifer T. Crandell  
Deputy Attorney General

By: \_\_\_\_\_

George M. Caan  
Executive Director

### B.8.0 Tailwater Recovery Systems (Project 18)

CD-ROM Doc. 14.18 dated December 14, 2001 is the VSR for the Tailwater Recovery Systems (TRS) element of Project 18, which is in the Additional Irrigation Water Management Project<sup>50</sup>. IID/MWD sponsored TRSs are relatively permanent, with tailwater reservoirs capable of holding 3 or more AF and pumps and their return flow pipelines capable of returning roughly 3 cfs from the tailwater reservoirs to the field head ditches.

#### B.8.1 Selection of Verification Procedure

The CVC considered three strategies for verifying the water Conservation Savings for the 25 TRSs (see Figure B.7) installed under Project 18. These are:

1. Spillage differential, i.e. the difference between the estimated volume of tailwater without a TRS and the measured discharge to the drain with a TRS, minus tailwater pond losses;
2. Demand/delivery differential, i.e. the difference between the estimated volume of water that would have been delivered without a TRS and the volume of water actually delivered with a TRS; and
3. Portion of pumpback water, i.e. an estimate of conserved water based on the volume of water pumped from the tailwater pond back to the farm headditch(es).

#### B.8.2 Determining the Net Conservation Savings

The CVC used the portion of pumpback water as the primary verification procedure and delivery differential was used with a selected set of TRSs to develop a *Pumpback Factor* that relates the *Net Conservation Savings* to the *Volume Pumped*, AF. The portion of pumpback water was selected because of its advantages with respect to data requirements, simplicity of computation, handling of consequential losses, and overall reliability. The CVC analyzed 51 irrigation events from 10 of the 25 TRSs to estimate how much water would have been delivered for each event if the TRS had not been used. The *Net Conservation Savings* attributed to the TRS for each irrigation event was computed by:

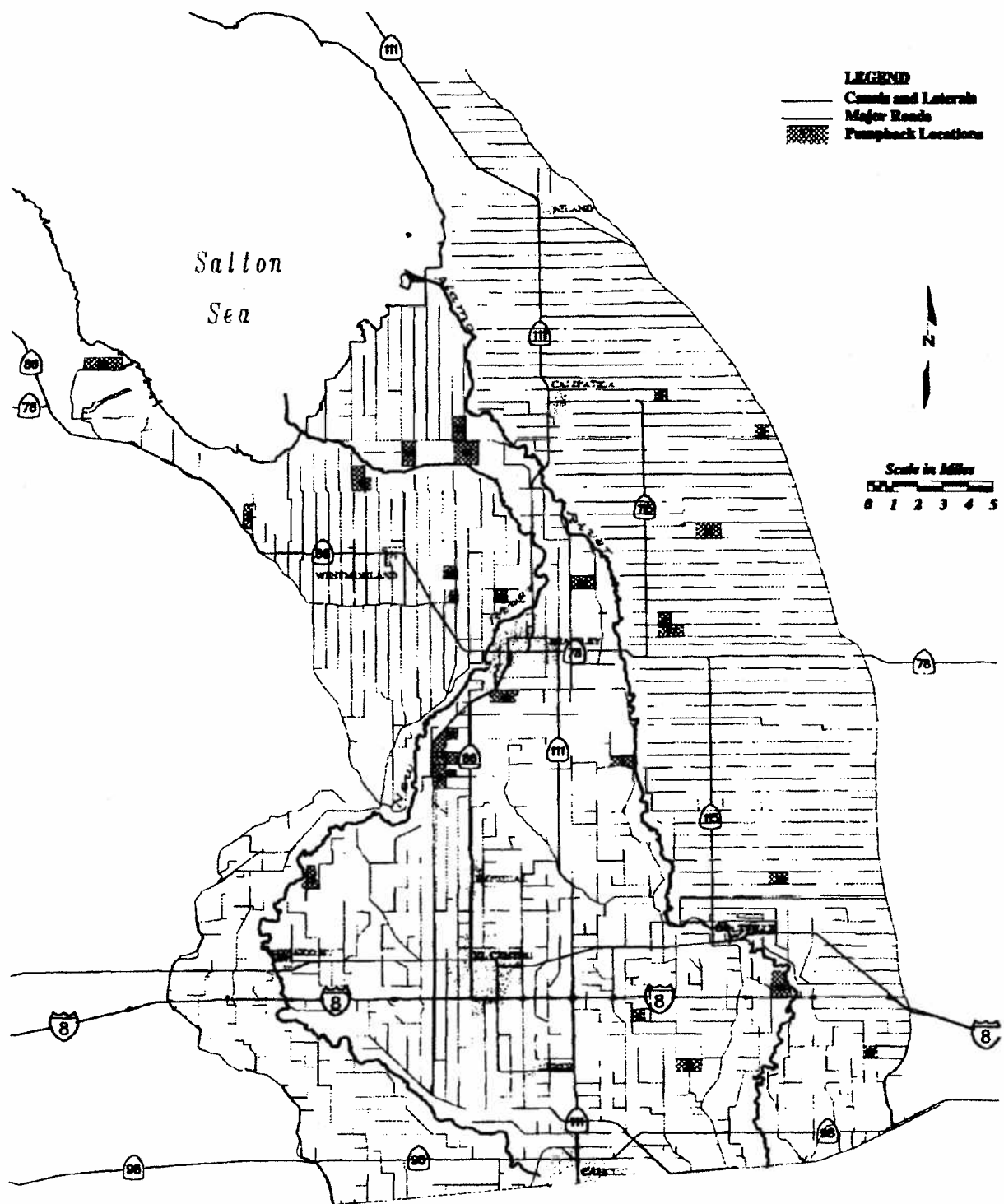
$$v_c = k_f \times v_p$$

Where:

- $v_c$  is the *Net Conservation Savings* per irrigation event, AF;
- $k_f$  is the individual event *Pumpback Factor* that relates  $v_p$  to  $v_c$ , dimensionless; and
- $v_p$  is the *Volume Pumped* from the tailwater pond to the headditch(es), AF.

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<sup>50</sup> Project 18 also includes Drip Irrigation Systems, which are discussed below in the Section covering Other On-Farm Irrigation Projects.



**Figure B.7 Location of IID/MWD Pumpback System Locations in Tailwater Recovery Systems**



From these estimates it was possible to calculate the ratio of the volume of water conserved<sup>51</sup> to the volume of water pumped, i.e.  $k_f$ . From the analysis of the 51 events, it was found that the average of all of the individual  $k_f$  values is  $K_f = 0.828$ , indicating that on average each acre-foot of tailwater pumping results in 0.828 acre-feet of water conservation<sup>52</sup>. Beginning with the Projected 1998 Water Conservation Savings for TRSs, the WCMC directed the CVC to recalculate the  $K_f$  after eliminating all events with a  $k_f > 1.0$  from the set of 51 irrigation events. This resulted in a new  $K_f = 0.81$ .

The Projected Water Conservation Savings for a given *Calendar Year* is the *Net Conservation Savings* computed for the previous *Water Year* as follows:

$$V_c = K_f \sum_{i=1}^n (V_p)_i$$

Where:

$V_c$  is the annual volume of water conserved or *Net Conservation Savings*, AF;

$K_f$  is the average *Pumpback Factor* for the 25 original systems, which is 0.81;

$n$  is the number of active tailwater recovery systems during the *Water Year*; and

$(V_p)_i$  is the volume of water pumped<sup>53</sup> by each active TRS during the *Water Year*, AF.

If at the time of the 5-year review there have been major changes in average usage and cropping history of the TRS systems, the CVC will need to adjust the  $K_f$  to compensate for any changes in the effectiveness of the pumped water in reducing the amount of water delivered to the fields.

---

<sup>51</sup> The volume of water conserved by each of the 51 irrigation events was estimated by replacing  $v_c$  with  $(v_d - v_d')$ , in which  $v_d$  is the estimated volume of water that would have been required and delivered without the TRS and  $v_d'$  is the volume of water actually delivered.

<sup>52</sup> To validate the regression analysis, a *Spillage differential* analysis was performed on three systems that had reliable *Spillage* records. The average pumpback factor for the three systems was 0.881 with a 95 percent confidence range of 0.834 to 0.928. Since  $K_f = 0.828$  is barely outside this 95 percent confidence interval, it was considered statistically similar and thus validated.

<sup>53</sup> Each TRS is equipped with a flow meter that records  $V_p$ . Each of the 25 TRS meters is calibrated annually and the recorded *Volume Pumped*, AF is adjusted by a meter calibration factor to assure the accuracy of the respective  $V_p$ .

## **EXHIBIT F**

### **IID Extraordinary Water Conservation Project – Seepage Recovery**

Contractor: Imperial Irrigation District

Term: 2008 through 2026

Category: Extraordinary conservation programs that existed on January 1, 2006.

Conservation Activity: Canal Lining/Other – Main Canal Seepage Interception

The purpose of this activity is to conserve water to transfer to Metropolitan Water District of Southern California (MWD) and San Diego County Water Authority (SDCWA) and to create Extraordinary Conservation ICS for water conserved beyond the amounts necessary to satisfy the Quantification Settlement Agreement.

Conservation Implementation:

- a) IID will construct approximately 24 seepage interceptor systems adjacent to the East Highline Canal, the West Side Main Canal, and other main All American Canal delivery canals for the purpose of recovering seepage.
- b) Captured seepage will be returned to the IID delivery system and to the main delivery canals and will be measured with meters at those delivery points.
- c) Absent the transfer of water to MWD and SDCWA or creation of ICS by IID, such water would have been beneficially used within the IID service area.

Verification and Accounting:

- a) Seepage recovered through the Main Canal Seepage Interception system will be adjusted for salinity and reported on a monthly and annual basis to the Parties and to United States Bureau of Reclamation (USBR).
- b) All measurements are subject to verification by USBR for accuracy.
- c) The Main Canal Seepage Interception system recovery volume to be devoted to the creation of ICS credits is limited to the quantities set forth in the following *Limitations on Creation of EC ICS* section and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007.

