

**No. 50482**

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**United States of America  
and  
Spain**

**Memorandum of Understanding on scientific and technological cooperation in the field of water resources development between the Bureau of Reclamation, Department of the Interior, Government of the United States of America, and the Centro de Estudios y Experimentación de Obras Públicas, Ministerio de Fomento, Government of the Kingdom of Spain. Madrid, 20 May 1997**

**Entry into force:** *20 May 1997 by signature, in accordance with article VII*

**Authentic texts:** *English and Spanish*

**Registration with the Secretariat of the United Nations:** *United States of America, 26 February 2013*

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**États-Unis d'Amérique  
et  
Espagne**

**Mémorandum d'accord sur la coopération en matière scientifique et technologique dans le domaine du développement des ressources hydriques entre le Bureau des réclamations du Département de l'intérieur du Gouvernement des États-Unis d'Amérique et le Centre d'études et d'expérimentation des travaux publics du Ministère de l'équipement du Gouvernement du Royaume d'Espagne. Madrid, 20 mai 1997**

**Entrée en vigueur :** *20 mai 1997 par signature, conformément à l'article VII*

**Textes authentiques :** *anglais et espagnol*

**Enregistrement auprès du Secrétariat de l'Organisation des Nations Unies :** *États-Unis d'Amérique, 26 février 2013*

[ ENGLISH TEXT – TEXTE ANGLAIS ]

**MEMORANDUM OF UNDERSTANDING  
ON SCIENTIFIC AND TECHNOLOGICAL COOPERATION  
IN THE FIELD OF WATER RESOURCES DEVELOPMENT  
BETWEEN  
THE BUREAU OF RECLAMATION  
DEPARTMENT OF THE INTERIOR  
GOVERNMENT OF THE UNITED STATES OF AMERICA  
AND  
THE CENTRO DE ESTUDIOS Y EXPERIMENTACIÓN DE OBRAS  
PÚBLICAS  
MINISTERIO DE FOMENTO  
GOVERNMENT OF THE KINGDOM OF SPAIN**

**ARTICLE I**

The Bureau of Reclamation, of the Government of the United States of America, an agency of the Department of the Interior (hereinafter referred to as Reclamation), and the Centro de Estudios y Experimentación de Obras Públicas of the Ministerio de Fomento of the Kingdom of Spain (hereinafter referred to as CEDEX), (the two agencies hereinafter referred to as the Parties), hereby reaffirm their mutual desire to collaborate in developing a program of scientific and technical cooperation for the exchange of ideas, information, skills and techniques on problems of mutual interest in the field of water resource development. This Memorandum of Understanding (MOU), is subject to and governed by the Agreement on Scientific and Technological Cooperation between the United States of America and the Kingdom of Spain, signed at Madrid on June 10, 1994, and any intellectual property generated under this MOU shall be subject to this Agreement.

**ARTICLE II**

Cooperation related to scientific and technical aspects of water resource development can be beneficial to both countries. The Parties will work together to utilize special scientific facilities available to both agencies in their respective countries to cooperate in the activities listed below, and in others as the Parties agree to be appropriate.

- A. Cooperation in the development, optimization and use of new methods to monitor water quality and other ecological conditions of reservoirs, and their

watersheds, in Spain and the United States, including the use of remote sensing techniques, Geographic Information Systems (GIS), descriptive graphics software, and new field instrumentation.

- B. Cooperation in joint investigations and informational exchanges in the areas of integrated management of pests, including aquatic plants, algae, and animals associated with irrigation systems, reservoirs, drinking water supplies, and other aquatic systems of mutual interests.
- C. Application of biological methodology to manage aquatic ecological systems including improvements of water quality in different aquatic systems such as construction of associated wetlands and/or development of aeration techniques, and control of physicochemical characteristics in inflows.
- D. Development of a methodology using benthic macroinvertebrates as biological indicators to assess the levels of water pollution and ecological conditions of river systems. The results can be compared with conventional methods for assessing those impacts caused by fish hatcheries, thermal, toxic or heavy metals pollution and ecological river flow changes.
- E. Cooperative activities in updating and improving laboratory facilities and equipment used in the field of hydraulic investigations of hydraulic structures.
- F. Cooperation in joint research and information exchange on the development of methodologies and models to obtain environmentally acceptable discharges in controlled flow rivers.
- G. Cooperation in the identification of improved and modernized irrigation techniques with a view to optimization of the use of irrigation water.

