AMENDMENT NO. 1
TO
MEMORANDUM OF AGREEMENT No. 16-MOA-32-0010
for the
LOWER SANTA CRUZ RIVER BASIN STUDY

Preamble:
THIS AMENDMENT NO. 1 TO AGREEMENT NO. 16-MOA-32-0010, Lower Santa Cruz River Basin Study Memorandum of Agreement, hereinafter called “Amendment No. 1”, is entered into by the Southern Arizona Water Users Association (SAWUA), the Arizona Department of Water Resources (ADWR), the Central Arizona Water Conservation District (CAWCD), the Cortaro-Marana Irrigation District (CMID), the Pima Association of Governments (PAG), and the Arizona Board of Regents, on behalf of the University of Arizona, sometimes referred to collectively as the “Non-Federal Partners” and the United States Department of Interior, Bureau of Reclamation (Reclamation).

Explanatory Recitals
WHEREAS, the Non-Federal Partners and Reclamation entered into Memorandum of Agreement No. 16-MOA-32-0010, referred to therein and hereinafter as the "Agreement", for the purpose of working collaboratively to perform the Lower Santa Cruz River Basin Study (Study), and to establish the terms for funding the Study and the terms that will guide the performance of the Study; and

WHEREAS, Section II, Article B of the Agreement provides that the total estimated cost of the Study is $785,750 with Reclamation providing $392,750 and the Non-Federal Partners providing a minimum of $393,000 in in-kind services; and

WHEREAS, Section IV, Article A of the Agreement provides that the term of the Agreement will expire three years from the date of the last signature to this Agreement, unless terminated earlier; and

WHEREAS, the last signature on the Agreement is dated February 10, 2016, providing that the Agreement will expire on February 10, 2019; and

WHEREAS, in January 2018, the Non-Federal Partners and Reclamation determined that the work necessary to complete the Study will increase the estimated total cost of the Study from $785,750 to $1,435,750, and will require extension of the term of the Agreement from February 10, 2019 to September 30, 2020; and

WHEREAS, Reclamation will provide an additional contribution of $325,000 and the Non-Federal Cost Share Partners will collectively contribute additional in-kind contributions of $325,000 to be used to fund the additional costs of the Study; and
WHEREAS, the Non-Federal Partners and Reclamation desire to amend Section II of the Agreement to provide for an increase in the estimated total cost of the Study and to specify the obligations of the Non-Federal Partners and Reclamation for the costs exceeding $785,750; and

WHEREAS, the Non-Federal Partners and Reclamation desire to amend Section IV of the Agreement to extend the term of the Agreement through September 30, 2020; and

WHEREAS, the Non-Federal Partners and Reclamation desire to amend Attachment A, Lower Santa Cruz River Basin Study Plan of Study, Section IV.A.6, Schedule and Cost Control, Section IV.A.7, Deliverables and Project Documentation and Section VI, Milestone Schedule and Costs.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, the Non-Federal Partners and Reclamation agree as follows:

ARTICLES

I. Effect of Amendment No. 1 on the Agreement
Except as expressly modified by this Amendment No. 1, all terms and conditions of the Agreement remain in full force and effect.

II. Amendments to Section II of the Agreement
A. Section II, Article B of the Agreement is hereby superseded and replaced with the following:

  A. The total cost of this Study is estimated to be $1,435,750. Reclamation will contribute $717,750 and the Non-Federal Partners will contribute $718,000. Reclamation’s financial contribution to the Basin Study shall not exceed 50% of the total cost. The Pima Association of Governments’ contributions are strictly limited to “in-kind services” and no cash payout or liability will accrue unless otherwise negotiated. The Cortaro-Marana Irrigation District’s contributions are strictly limited to “in-kind services” and no cash payout or liability will accrue unless otherwise negotiated. All or part of the Non-Federal Partners’ share may be provided as in-kind services. Valuation of in-kind services shall be in accordance with 2 CFR Part 225, Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87).

III. Amendment to Section IV, Article A of the Agreement
Section IV, Article A of the Agreement is hereby amended by replacing "three years from the date of the last signature to this Agreement" with "on September 30, 2020".

IV. Amendment to Attachment A, Lower Santa Cruz River Basin Study Plan of Study
is hereby superseded and replaced with Amended Attachment A, Lower Santa Cruz River Basin Study Plan of Study with the following changes:

  1) Section IV.A.6, Schedule and Cost Control:

      The Study will begin after the execution of the Memorandum of Agreement and will continue through September 30, 2020. This Study will consist of the tasks identified in
Section V below. Specific costs are identified in Section VI, Milestone Schedule and Costs.

Schedule and cost control measures will be monitored by the Co-Study Managers to ensure that project tasks stay on track and within budget. These measures will include semi-annual reviews of the schedule and budget providing this information to the Project Team along with Reclamation’s Basin Study management team in Denver.

2) **Section IV.A.7, Deliverables and Project Documentation** is hereby amended by replacing "quarterly" with "semi-annual".

3) **Section VI, Milestone Schedule and Costs** is hereby replaced by an updated Costs table and Milestone Schedule table.

**V. Effective Date**

This Amendment No. 1 shall become effective upon execution by the Non-Federal Partners and Reclamation.

IN WITNESS WHEREOF, the Non-Federal Partners and Reclamation hereto have caused this Amendment No. 1 to be executed.
For the Non-Federal Partners

______________________________   _____________
Joseph Olsen, President                      Date
Southern Arizona Water Users Association
For the Non-Federal Partners

____________________________   _______________
Thomas Buschatzke, Director    Date
Arizona Department of Water Resources
For the Non-Federal Partners

______________________________   _____________
Farhad Moghimi, Director   Date
Pima Association of Governments
For the Non-Federal Partners

Suzanne Ticknor, Director of Water Policy
Central Arizona Water Conservation District

Date
For the Non-Federal Partners

Douglas Greenland, General Manager
Cortaro-Marana Irrigation District

Date
For the Non-Federal Partners

_________________________________________
Arizona Board of Regents, on behalf
of The University of Arizona

Date
For Reclamation

Terrance J. Fulp, Ph.D.
Regional Director, Lower Colorado Region