Limitations on Creation of ECICS

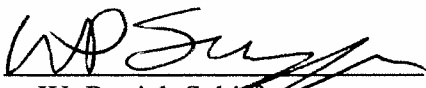
- a) The total amount of EC ICS that IID may create in any year pursuant to Exhibits D, E, and F is limited to the amount of Colorado River water that, if added to the sum of its consumptive use and the maximum amounts of water that could be transferred to other California Colorado River contractors pursuant to the schedules in the Quantification Settlement Agreement, would not result in an Inadvertent Overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.

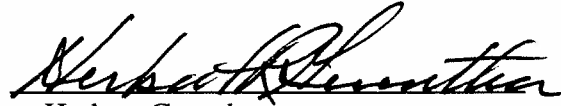
- b) The amount of annual EC ICS created shall not exceed 25,000 acre-feet per year for storage in Lake Mead.

In Witness of this Exhibit F to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13 day of December, 2007.

Approved as to form:


**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**


By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:

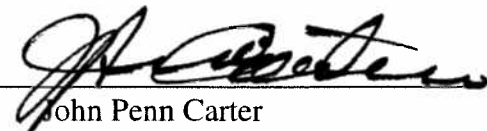
**PALO VERDE IRRIGATION  
DISTRICT**


By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

Attest and Approved:

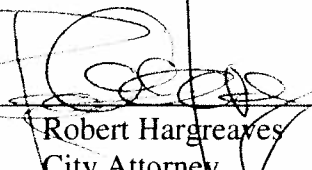
**IMPERIAL IRRIGATION DISTRICT**

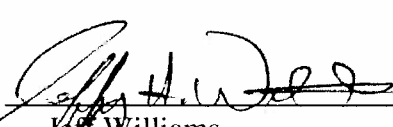
By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

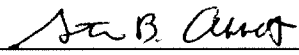
Approved as to form:

**THE CITY OF NEEDLES**

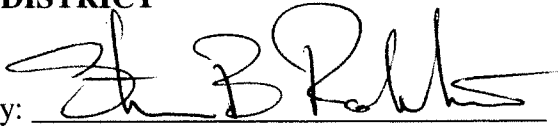
By:   
Robert Hargreaves  
City Attorney

By:   
Jeff Williams  
Mayor


Approved as to form:

By:   
Steven B. Abbott  
Legal Counsel

**COACHELLA VALLEY WATER  
DISTRICT**

By:   
Steven B. Robbins  
General Manager/Chief Engineer

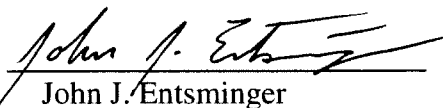
Approved as to form:

By:   
Karen L. Tachiki  
General Counsel

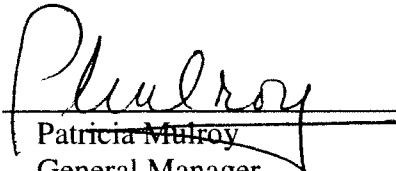
**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

By:   
Jeffrey Kightlinger  
General Manager

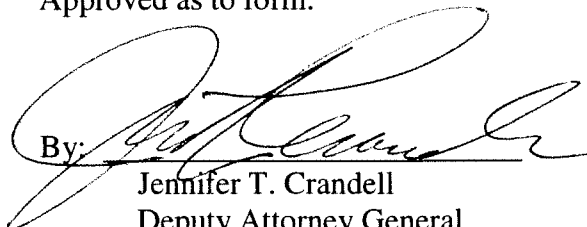
Approved as to form:

By:   
John J. Entsminger  
Deputy General Counsel

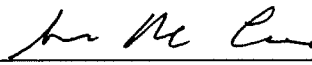
**SOUTHERN NEVADA WATER  
AUTHORITY**

By:   
Patricia Mulroy  
General Manager

Approved as to form:

By:   
Jennifer T. Crandell  
Deputy Attorney General

**COLORADO RIVER COMMISSION  
OF NEVADA**

By:   
George M. Caan  
Executive Director

## Exhibit G

### Metropolitan Funded Palo Verde Irrigation District Forbearance and Fallowing Program

Type: “2.1 D. Extraordinary conservation programs that existed on January 1, 2006.”

Under the August 18, 2004 Forbearance and Fallowing Program Agreement with Palo Verde Irrigation District (PVID) and landowner agreements for fallowing in PVID, The Metropolitan Water District of Southern California (Metropolitan) pays landowners within the Palo Verde Valley to annually fallow a portion of their land, foregoing the planting and irrigation of crops, allowing PVID to forbear use of water, increasing the amount of water available to Metropolitan. The volume of water that becomes available to Metropolitan is governed by the October 10, 2003 Quantification Settlement Agreement<sup>1</sup> and the October 10, 2003 Colorado River Water Delivery Agreement<sup>2</sup>. Under these agreements:

- Metropolitan must reduce its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is greater than 420,000 acre-feet in a calendar year, or
- Metropolitan may increase its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is less than 420,000 acre-feet in a calendar year.

In both cases, each acre-foot of reduced consumptive use by PVID is an additional acre-foot that becomes available to Metropolitan.

Palo Verde Valley landowners decided whether to participate in the 35-year program and those participating stop irrigating from 9 to 35 percent of their land in any year at Metropolitan's request. Upon one-year notice, Metropolitan has the option to change the percentage of land fallowed, with an increase in the percentage effective for a two-year period. The land taken out of agricultural production is maintained and rotated once every one to five years. The maximum amount of farmland taken out of production in any 10 years is 25,947 acres. No more than 23,508 acres is to be fallowed in any 25 years. The landowner is responsible for payment of taxes, PVID water tolls, vegetation abatement, dust control and all other costs related to the fallowed lands. A history of farming is required for fields to be fallowed. Parcels to be fallowed must be at least 5 acres.

Water saved could range from about 29,000 acre-feet per year to about 118,000 acre-feet per year depending on Metropolitan's option on the number of acres fallowed, assuming 4.54 acre-feet is saved per acre fallowed (the estimated average annual Palo Verde Valley irrigation use from 1988-2002 excluding the years of 1992-94 in which fallowing occurred). Through October 2007, Metropolitan has paid \$112.6 million in program costs. Absent the creation of

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<sup>1</sup> The parties to the Quantification Settlement Agreement are Imperial Irrigation District (IID), Coachella Valley Water District (CVWD), and Metropolitan.

<sup>2</sup> The parties to the Colorado River Water Delivery Agreement are the United States, IID, CVWD, Metropolitan, and San Diego County Water Authority.

Extraordinary Conservation Intentionally Created Surplus (EC ICS), such water would have otherwise been beneficially used.

Verification: Upon designation of fallowed acreage, a Metropolitan representative visits the field on the date when fallowing is to commence and verifies that fallowing conditions had been met. The same procedure is followed when program participants make changes in the area and/or location of fallowed lands.

In addition to field verification by Metropolitan, the Bureau of Reclamation (Reclamation) conducts an independent verification with its own staff, selecting 5 percent of the fallowed land for inspection. An on-site inspection is made of all selected fields to observe fallowing conditions and take photographs. A report is then prepared that contains field observations and relevant photographs of fallowing conditions in PVID.

Total Amount of ICS Credited Annually: The amount of EC ICS that can be created during any Year is limited to the amount of water resulting from the program that Metropolitan does not consumptively use, for example, up to 118,000 acre-feet assuming 4.54 acre-feet is saved per acre fallowed. Annual consumptive use by PVID varies from Year to Year due to a number of factors including weather (temperature and precipitation) and agricultural markets. As consumptive use varies from Year-to-Year, the volume of water saved from not irrigating an acre of land in the Palo Verde Valley also varies from Year-to-Year. Following each Year, PVID, Metropolitan, and the Bureau of Reclamation examine consumptive use on those lands within the Palo Verde Valley that were irrigated and estimate the volume of water saved due to the fallowing of lands pursuant to the program. The agencies issue a joint report documenting the volume of water saved during the Year as a direct result of the program. This annual report would serve as the basis for determining the amount of Extraordinary Conservation ICS that can be created by Metropolitan. The volume of water conserved annually pursuant to this program to be devoted to the creation of EC ICS credits is further limited to the quantities set forth in the following, and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007:


Limitations on Creation of EC ICS


- a) The amount of EC ICS that Metropolitan may create in any Year is limited to the amount of Colorado River water that, if added to its consumptive use, would not result in an inadvertent overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.
- b) The total amount of annual EC ICS created by this program is limited to the amount of water that could have been delivered for beneficial use from the Colorado River Aqueduct.

In Witness of this Exhibit G to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13<sup>th</sup> day of December, 2007.