### **ARTICLE III**

The Parties may use, as appropriate and as may be mutually agreed, the services of other government agencies, universities, organizations and institutions of both countries for the development and conduct of the cooperative programs. Similarly, the Parties may seek opportunities to submit joint research proposals to third party granting institutions as appropriate.

### **ARTICLE IV**

The Parties shall establish a detailed written plan of work for each project. Each agency should bear its costs in accordance with its own financial and budgetary process. Activities under this MOU are subject to the availability of funds, and will be implemented in a manner consistent with the laws of the Kingdom of

Spain and the United States of America. The detailed scopes of work will be attached as annexes to this MOU.

#### **ARTICLE V**

Scientific and technical information derived from the cooperative activity under this MOU should be made available to the world's scientific community through customary channels and in accordance with normal scientific procedures. Any intellectual property generated under this MOU shall be subject to the provisions of the Agreement of Scientific and Technological Cooperation between the United States of America and the Kingdom of Spain.

#### **ARTICLE VI**

The Parties may from time to time jointly review the progress of cooperation under this MOU.

#### **ARTICLE VII**

This MOU will enter into force upon signature by both parties and will remain in force for five years and will be automatically renewed for five year periods. The MOU may be amended by written agreement of the Parties. Either Party may terminate the MOU upon three months' written notice to the other Party. The termination or expiration of the MOU shall not affect the carrying out of any cooperative activity undertaken under the MOU.

#### **ARTICLE VIII**

Activities under this MOU are subject to the availability of appropriated funds. Done in duplicate, in the English and Spanish languages, this 20th day of May 1997.

FOR THE UNITED STATES OF  
AMERICA BUREAU OF  
RECLAMATION,

Eluid Martínez  
Commissioner

FOR THE KINGDOM OF SPAIN  
CENTRO DE ESTUDIOS Y  
EXPERIMENTACIÓN DE OBRAS  
PÚBLICAS,

Felipe Martínez Martínez  
Director General

Date: 5/20/97

**CONVENIO MARCO  
DE COOPERACIÓN CIENTÍFICA Y TECNOLÓGICA  
EN EL CAMPO DEL DESARROLLO DE RECURSOS HÍDRICOS  
ENTRE  
EL BUREAU OF RECLAMATION DEL DEPARTAMENTO DEL  
INTERIOR  
DEL GOBIERNO DE LOS ESTADOS UNIDOS DE AMÉRICA  
Y  
EL CENTRO DE ESTUDIOS Y EXPERIMENTACIÓN  
DE OBRAS PÚBLICAS DEL MINISTERIO DE FOMENTO  
DEL REINO DE ESPAÑA**

**ARTÍCULO I**

El Bureau of Reclamation, agencia del Departamento del Interior del Gobierno de los Estados Unidos de América (en adelante Reclamation) y el Centro de Estudios y Experimentación de Obras Públicas del Ministerio de Fomento del Reino de España (en adelante CEDEX) (los dos organismos en adelante las Partes), por este acto reafirman su mutuo deseo de colaborar en desarrollar un programa de cooperación científica y técnica para el intercambio de ideas, información, artes y técnicas sobre problemas de interés mutuo en el campo del desarrollo de los recursos hídricos. Este Convenio Marco está sujeto y regido por el Acuerdo sobre Cooperación Científica y Tecnológica entre los Estados Unidos de América y el Reino de España, firmado en Madrid el 10 de junio de 1994, y cualquier propiedad intelectual generada bajo este Convenio Marco estará sujeta a dicho Acuerdo.

**ARTÍCULO II**

La cooperación relativa a aspectos científicos y técnicos del desarrollo de los recursos hidráulicos puede ser beneficiosa para ambos países. Las Partes trabajarán de común acuerdo para utilizar las instalaciones científicas especiales disponibles en ambos organismos en sus respectivos países al objeto de cooperar en las actividades enumeradas más adelante y en otras, cuando las Partes consideren que sea conveniente.

- A. Cooperación en el desarrollo, optimización y utilización de nuevos métodos para controlar la calidad del agua y otras condiciones ecológicas de los embalses y sus cuencas, en los Estados Unidos y en España, incluyendo el uso de técnicas de teledetección, sistemas de información geográfica, "Software" gráfico descriptivo, y nueva instrumentación de campo.