

(3) each mitigation and adaptation strategy considered and implemented by the Secretary to address each effect of global climate change described in paragraph (1);

(4) each coordination activity conducted by the Secretary with—

(A) the Director;

(B) the Administrator;

(C) the Secretary of Agriculture (acting through the Chief of the Natural Resources Conservation Service); or

(D) any appropriate State water resource agency; and

(5) the implementation by the Secretary of the monitoring plan developed under subsection (b)(5).

(d) Feasibility studies

(1) Authority of Secretary

The Secretary, in cooperation with any non-Federal participant, may conduct 1 or more studies to determine the feasibility and impact on ecological resiliency of implementing each mitigation and adaptation strategy described in subsection (c)(3), including the construction of any water supply, water management, environmental, or habitat enhancement water infrastructure that the Secretary determines to be necessary to address the effects of global climate change on water resources located in each major reclamation river basin.

(2) Cost sharing

(A) Federal share

(i) In general

Except as provided in clause (ii), the Federal share of the cost of a study described in paragraph (1) shall not exceed 50 percent of the cost of the study.

(ii) Exception relating to financial hardship

The Secretary may increase the Federal share of the cost of a study described in paragraph (1) to exceed 50 percent of the cost of the study if the Secretary determines that, due to a financial hardship, the non-Federal participant of the study is unable to contribute an amount equal to 50 percent of the cost of the study.

(B) Non-Federal share

The non-Federal share of the cost of a study described in paragraph (1) may be provided in the form of any in-kind services that substantially contribute toward the completion of the study, as determined by the Secretary.

(e) No effect on existing authority

Nothing in this section amends or otherwise affects any existing authority under reclamation laws that govern the operation of any Federal reclamation project.

(f) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2009 through 2023, to remain available until expended.

(Pub. L. 111–11, title IX, §9503, Mar. 30, 2009, 123 Stat. 1332.)

REFERENCES IN TEXT

The Endangered Species Act of 1973, referred to in subsec. (b)(3)(E), is Pub. L. 93–205, Dec. 28, 1973, 87 Stat. 884, which is classified principally to chapter 35 (§1531 et seq.) of Title 16, Conservation. For complete classification of this Act to the Code, see Short Title note set out under section 1531 of Title 16 and Tables.

§ 10364. Water management improvement

(a) Authorization of grants and cooperative agreements

(1) Authority of Secretary

The Secretary may provide any grant to, or enter into an agreement with, any eligible applicant to assist the eligible applicant in planning, designing, or constructing any improvement—

(A) to conserve water;

(B) to increase water use efficiency;

(C) to facilitate water markets;

(D) to enhance water management, including increasing the use of renewable energy in the management and delivery of water;

(E) to accelerate the adoption and use of advanced water treatment technologies to increase water supply;

(F) to prevent the decline of species that the United States Fish and Wildlife Service and National Marine Fisheries Service have proposed for listing under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) (or candidate species that are being considered by those agencies for such listing but are not yet the subject of a proposed rule);

(G) to accelerate the recovery of threatened species, endangered species, and designated critical habitats that are adversely affected by Federal reclamation projects or are subject to a recovery plan or conservation plan under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) under which the Commissioner of Reclamation has implementation responsibilities; or

(H) to carry out any other activity—

(i) to address any climate-related impact to the water supply of the United States that increases ecological resiliency to the impacts of climate change; or

(ii) to prevent any water-related crisis or conflict at any watershed that has a nexus to a Federal reclamation project located in a service area.

(2) Application

To be eligible to receive a grant, or enter into an agreement with the Secretary under paragraph (1), an eligible applicant shall—

(A) be located within the States and areas referred to in section 391 of title 43; and

(B) submit to the Secretary an application that includes a proposal of the improvement or activity to be planned, designed, constructed, or implemented by the eligible applicant.

(3) Requirements of grants and cooperative agreements

(A) Compliance with requirements

Each grant and agreement entered into by the Secretary with any eligible applicant under paragraph (1) shall be in compliance

with each requirement described in subparagraphs (B) through (F).