Approved as to form:


**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**

By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:

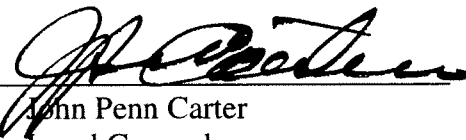
**PALO VERDE IRRIGATION  
DISTRICT**

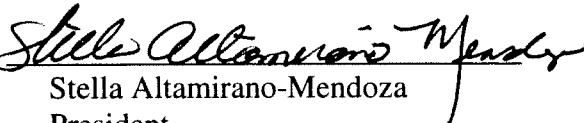
By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

Attest and Approved:

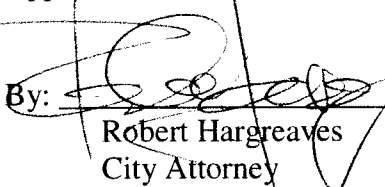
**IMPERIAL IRRIGATION DISTRICT**

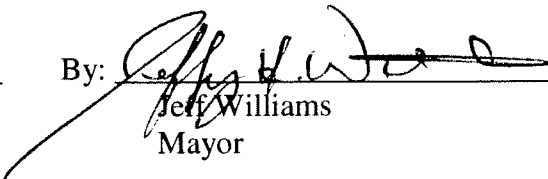
By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

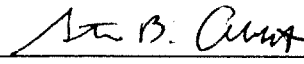
Approved as to form:

**THE CITY OF NEEDLES**

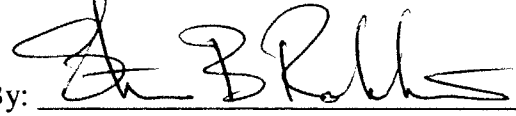
By:   
Robert Hargreaves  
City Attorney

By:   
Jeff Williams  
Mayor


Approved as to form:

By:   
Steven B. Abbott  
Legal Counsel

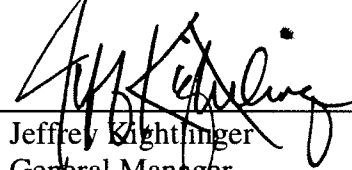
**COACHELLA VALLEY WATER  
DISTRICT**

By:   
Steven B. Robbins  
General Manager/Chief Engineer

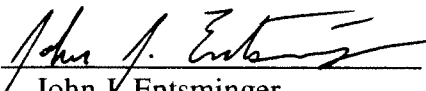
Approved as to form:

By:   
Karen L. Tachiki  
General Counsel

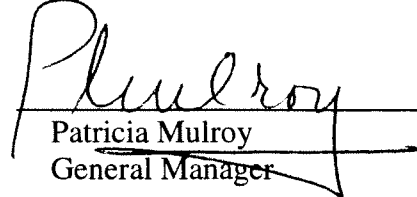
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CALIFORNIA**

By:   
Jeffrey Kightlinger  
General Manager

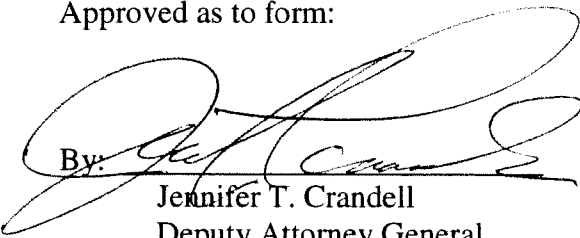
Approved as to form:

By:   
John J. Entsminger  
Deputy General Counsel

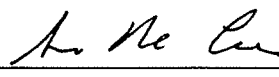
**SOUTHERN NEVADA WATER  
AUTHORITY**

By:   
Patricia Mulroy  
General Manager

Approved as to form:

By:   
Jennifer T. Crandell  
Deputy Attorney General

**COLORADO RIVER COMMISSION  
OF NEVADA**

By:   
George M. Caan  
Executive Director



## Exhibit H

### Metropolitan Funded Imperial Irrigation District Water Conservation Program

Type: “2.1 D. Extraordinary conservation programs that existed on January 1, 2006.”

Under the December 22, 1988 Conservation Agreement as amended and the December 19, 1989 Approval Agreement as amended, The Metropolitan Water District of Southern California (Metropolitan) has funded water efficiency improvements within the Imperial Irrigation District's (IID) service area in return for IID's agreement to not use an amount of water equal to the amount conserved by the program.

The program implemented structural and non-structural measures, including the concrete lining of 13 miles of existing main canals and 200 miles of lateral canals, construction of two local reservoirs and three spill-interceptor canals with four reservoirs, installation of 14 non-leak gates, and automation of the distribution system. Other implemented projects include the delivery of water to farmers on a 12-hour basis and improvements in on-farm water management through the installation of drip irrigation systems and 24 currently operating tailwater pumpback systems.

In 2007, 105,000 acre-feet per Year is being conserved and IID is reducing its use by that amount. Through August 2007, Metropolitan has paid IID \$222 million for program costs. Absent the creation of Extraordinary Conservation Intentionally Created Surplus (ICS), such water would have otherwise been beneficially used.

Verification: Through 2006, the Conservation Verification Consultants prepared and presented to the Water Conservation Measurement Committee an annual report on the estimated amount of water conserved by the program and each project thereof. A Systemwide Monitoring Program was developed to identify and explain trends in IID system performance as a function of the operational environment within which the IID/Metropolitan conservation projects operated. The Systemwide Monitoring Program was designed to function over the life of the IID/Metropolitan program to:

- Identify changes in on-farm irrigation practices.
- Identify changes in main and lateral canal operations and zanjero accounting procedures.
- Provide data support for the five-year verification updates.
- Provide a basis for separating water savings associated with IID/Metropolitan-sponsored conservation projects from water savings associated with measures implemented by others. In this case, the Systemwide Monitoring Program provides valuable baseline data for separating the effects of a new program from those attributable to the IID/Metropolitan program.
- Fulfill the requirement for overall verification specified in the December 19, 1989 Approval Agreement.

Forty sites were selected and developed to provide data required for systemwide monitoring.

In order to collect and process the flow data needed in support of the water conservation verification activities for the IID/Metropolitan Water Conservation Agreement projects, an automated data collection, quality control, processing and retrieval system was developed under the IID/Metropolitan program. The system was designed to include many of the control sites for the various projects as well as the sites needed for systemwide monitoring. In December 1995, data processing procedures developed by the Conservation Verification Consultants were institutionalized and incorporated into IID's Water Information System.

Since January 1, 1996, conservation verification data have been processed and stored using Water Information System applications and capabilities. IID data collected prior to January 1, 1996, which were processed by the Conservation Verification Consultants for use in determining annual projected water conservation savings over the life of the program, were also stored in the Water Information System. The Water Information System management system has been developed to generate daily, monthly, calendar year, and water year tables, summary tables and bar charts that have been presented in an annual Processed Flow Data document and an annual Projected Water Conservation Savings report.

IID reduces its net diversions at Imperial Dam by 105,000 acre-feet annually as specified in the May 14, 2007 second amendment to the Conservation Agreement. IID's reduction in net diversions at Imperial Dam permits the Secretary of the Interior to deliver water made available for Metropolitan.

Total Amount of ICS Credited Annually: The amount of EC ICS that can be created during any Year is limited to the amount of water resulting from the program that Metropolitan does not consumptively use, up to 105,000 acre-feet, plus any reduction in calculated IID conveyance losses as a result of IID conveying less water through its conveyance and distribution system due to the conservation of water from this program. The volume of water conserved annually pursuant to this program to be devoted to the creation of EC ICS credits is further limited to the quantities set forth in the following, and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007:

Limitations on Creation of EC ICS


- a) The amount of EC ICS that Metropolitan may create in any Year is limited to the amount of Colorado River water that, if added to its consumptive use, would not result in an inadvertent overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.
- b) The total amount of annual EC ICS created by this program is limited to the amount of water that could have been delivered for beneficial use from the Colorado River Aqueduct.
- c) The amount of EC ICS created pursuant to this Exhibit is limited to the IID reduction shown in column 4 of Exhibit B to the October 10, 2003 Colorado River Water Delivery Agreement, less any portion of that reduction that results in delivery of water to Coachella Valley Water District.

In Witness of this Exhibit H to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13<sup>th</sup> day of December, 2007.

Approved as to form:


**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**


By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:

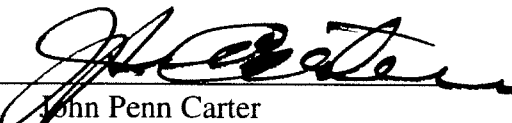
**PALO VERDE IRRIGATION  
DISTRICT**

By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

Attest and Approved:

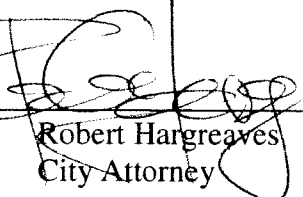
**IMPERIAL IRRIGATION DISTRICT**


By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

Approved as to form:


**THE CITY OF NEEDLES**

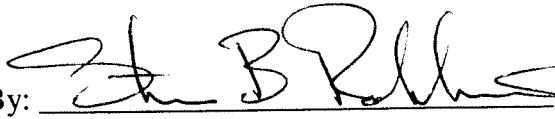
By:   
Robert Hargreaves  
City Attorney

By:   
Jeff Williams  
Mayor

Approved as to form:

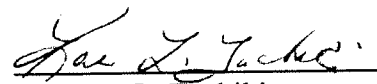
**COACHELLA VALLEY WATER  
DISTRICT**

By:   
Steven B. Abbott  
Legal Counsel

By:   
Steven B. Robbins  
General Manager/Chief Engineer

Approved as to form:

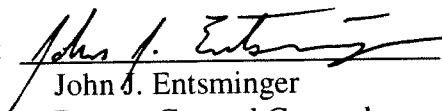
**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

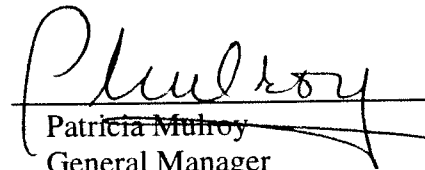
By:   
Karen L. Tachiki  
General Counsel

By:   
Jeffrey Knightlinger  
General Manager

Approved as to form:

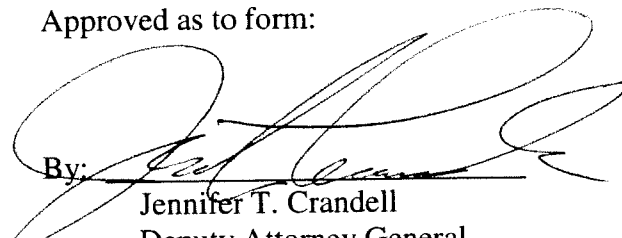
**SOUTHERN NEVADA WATER  
AUTHORITY**


By:   
John J. Entsminger  
Deputy General Counsel

By:   
Patricia Mulroy  
General Manager

Approved as to form:

**COLORADO RIVER COMMISSION  
OF NEVADA**

By:   
Jennifer T. Crandell  
Deputy Attorney General

By:   
George M. Caan  
Executive Director

## Exhibit I

### Metropolitan Funded Extraordinary Conservation ICS Demonstration Program

Type: “2.1 E. Demonstration Extraordinary Conservation ICS programs pursuant to a letter agreement entered into between the United States Bureau of Reclamation and the Contractor prior to the effective date of the ROD.”

Under the May 18, 2006 letter agreement between The Metropolitan Water District of Southern California (Metropolitan) and the Bureau of Reclamation (Reclamation), Metropolitan created 50,000 acre-feet of Intentionally Created Surplus (ICS) water in 2006 as a demonstration program. Metropolitan created ICS in 2006 through water extraordinarily conserved by land fallowing in the Palo Verde Valley through its 2004 Forbearance and Fallowing Program Agreement with Palo Verde Irrigation District (PVID) and landowner agreements for fallowing in PVID.

Reclamation has approved creation of an additional 50,000 acre-feet of ICS by Metropolitan in 2007. Such ICS would be created through water extraordinarily conserved by land fallowing in the Palo Verde Valley.

Verification: Upon designation of fallowed acreage, a Metropolitan representative visited the field on or before the date when fallowing was to commence and verified that fallowing conditions had been met.

In addition to field verification by Metropolitan, Reclamation conducted an independent verification with its own staff, selecting 5 percent of the fallowed land for inspection. An on-site inspection was made of all selected fields to observe fallowing conditions and take photographs. A report was then prepared that contains field observations and relevant photographs of fallowing conditions in PVID.

Total Amount of ICS Credited Annually: The amount of Extraordinary Conservation (EC) ICS that was created was 50,000 acre-feet in 2006 based on the letter agreement. The amount of Extraordinary Conservation ICS that can be created is 50,000 acre-feet in 2007 based on Metropolitan’s notification of the amount of water to be created. The volume of water conserved annually pursuant to this program to be devoted to the creation of EC ICS credits is further limited to the quantities set forth in the following, and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007:

#### Limitations on Creation of EC ICS

- a) The amount of EC ICS that Metropolitan may create in any Year is limited to the amount of Colorado River water that, if added to its consumptive use, would not result in an inadvertent overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.

- b) The total amount of annual EC ICS created by this program is limited to the amount of water that could have been delivered for beneficial use from the Colorado River Aqueduct.

Loss of ICS by Evaporation: The quantity of Extraordinary Conservation ICS remaining at the end of each Year is diminished by 2.8 percent for evaporation beginning in the Year after the ICS is created and continuing until no Extraordinary Conservation ICS remains in accordance with paragraph number nine of the letter agreement. However, no evaporation loss is assessed during a Year in which the Secretary has declared a Shortage.

In Witness of this Exhibit I to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13<sup>th</sup> day of December, 2007.


Approved as to form:

**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**

By:

  
W. Patrick Schiffer  
Chief Counsel


By:

  
Herbert Guenther  
Director

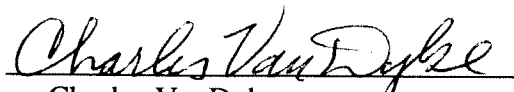
Attest:

**PALO VERDE IRRIGATION  
DISTRICT**

By:

  
Edward W. Smith  
General Manager

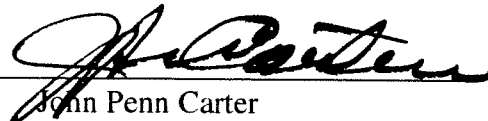
By:

  
Charles VanDyke  
Chair

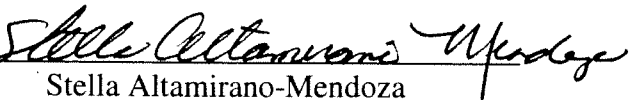
Attest and Approved:

**IMPERIAL IRRIGATION DISTRICT**

By:

  
John Penn Carter  
Legal Counsel

By:

  
Stella Altamirano-Mendoza  
President

Approved as to form:

By: 

Robert Hargreaves  
City Attorney

**THE CITY OF NEEDLES**

By: 

Jeff Williams  
Mayor

Approved as to form:

By: 

Steven B. Abbott  
Legal Counsel

**COACHELLA VALLEY WATER  
DISTRICT**

By: 

Steven B. Robbins  
General Manager/Chief Engineer

Approved as to form:

By: 

Karen L. Tachiki  
General Counsel

**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

By: 

Jeffrey Knightlinger  
General Manager

Approved as to form:

By: 

John J. Entsminger  
Deputy General Counsel

**SOUTHERN NEVADA WATER  
AUTHORITY**

By: 

Patricia Mulroy  
General Manager

Approved as to form:

By: 

Jennifer T. Crandell  
Deputy Attorney General

**COLORADO RIVER COMMISSION  
OF NEVADA**

By: 

George M. Caan  
Executive Director

## Exhibit J

### Metropolitan Funded Water Supply from the All-American and Coachella Canal Lining Projects

Type: “2.1 B. Canal lining programs.”

Under the October 10, 2003 Allocation Agreement<sup>1</sup>, 4,500 acre-feet of water conserved in a Year by the Coachella Canal Lining Project and 11,500 acre-feet of water to be conserved in a Year by the All-American Canal Lining Project is made available to The Metropolitan Water District of Southern California (Metropolitan) prior to satisfaction of Section 104 of Public Law 100-675 as amended. Metropolitan is placing into trust for the San Luis Rey River Indian Water Authority in 2007, \$203 per acre-foot of water made available. Absent the creation of Extraordinary Conservation Intentionally Created Surplus (EC ICS), such water would have otherwise been beneficially used.

Verification: Imperial Irrigation District (IID) reduces its and Coachella Valley Water District’s (CVWD) net diversions at Imperial Dam by the annual amounts specified in the Allocation Agreement, based on the determination by the Secretary of the Interior of the amount of water conserved by the All-American Canal Lining Project and the Coachella Canal Lining Project, respectively. IID’s reduction in net diversions at Imperial Dam permits the Secretary of the Interior to deliver water made available for Metropolitan.

Total Amount of ICS Credited Annually: The amount of EC ICS that can be created during any Year is limited to the amount of Supplemental Water made available to Metropolitan, provided that Metropolitan does not consumptively use such water—from 4,500 acre-feet from the Coachella Canal Lining Project in 2008 to 16,000 acre-feet from the Coachella and All-American Canal Lining Projects in a Year that amount of water is made available by Reclamation. The volume of water conserved annually pursuant to this program to be devoted to the creation of EC ICS credits is further limited to the quantities set forth in the following, and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007:

#### Limitations on Creation of EC ICS

- a) The amount of EC ICS that Metropolitan may create in any Year is limited to the amount of Colorado River water that, if added to its consumptive use, would not result in an inadvertent overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.
- b) The total amount of annual EC ICS created by this program is limited to the amount of water that could have been delivered for beneficial use from the Colorado River Aqueduct.

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<sup>1</sup> The Parties to the Allocation Agreement are the United States, The Metropolitan Water District of Southern California, Imperial Irrigation District, Coachella Valley Water District, San Diego County Water Authority, the La Jolla, Pala, Pauma, Rincon, and San Pasqual Bands of Mission Indians, the San Luis Rey River Indian Water Authority, the City of Escondido, and Vista Irrigation District.




- c) The total amount of EC ICS created pursuant to Exhibits J and O is limited to the sum of the IID and CVWD reductions shown in columns 6 and 15, respectively of Exhibit B to the October 10, 2003 Colorado River Water Delivery Agreement, as modified by Exhibit B to the October 30, 2007 San Diego County Water Authority-CVWD Settlement Agreement, less any portion of those reductions that result in an exchange of water with San Diego County Water Authority and/or the United States for use by the San Luis Rey Settlement Parties in that Year.

In Witness of this Exhibit J to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13<sup>th</sup> day of December, 2007.

Approved as to form:


**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**


By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:

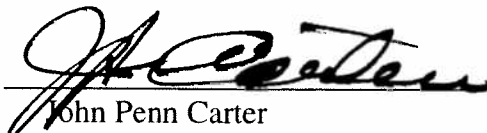
**PALO VERDE IRRIGATION  
DISTRICT**


By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

Attest and Approved:

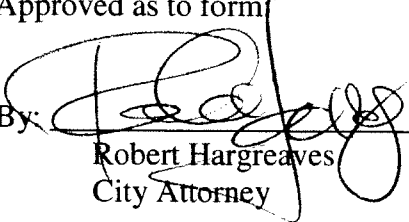
**IMPERIAL IRRIGATION DISTRICT**

By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

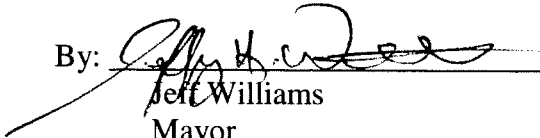
Approved as to form:

By:

  
Robert Hargreaves  
City Attorney

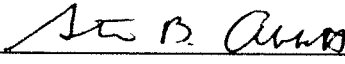
**THE CITY OF NEEDLES**

By:

  
Jeff Williams  
Mayor

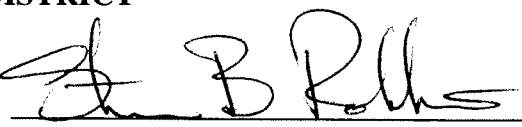
Approved as to form:

By:

  
Steven B. Abbott  
Legal Counsel

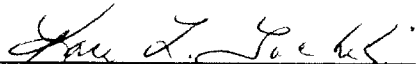
**COACHELLA VALLEY WATER  
DISTRICT**

By:

  
Steven B. Robbins  
General Manager/Chief Engineer

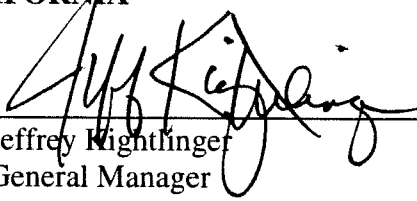
Approved as to form:

By:

  
Karen L. Tachiki  
General Counsel

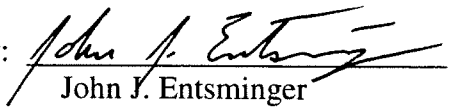
**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

By:

  
Jeffrey Kightlinger  
General Manager

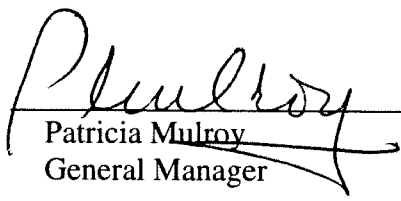
Approved as to form:

By:

  
John J. Entsminger  
Deputy General Counsel

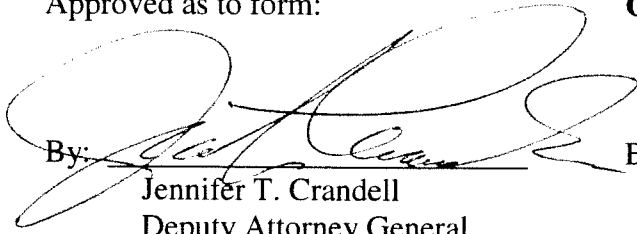
**SOUTHERN NEVADA WATER  
AUTHORITY**

By:

  
Patricia Mulroy  
General Manager


Approved as to form:

By:

  
Jennifer T. Crandell  
Deputy Attorney General

**COLORADO RIVER COMMISSION  
OF NEVADA**

By:

  
George M. Caan  
Executive Director

## Exhibit K

### Metropolitan Funded Transfer of Conserved Water from the California Department of Water Resources

Type: “2.1 H. Other extraordinary conservation measures, including development and acquisition of a non-Colorado River System water supply used in lieu of Mainstream water within the same state, as agreed upon by the Parties pursuant to this Forbearance Agreement.”