(B) Agricultural operations

In carrying out paragraph (1), the Secretary shall not provide a grant, or enter into an agreement, for an improvement to conserve irrigation water unless the eligible applicant agrees not—

(i) to use any associated water savings to increase the total irrigated acreage of the eligible applicant; or

(ii) to otherwise increase the consumptive use of water in the operation of the eligible applicant, as determined pursuant to the law of the State in which the operation of the eligible applicant is located.

(C) Nonreimbursable funds

Any funds provided by the Secretary to an eligible applicant through a grant or agreement under paragraph (1) shall be nonreimbursable.

(D) Title to improvements

If an infrastructure improvement to a federally owned facility is the subject of a grant or other agreement entered into between the Secretary and an eligible applicant under paragraph (1), the Federal Government shall continue to hold title to the facility and improvements to the facility.

(E) Cost sharing

(i) Federal share

The Federal share of the cost of any infrastructure improvement or activity that is the subject of a grant or other agreement entered into between the Secretary and an eligible applicant under paragraph (1) shall not exceed 50 percent of the cost of the infrastructure improvement or activity.

(ii) Calculation of non-Federal share

In calculating the non-Federal share of the cost of an infrastructure improvement or activity proposed by an eligible applicant through an application submitted by the eligible applicant under paragraph (2), the Secretary shall—

(I) consider the value of any in-kind services that substantially contributes toward the completion of the improvement or activity, as determined by the Secretary; and

(II) not consider any other amount that the eligible applicant receives from a Federal agency.

(iii) Maximum amount

The amount provided to an eligible applicant through a grant or other agreement under paragraph (1) shall be not more than \$5,000,000.

(iv) Operation and maintenance costs

The non-Federal share of the cost of operating and maintaining any infrastructure improvement that is the subject of a grant or other agreement entered into between the Secretary and an eligible applicant under paragraph (1) shall be 100 percent.

(F) Liability

(i) In general

Except as provided under chapter 171 of title 28 (commonly known as the “Federal Tort Claims Act”), the United States shall not be liable for monetary damages of any kind for any injury arising out of an act, omission, or occurrence that arises in relation to any facility created or improved under this section, the title of which is not held by the United States.

(ii) Tort Claims Act

Nothing in this section increases the liability of the United States beyond that provided in chapter 171 of title 28 (commonly known as the “Federal Tort Claims Act”).

(b) Research agreements

(1) Authority of Secretary

The Secretary may enter into 1 or more agreements with any university, nonprofit research institution, or organization with water or power delivery authority to fund any research activity that is designed—

(A) to conserve water resources;

(B) to increase the efficiency of the use of water resources; or

(C) to enhance the management of water resources, including increasing the use of renewable energy in the management and delivery of water.

(2) Terms and conditions of Secretary

(A) In general

An agreement entered into between the Secretary and any university, institution, or organization described in paragraph (1) shall be subject to such terms and conditions as the Secretary determines to be appropriate.

(B) Availability

The agreements under this subsection shall be available to all Reclamation projects and programs that may benefit from project-specific or programmatic cooperative research and development.

(c) Mutual benefit

Grants or other agreements made under this section may be for the mutual benefit of the United States and the entity that is provided the grant or enters into the cooperative agreement.

(d) Relationship to project-specific authority

This section shall not supersede any existing project-specific funding authority.

(e) Authorization of appropriations

There is authorized to be appropriated to carry out this section \$200,000,000, to remain available until expended.

(Pub. L. 111-11, title IX, §9504, Mar. 30, 2009, 123 Stat. 1334.)

REFERENCES IN TEXT

The Endangered Species Act of 1973, referred to in subsec. (a)(1)(F), (G), is Pub. L. 93-205, Dec. 28, 1973, 87 Stat. 884, which is classified principally to chapter 35 (§1531 et seq.) of Title 16, Conservation. For complete

classification of this Act to the Code, see Short Title note set out under section 1531 of Title 16 and Tables.