Under the October 10, 2003 Transfer Agreement with the California Department of Water Resources (CDWR), The Metropolitan Water District of Southern California (Metropolitan) is to acquire water made available to CDWR by Imperial Irrigation District (IID) through conservation measures selected by IID. An amount of Colorado River water equal to the amount conserved would not be used by IID. Metropolitan would pay CDWR an estimated \$288 per acre-foot in 2008, adjusted annually for inflation, for the following amounts of water:

<u>Year</u>	<u>(acre-feet)</u>
2008	45,000
2009	70,000
2010	95,000
2011	120,000
2012	145,000
2013	170,000
2014	190,000
2015	210,000
2016	230,000
2017	250,000

Absent the creation of Extraordinary Conservation Intentionally Created Surplus (EC ICS), such water would have otherwise been beneficially used.

Verification: IID reduces its net diversions at Imperial Dam by the annual amount specified in the October 10, 2003 Transfer Agreement between CDWR and IID to permit the Secretary of the Interior to deliver water made available for Metropolitan.

Total Amount of ICS Credited Annually: The amount of Extraordinary Conservation ICS that can be created during any Year is limited to the amount of water resulting from the program that Metropolitan does not consumptively use, up to between 45,000 and 250,000 acre-feet depending upon the Year as shown under the heading “Type” above, plus any reduction in calculated IID conveyance losses as a result of IID conveying less water through its conveyance and distribution system due to the conservation of water from this program. The volume of water conserved annually pursuant to this program to be devoted to the creation of EC ICS credits is further limited to the quantities set forth in the following, and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007:

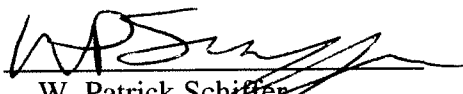
Limitations on Creation of EC ICS


- a) The amount of EC ICS that Metropolitan may create in any Year is limited to the amount of Colorado River water that, if added to its consumptive use, would not result in an inadvertent overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.
- b) The total amount of annual EC ICS created by this program is limited to the amount of water that could have been delivered for beneficial use from the Colorado River Aqueduct.
- c) The amount of EC ICS created pursuant to this Exhibit is limited to the IID reduction shown in column 9 of Exhibit B to the October 10, 2003 Colorado River Water Delivery Agreement in that Year.

In Witness of this Exhibit K to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13<sup>th</sup> day of December, 2007.

Approved as to form:


**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**


By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:


**PALO VERDE IRRIGATION  
DISTRICT**

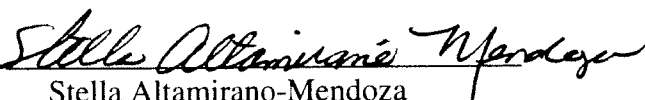
By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

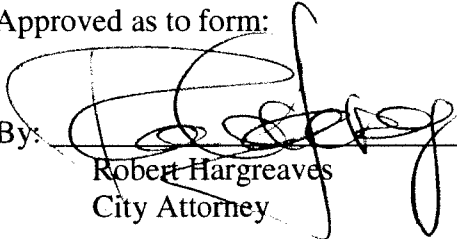
Attest and Approved:

**IMPERIAL IRRIGATION DISTRICT**

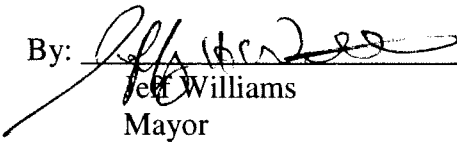
By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

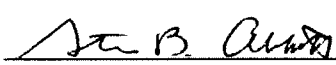
Approved as to form:

By:   
Robert Hargreaves  
City Attorney


**THE CITY OF NEEDLES**

By:   
Jeff Williams  
Mayor

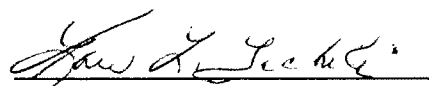
Approved as to form:

By:   
Steven B. Abbott  
Legal Counsel

**COACHELLA VALLEY WATER  
DISTRICT**

By:   
Steven B. Robbins  
General Manager/Chief Engineer

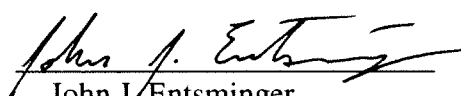
Approved as to form:

By:   
Karen L. Tachiki  
General Counsel

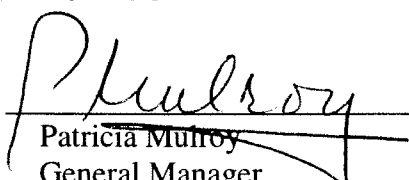
**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

By:   
Jeffrey Kightlinger  
General Manager

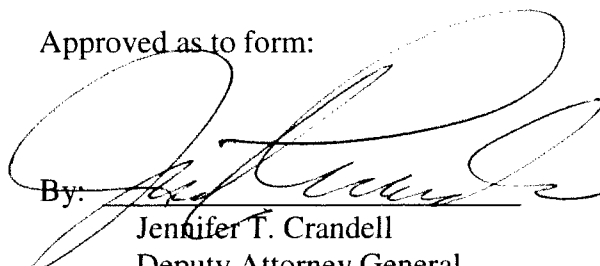
Approved as to form:

By:   
John J. Entsminger  
Deputy General Counsel

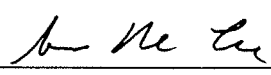
**SOUTHERN NEVADA WATER  
AUTHORITY**

By:   
Patricia Mulroy  
General Manager

Approved as to form:

By:   
Jennifer T. Crandell  
Deputy Attorney General

**COLORADO RIVER COMMISSION  
OF NEVADA**

By:   
George M. Caan  
Executive Director

## Exhibit L

### Metropolitan Funded Water Supply from the Lower Colorado Water Supply Project

Type: “2.1 H. Extraordinary Conservation ICS - Other extraordinary conservation measures, development of non-Colorado River System water supply used in lieu of Mainstream water within the same state.

In 1986, Public Law 99-655, the Lower Colorado Water Supply Act, authorized the Secretary of the Interior (Secretary), through the Bureau of Reclamation (Reclamation), to construct, operate, and maintain the Lower Colorado Water Supply Project (Project). The Project is comprised of a well field that pumps groundwater from the Sand Hills area of California into the All-American Canal. The purpose of the Project at the time of its authorization was to provide an alternative water supply for parties using Colorado River water without or with insufficient rights. These parties pay the Project costs for producing water and exchange that water with Imperial Irrigation District (IID). The Project is authorized to supply up to 10,000 acre-feet of water annually. Under a contract with Reclamation, the City of Needles assumed the administrative responsibility for non-federal Project beneficiaries within San Bernardino, Riverside, and Imperial Counties. Stage 1 of the Project was completed in 1996.

In 2005, Public Law 109-103 amended the Act to authorize the Secretary to contract with certain additional entities for the use of Project water under such terms as the Secretary determined would benefit the interest of Project users along the Colorado River. Through 2006, contracting parties used about 1,000 acre-feet of water from the Project annually with the primary user of the Project being Needles. There was a concern that over time, the groundwater pumped by the Project will become too saline for use leaving the Project beneficiaries without an available water supply. On March 26, 2007, Reclamation, Needles, and Metropolitan entered into a contract allowing Metropolitan to access the unused capacity of the Project. A portion of Metropolitan's payments are being set aside in an escrow fund for potentially acquiring a new water supply for Needles and other users of the Project. The contract ensures no interference with the Secretary's management of Colorado River system reservoirs and regulatory structures. The amount of Project water conserved in Lake Mead by exchange will be reported by Metropolitan.

Through October 2007, Metropolitan has paid \$594,000 in Project costs. Absent the creation of Extraordinary Conservation Intentionally Created Surplus (EC ICS), Metropolitan would have otherwise beneficially used such water.

Verification: Water pumped by the Project is measured at a point designated by Reclamation. Measuring devices are operated and maintained by IID. The measuring devices remain at all times under the control of Reclamation. At all times Reclamation has access to the measuring devices over the lands and rights-of-way of IID and Coachella Valley Water District (CVWD).

Total Amount of ICS Credited Annually: The amount of EC ICS during any Year is limited to the amount of water received by Metropolitan from unused Project capacity that Metropolitan does not consumptively use and is conserved in Lake Mead, for example, up to 9,000 acre-feet based on Project authorized capacity of 10,000 acre-feet and past annual use of 1,000 acre-feet.

This would be the basis for determining the amount of EC ICS that can be created by Metropolitan from the Project. The volume of water conserved annually pursuant to this program to be devoted to the creation of EC ICS credits is further limited to the quantities set forth in the following, and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007:

Limitations on Creation of EC ICS

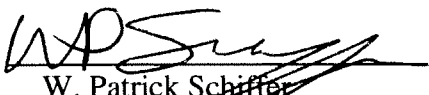
- a) The amount of EC ICS that Metropolitan may create in any Year is limited to the amount of Colorado River water that, if added to its consumptive use, would not result in an inadvertent overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.
- b) The total amount of annual EC ICS created by this program is limited to the amount of water that could have been delivered for beneficial use from the Colorado River Aqueduct.

In Witness of this Exhibit L to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13<sup>th</sup> day of December, 2007.


Approved as to form:

**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**

By:

  
W. Patrick Schiffer  
Chief Counsel

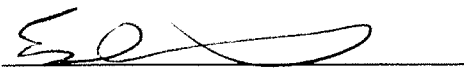
By:

  
Herbert Guenther  
Director

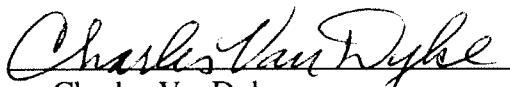
Attest:

**PALO VERDE IRRIGATION  
DISTRICT**

By:

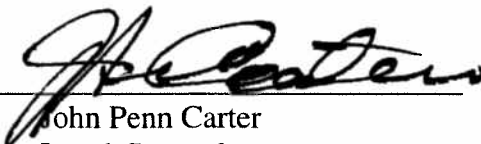
  
Edward W. Smith  
General Manager

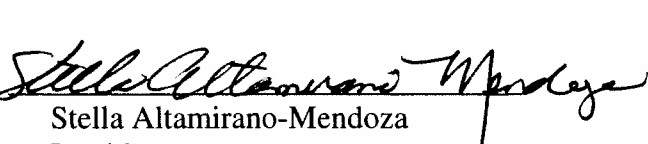
By:

  
Charles VanDyke  
Chair

Attest and Approved:

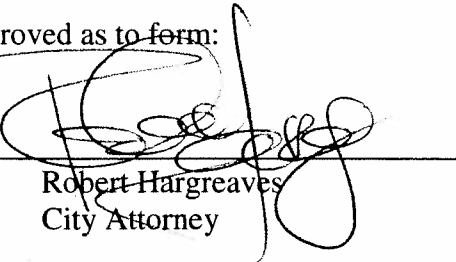
**IMPERIAL IRRIGATION DISTRICT**


By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

Approved as to form:

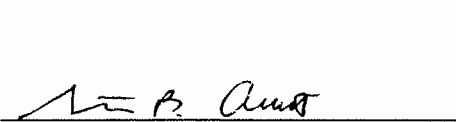
**THE CITY OF NEEDLES**


By:   
Robert Hargreaves  
City Attorney

By:   
Jeff Williams  
Mayor

Approved as to form:

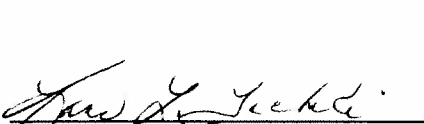
**COACHELLA VALLEY WATER DISTRICT**


By:   
Steven B. Abbott  
Legal Counsel

By:   
Steven B. Robbins  
General Manager/Chief Engineer

Approved as to form:

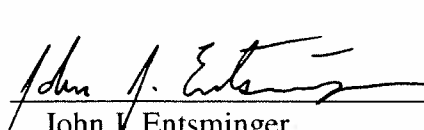
**THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

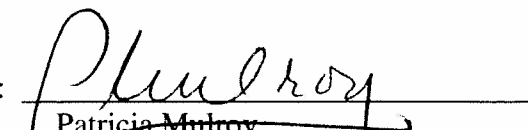
By:   
Karen L. Tachiki  
General Counsel

By:   
Jeffrey Knightlinger  
General Manager

Approved as to form:

**SOUTHERN NEVADA WATER AUTHORITY**

By:   
John I. Entsminger  
Deputy General Counsel

By:   
Patricia Mulroy  
General Manager



Approved as to form:

**COLORADO RIVER COMMISSION  
OF NEVADA**

By: \_\_\_\_\_

Jennifer T. Crandell  
Deputy Attorney General

By: \_\_\_\_\_

George M. Caan  
Executive Director

## Exhibit M

### Metropolitan Funded Water Supply from Desalination

Type: “2.1 C. Desalination programs in which the desalinated water is used in lieu of Mainstream water.”

The Metropolitan Water District of Southern California (Metropolitan) provides financial support to its member agencies to implement desalination projects in its service area. These projects to desalt water in Metropolitan’s service area are:

Arlington Desalter-The Arlington Desalter includes extraction wells, pumps and piping, desalter modules, granular activated carbon filters and brine disposal facilities. The project extracts, and desalts non-potable groundwater from the Arlington Basin. Product water is then distributed for general municipal, domestic, and industrial purposes. Concentrate is disposed to the ocean through the Santa Ana Regional Interceptor line. In fiscal year 2003/04, the Project commenced production of potable water, which was purchased by the City of Norco.

Beverly Hills Desalter-The Beverly Hills Desalter includes a treatment plant, extraction wells, a collection pipeline, a booster pump, a product water pipeline to connect to Beverly Hills’ water distribution system, and a concentrate waste disposal pipeline. The project pumps and treats brackish groundwater from the Hollywood Basin. Concentrate is discharged to the sanitary sewer system through which it is conveyed to the City of Los Angeles’ Hyperion Wastewater Treatment Plant.

Chino Basin Desalter No. 1 and No. 2-The Chino Basin Desalter No. 1 treats groundwater containing high concentrations of total dissolved solids and nitrates, and conveys product water to the cities of Chino, Chino Hills, and Norco and Jurupa Community Services District. Groundwater is pumped from 14 wells throughout the Chino Basin area to the Desalter, where reverse osmosis is utilized. The project includes a pipeline and structures connecting existing Jurupa and City of Ontario water systems. Brine is transported by a regional brine line and subsequently discharged to the ocean. The Chino Basin Desalter No. 1 has been expanded to 14.2 million gallons per day by including an ion exchange treatment system and product water is conveyed to the City of Ontario as well. The Chino Basin Desalter No. 2 serves water to Jurupa, Ontario, Norco and the Santa Ana River Water Company. Groundwater from eight wells in the Mira Loma area is treated by reverse osmosis (6 million gallons per day) and ion exchange (4 million gallons per day) treatment systems.

Long Beach Pilot Project-The City of Long Beach intends to develop a 10,000 acre-foot per year seawater desalination facility consisting of a seawater intake, pretreatment, membrane desalination, post-treatment, and a brine disposal system. Long Beach is researching an under ocean floor seawater intake, pretreatment and discharge system. With the under-ocean-floor seawater intake and discharge method, collector screens will be extended horizontally out into the ocean below the beach floor. Long Beach has also developed a proprietary technology for desalination using a two-pass nanofiltration system. Treated water would be distributed into the

distribution system through new treated water pipelines. Project water would be used in Long Beach.

Los Angeles Pilot Project-The City of Los Angeles Department of Water and Power is proposing implementation of a pilot project to assist in evaluating the technical, environmental, institutional, and economical merits of desalinating seawater within its service area. The proposed pilot project at the Scattergood Generating Station is aimed at collecting the needed information from which LADWP can make an informed decision.

Lower Sweetwater Desalter-The Lower Sweetwater Desalter includes wells, replenishment facilities, a treatment plant, neutralization plant, brine disposal, and pipelines. The treatment plant employs reverse osmosis and blending to desalt brackish water. Product water is pumped to the Sweetwater Authority's distribution system for use by National City and South Bay Irrigation District. Concentrate is discharged to San Diego Bay through the Upper Paradise Creek flood control channel.

Madrona Desalination Facility-The Madrona Desalination Facility includes two wells and treatment of water from the West Coast Basin by reverse osmosis. Product water is conveyed to the City of Torrance's distribution system by booster pump. Concentrate is discharged to the ocean.

Menifee Desalter-The Menifee Desalter treats brackish water from five wells in the Perris and Menifee Subbasins through reverse osmosis. Product water is pumped into Eastern Municipal Water District's potable distribution system. Concentrate is disposed through the Temescal Valley and Santa Ana regional interceptors to the ocean.

Municipal Water District of Orange County Pilot Project-The Municipal Water District of Orange County intends to develop a 25 million gallon per day seawater desalination facility in Dana Point. The subsurface feedwater supply intake system will be situated within Doheny State Beach and the desalination plant will be located a short distance inland just east of San Juan Creek. The project consists of a subsurface slant well intake system, pretreatment, membrane desalination, post-treatment, power supply, brine conditioning (if needed) and disposal, and a pumping station connection to the regional distribution system to serve customers in south Orange County.

Oceanside Desalter (Mission Basin Expansion)-The Oceanside Desalter (Mission Basin Expansion) includes three wells, a cartridge filtration facility, and water conveyance facilities. Brackish water is pumped from the Mission Basin. Product water is delivered to the City of Oceanside. Concentrate is disposed into the ocean.

San Diego Full Scale Project-Poseidon Resources (Channelside) LLC (Poseidon) plans to construct and operate an approximately 50 million gallon per day Carlsbad Seawater Desalination Plant to produce potable water through reverse osmosis. Associated facilities include an intake pump station and pipeline, concentrate return pipeline, sewer connection, solids handling building, electrical transmission lines, and product water pipeline. From the Desalination Plant, desalinated water would be distributed along several pipeline routes (some

proposed, some planned and some existing) to the City of Carlsbad and various local water districts as wholesale water purchasers for ultimate use in Northern San Diego County. Source water for the project will come from once-through-flow seawater in the existing cooling water discharge system at the Encina power plant. Concentrate will be conveyed to the power plant cooling water discharge canal, and then the concentrate will be blended with the power plant cooling water prior to discharge of the blended stream into the ocean via the power plant discharge canal.

San Juan Basin Desalter-The San Juan Basin Desalter consists of five wells, a 4 million gallon per day reverse osmosis treatment plant, pretreatment to remove iron and manganese, a pump station, a product water pipeline, and a concentrate disposal pipeline. Brackish water is pumped from the Lower San Juan Basin. Product water is delivered to the Capistrano Valley Water District. Concentrate is conveyed to the ocean through the Chiquita Land Outfall and the Serra Ocean Outfall.