§ 10365. Hydroelectric power assessment

(a) Duty of Secretary of Energy

The Secretary of Energy, in consultation with the Administrator of each Federal Power Marketing Administration, shall assess each effect of, and risk resulting from, global climate change with respect to water supplies that are required for the generation of hydroelectric power at each Federal water project that is applicable to a Federal Power Marketing Administration.

(b) Access to appropriate data

(1) In general

In carrying out each assessment under subsection (a), the Secretary of Energy shall consult with the United States Geological Survey, the National Oceanic and Atmospheric Administration, the program, and each appropriate State water resource agency, to ensure that the Secretary of Energy has access to the best available scientific information with respect to presently observed impacts and projected future impacts of global climate change on water supplies that are used to produce hydroelectric power.

(2) Access to data for certain assessments

In carrying out each assessment under subsection (a), with respect to the Bonneville Power Administration and the Western Area Power Administration, the Secretary of Energy shall consult with the Commissioner to access data and other information that—

- (A) is collected by the Commissioner; and
- (B) the Secretary of Energy determines to be necessary for the conduct of the assessment.

(c) Report

Not later than 2 years after March 30, 2009, and every 5 years thereafter, the Secretary of Energy shall submit to the appropriate committees of Congress a report that describes—

- (1) each effect of, and risk resulting from, global climate change with respect to—
 - (A) water supplies used for hydroelectric power generation; and
 - (B) power supplies marketed by each Federal Power Marketing Administration, pursuant to—
 - (i) long-term power contracts;
 - (ii) contingent capacity contracts; and
 - (iii) short-term sales; and
- (2) each recommendation of the Administrator of each Federal Power Marketing Administration relating to any change in any operation or contracting practice of each Federal Power Marketing Administration to address each effect and risk described in paragraph (1), including the use of purchased power to meet long-term commitments of each Federal Power Marketing Administration.

(d) Authority

The Secretary of Energy may enter into contracts, grants, or other agreements with appropriate entities to carry out this section.

(e) Costs

(1) Nonreimbursable

Any costs incurred by the Secretary of Energy in carrying out this section shall be non-reimbursable.

(2) PMA costs

Each Federal Power Marketing Administration shall incur costs in carrying out this section only to the extent that appropriated funds are provided by the Secretary of Energy for that purpose.

(f) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2009 through 2023, to remain available until expended.

(Pub. L. 111-11, title IX, §9505, Mar. 30, 2009, 123 Stat. 1336.)

§ 10366. Climate change and water intragovernmental panel

(a) Establishment

The Secretary and the Administrator shall establish and lead a climate change and water intragovernmental panel—

- (1) to review the current scientific understanding of each impact of global climate change on the quantity and quality of freshwater resources of the United States; and
- (2) to develop any strategy that the panel determines to be necessary to improve observational capabilities, expand data acquisition, or take other actions—
 - (A) to increase the reliability and accuracy of modeling and prediction systems to benefit water managers at the Federal, State, and local levels; and
 - (B) to increase the understanding of the impacts of climate change on aquatic ecosystems.

(b) Membership

The panel shall be comprised of—

- (1) the Secretary;
- (2) the Director;
- (3) the Administrator;
- (4) the Secretary of Agriculture (acting through the Under Secretary for Natural Resources and Environment);
- (5) the Commissioner;
- (6) the Secretary of the Army, acting through the Chief of Engineers;
- (7) the Administrator of the Environmental Protection Agency; and
- (8) the Secretary of Energy.

(c) Review elements

In conducting the review and developing the strategy under subsection (a), the panel shall consult with State water resource agencies, the Advisory Committee, drinking water utilities, water research organizations, and relevant water user, environmental, and other non-governmental organizations—

- (1) to assess the extent to which the conduct of measures of streamflow, groundwater levels, soil moisture, evapotranspiration rates, evaporation rates, snowpack levels, precipitation amounts, flood risk, and glacier mass is