Temescal Basin Desalter-The Temescal Basin Desalter includes wells, reverse osmosis treatment, transmission, product water, and brine disposal pipelines. Brackish water is pumped from the Temescal Subbasin. Product water is delivered to the City of Corona. Brine is discharged to the ocean through the Santa Ana Regional Interceptor.

Tustin Desalter-The Tustin Desalter includes wells, a 2 million gallon per day reverse osmosis desalination plant, and pipeline. Brackish water is pumped from the Orange County Basin. Product water is delivered to the City of Tustin. Brine is conveyed to the County Sanitation Districts of Orange County wastewater treatment facilities via a sewer.

West Basin Desalter-The West Basin Desalter includes a 1.5 million gallon per day reverse osmosis desalination system, yard piping, and brine disposal piping. Treatment facilities consist of threshold inhibitor and acid injection systems, cartridge filters, booster pumps, reverse osmosis membrane units, decarbonation facilities, chlorine disinfection, and an on-site storage reservoir. Brackish water is pumped from the West Coast Basin. Product water is delivered to the California Water Service Company. Brine is disposed and conveyed to the Los Angeles County Sanitation District's Carson Industrial Wastewater Treatment Plant.

West Basin Pilot Project-West Basin Municipal Water District (West Basin MWD) intends to develop a 20 million gallon per day seawater desalination facility within its service area. The project would employ a combination of proven technologies, including microfiltration and reverse osmosis, to reduce salt content levels to at or below that of imported water being delivered to the area. Water would be used by customers of West Basin MWD.

Collectively, over 43,300 acre-feet of desalted water was produced in 2006 in Metropolitan's service area, with financial contributions in 2005 and 2006 by Metropolitan totaling over \$16.2 million. To create Extraordinary Conservation Intentionally Created Surplus (EC ICS) as a result of desalting, Metropolitan would reduce its use of Colorado River water in an amount up to the amount of water desalted in its service area.

Verification: On a contractual basis, a participating agency is required to meter and invoice Metropolitan for the amount of desalted water produced and used each month. At the end of each fiscal year, Metropolitan verifies the amount of desalted water production through an annual reconciliation process in which Metropolitan reviews the metered production records and compares it to monthly invoices submitted during the fiscal year. In addition, Metropolitan periodically conducts an audit of agencies' records pertaining to desalted water production.

Total Amount of ICS Credited Annually: The amount of EC ICS that can be created during any Year is limited to the amount of desalted water produced in Metropolitan's service area, for example, 50,000 acre-feet in 2008, provided that Metropolitan reduces its use of Colorado River water from the amount which would otherwise be approved by Reclamation by an equal amount. The volume of water conserved annually pursuant to this program to be devoted to the creation of EC ICS credits is further limited to the quantities set forth in the following, and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007:

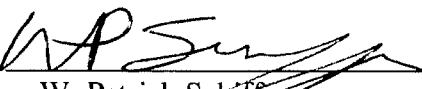
Limitations on Creation of EC ICS

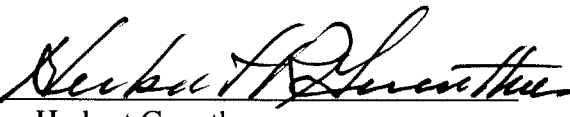
- a) The amount of EC ICS that Metropolitan may create in any Year is limited to the amount of Colorado River water that, if added to its consumptive use, would not result in an inadvertent overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.
- b) The total amount of annual EC ICS created by this program is limited to the amount of water that could have been delivered for beneficial use from the Colorado River Aqueduct.

In Witness of this Exhibit M to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13<sup>th</sup> day of December, 2007.

Approved as to form:


**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**


By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:

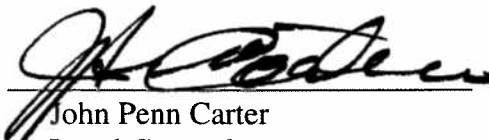
**PALO VERDE IRRIGATION  
DISTRICT**

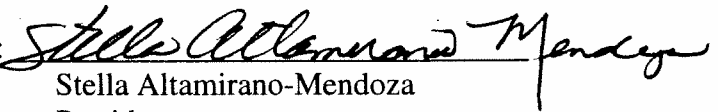
By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

Attest and Approved:

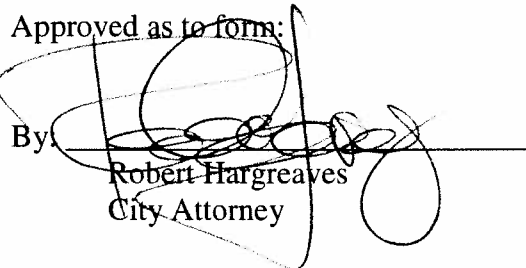
**IMPERIAL IRRIGATION DISTRICT**

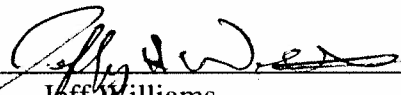
By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

Approved as to form:

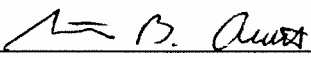
**THE CITY OF NEEDLES**


By:   
Robert Hargreaves  
City Attorney

By:   
Jeff Williams  
Mayor

Approved as to form:

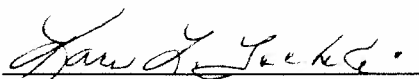
**COACHELLA VALLEY WATER  
DISTRICT**

By:   
Steven B. Abbott  
Legal Counsel

By:   
Steven B. Robbins  
General Manager/Chief Engineer

Approved as to form:

**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

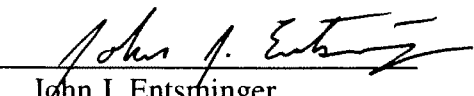
By:   
Karen L. Tachiki  
General Counsel

By:   
Jeffrey Kightlinger  
General Manager

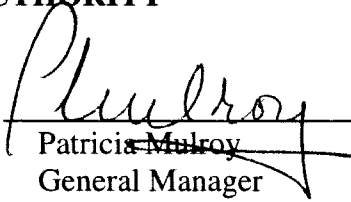
Approved as to form:

**SOUTHERN NEVADA WATER  
AUTHORITY**

By:

  
John J. Entsminger  
Deputy General Counsel

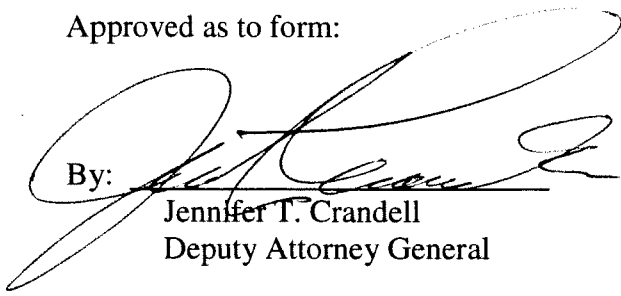
By:

  
Patricia Mulroy  
General Manager

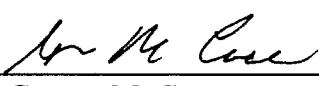
Approved as to form:

**COLORADO RIVER COMMISSION  
OF NEVADA**

By:

  
Jennifer T. Crandell  
Deputy Attorney General

By:

  
George M. Caan  
Executive Director

## Exhibit N

### San Diego County Water Authority Funded Imperial Irrigation District Water Transfer

Type: “2.1 D. Extraordinary conservation program that existed on January 1, 2006.”

Under the April 29, 1998 Transfer Agreement amended on May 4, 2000, February 13, 2001, December 31, 2001, and October 10, 2003, San Diego County Water Authority (Authority) is paying Imperial Irrigation District (IID) to conserve water through means determined by IID. In return, IID is transferring conserved water to the Authority. The Authority makes the conserved water available to The Metropolitan Water District of Southern California (Metropolitan) under the 2003 Amended and Restated Exchange Agreement. In return, Metropolitan delivers an equal amount of exchange water to the Authority.

Through 2007, water has been conserved by IID through a land fallowing program implemented by landowners in IID’s service area. During the life of this program, IID shall employ other extraordinary conservation methods to conserve water for transfer. The amount of water to be conserved and transferred is scheduled to increase from 50,000 acre-feet in 2008 to 205,000 acre-feet in 2021, and then decrease to 200,000 acre-feet in 2023. Absent the creation of Extraordinary Conservation Intentionally Created Surplus (EC ICS), such water would have otherwise been beneficially used.

Any ICS created under this program will be credited to Metropolitan in accordance with EC ICS procedures pursuant to the terms of an agreement between Metropolitan and the Authority, which includes establishment of an Authority sub-account in records maintained by Metropolitan. Release of ICS credits resulting from this program to Metropolitan are to be in accordance with EC ICS procedures pursuant to the terms of an agreement between Metropolitan and the Authority.

Verification: IID staff monitors the fallowed fields to verify that canal water is not delivered. IID locks the water delivery gate or if water is delivered from one gate to more fields than the number fallowed, the delivery ditch is blocked or another physical obstruction to water delivery is created. Computerized crop codes have been modified by IID to prevent a water order from being processed for a fallowed field. The Bureau of Reclamation may verify 5 percent of randomly selected fallowed fields for locked gates or physical obstructions in the spring and the fall. Regardless of whether water is conserved by fallowing or other extraordinary conservation methods, IID reduces its net diversions at Imperial Dam by the annual amount specified in the Transfer Agreement to permit the Secretary of the Interior to deliver water made available for the Authority’s benefit at the intake facilities for Metropolitan’s Colorado River Aqueduct.

Total Amount of ICS Credited Annually: The amount of Extraordinary Conservation ICS that can be created during any Year is limited to the amount of water resulting from the program in that Year that the Authority does not cause to be delivered to Metropolitan’s intake at Lake Havasu. The volume of water conserved annually pursuant to this program to be devoted to the



creation of EC ICS (EC ICS) credits is further limited to the quantities set forth in the following, and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007:

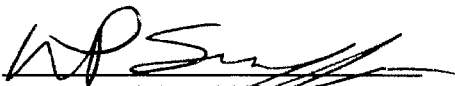
Limitations on Creation of EC ICS


- a) The amount of EC ICS that Metropolitan may create in any Year is limited to the amount of Colorado River water that, if added to its consumptive use, would not result in an inadvertent overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.
- b) The total amount of annual EC ICS created by this program is limited to the amount of water that could have been delivered for beneficial use from the Colorado River Aqueduct.
- c) The amount of EC ICS created pursuant to this Exhibit is limited to the IID reductions shown in columns 5 and 7 of Exhibit B to the October 10, 2003 Colorado River Water Delivery Agreement, less any amount delivered for mitigation in that Year.

In Witness of this Exhibit N to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13<sup>th</sup> day of December, 2007.

Approved as to form:

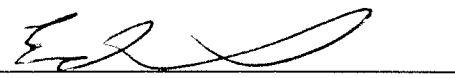
**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**


By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:


**PALO VERDE IRRIGATION  
DISTRICT**

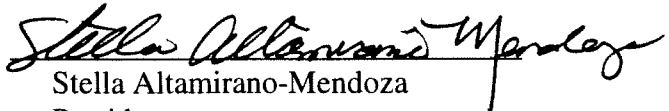
By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

Attest and Approved:

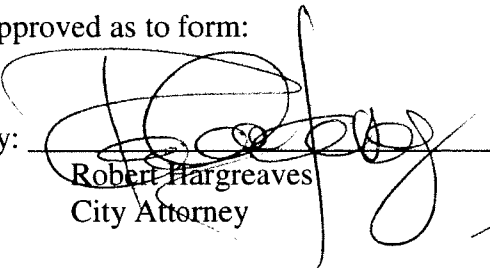
**IMPERIAL IRRIGATION DISTRICT**

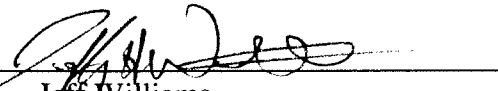
By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

Approved as to form:

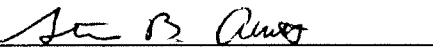
**THE CITY OF NEEDLES**

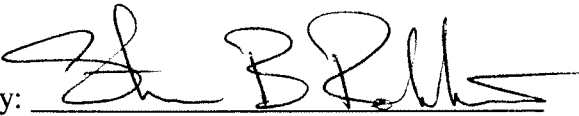
By:   
Robert Hargreaves  
City Attorney

By:   
Jeff Williams  
Mayor

Approved as to form:


**COACHELLA VALLEY WATER DISTRICT**

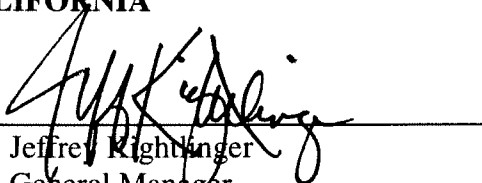
By:   
Steven B. Abbott  
Legal Counsel

By:   
Steven B. Robbins  
General Manager/Chief Engineer

Approved as to form:

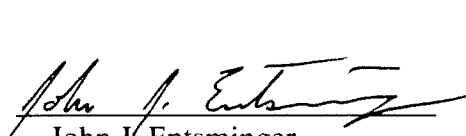
**THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

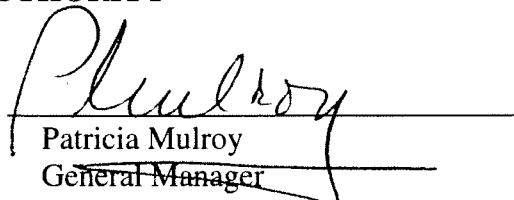
By:   
Karen L. Tachiki  
General Counsel

By:   
Jeffrey Kightlinger  
General Manager

Approved as to form:

**SOUTHERN NEVADA WATER AUTHORITY**

By:   
John J. Entsminger  
Deputy General Counsel

By:   
Patricia Mulroy  
General Manager

Approved as to form:

**COLORADO RIVER COMMISSION  
OF NEVADA**

By: 

Jennifer T. Crandell  
Deputy Attorney General

By: 

George M. Caan  
Executive Director

## Exhibit O

### San Diego County Water Authority Funded All-American and Coachella Canal Lining Projects

Type: “2.1 B. Canal lining programs.”

Under the October 10, 2003 Allocation Agreement<sup>1</sup>, 21,500 acre-feet of water conserved in a Year by the 35-mile Coachella Canal Lining Project and 56,200 acre-feet of water to be conserved in a Year by the 23-mile All-American Canal Lining Project is being made available to San Diego County Water Authority (Authority) except under certain specified circumstances. The Authority makes the conserved water available to The Metropolitan Water District of Southern California (Metropolitan) under the October 10, 2003 Amended and Restated Exchange Agreement. In return, Metropolitan delivers an equal amount of exchange water to the Authority. Absent the creation of Extraordinary Conservation Intentionally Created Surplus (EC ICS), such water would have otherwise been beneficially used.

Any ICS created under this program will be credited to Metropolitan in accordance with EC ICS procedures pursuant to the terms of an agreement between Metropolitan and the Authority, which includes establishment of an Authority sub-account in records maintained by Metropolitan. Release of ICS credits resulting from this program to Metropolitan are to be in accordance with EC ICS procedures pursuant to the terms of an agreement between Metropolitan and the Authority.

Verification: Imperial Irrigation District (IID) reduces its and Coachella Valley Water District's (CVWD) net diversions at Imperial Dam, based on the determination by the Secretary of the Interior of the amount of water conserved by the All-American Canal Lining Project and the Coachella Canal Lining Project, respectively. IID's reduction in net diversions at Imperial Dam permits the Secretary of the Interior to deliver water made available for the Authority's benefit at the intake facilities for Metropolitan's Colorado River Aqueduct.

Total Amount of ICS Credited Annually: The amount of Extraordinary Conservation ICS that can be created during any Year is limited to the amount of water allocated from each of the Projects in that Year that the Authority does not cause to be delivered to Metropolitan's intake at Lake Havasu. The volume of water conserved annually pursuant to this Program to be devoted to the creation of EC ICS credits is further limited to the quantities set forth in the following, and the California Agreement for the Creation and Delivery of EC ICS dated December 13, 2007:

#### Limitations on Creation of EC ICS

- a) The amount of EC ICS that Metropolitan may create in any Year is limited to the amount of Colorado River water that, if added to its consumptive use, would not result

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<sup>1</sup> The Parties to the Allocation Agreement are the United States, The Metropolitan Water District of Southern California, Imperial Irrigation District, Coachella Valley Water District, San Diego County Water Authority, the La Jolla, Pala, Pauma, Rincon, and San Pasqual Bands of Mission Indians, the San Luis Rey River Indian Water Authority, the City of Escondido, and Vista Irrigation District.


in an inadvertent overrun pursuant to the October 10, 2003 Inadvertent Overrun and Payback Policy.

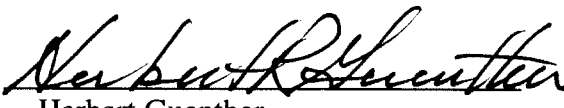
- b) The total amount of annual EC ICS created by this program is limited to the amount of water that could have been delivered for beneficial use from the Colorado River Aqueduct.
- c) The total amount of EC ICS created pursuant to Exhibits J and O is limited to the sum of the IID and CVWD reductions shown in columns 6 and 15, respectively of Exhibit B to the October 10, 2003 Colorado River Water Delivery Agreement, as modified by Exhibit B to the October 30, 2007 Authority-CVWD Settlement Agreement, less any portion of those reductions that result in delivery of water to Metropolitan or an exchange of water with the United States for use by the San Luis Rey Settlement Parties in that Year.

In Witness of this Exhibit O to the Forbearance Agreement executed contemporaneously herewith, the Parties affix their official signatures below, acknowledging approval of this document on the 13<sup>th</sup> day of December, 2007.

Approved as to form:

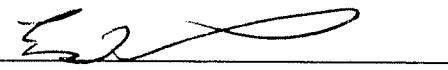
**THE STATE OF ARIZONA acting  
through the ARIZONA  
DEPARTMENT OF WATER  
RESOURCES**


By:   
W. Patrick Schiffer  
Chief Counsel

By:   
Herbert Guenther  
Director

Attest:

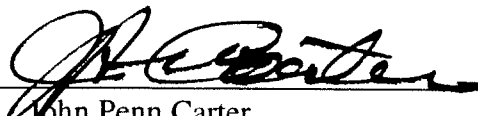
**PALO VERDE IRRIGATION  
DISTRICT**

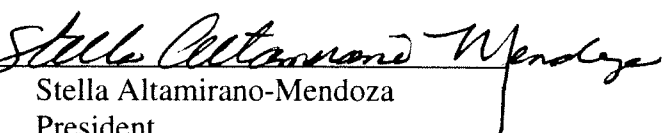
By:   
Edward W. Smith  
General Manager

By:   
Charles VanDyke  
Chair

Attest and Approved:

**IMPERIAL IRRIGATION DISTRICT**

By:   
John Penn Carter  
Legal Counsel

By:   
Stella Altamirano-Mendoza  
President

Approved as to form:

By:

Robert Hargreaves  
City Attorney

**THE CITY OF NEEDLES**

By:

Jeff Williams  
Mayor

Approved as to form:

By:

Steven B. Abbott  
Legal Counsel

**COACHELLA VALLEY WATER  
DISTRICT**

By:

Steven B. Robbins  
General Manager/Chief Engineer

Approved as to form:

By:

Karen L. Tachiki  
General Counsel

**THE METROPOLITAN WATER  
DISTRICT OF SOUTHERN  
CALIFORNIA**

By:

Jeffrey Lightlinger  
General Manager

Approved as to form:

By:

John J. Entsminger  
Deputy General Counsel

**SOUTHERN NEVADA WATER  
AUTHORITY**

By:

Patricia Mulroy  
General Manager

Approved as to form:

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Jennifer T. Crandell  
Deputy Attorney General

**COLORADO RIVER COMMISSION  
OF NEVADA**

By:

George M. Caan  
Executive Director