the appropriate committees of Congress a report that provides a detailed assessment of—

(1) the current availability of water resources in the United States, including—

(A) historic trends and annual updates of river basin inflows and outflows;

(B) surface water storage;

(C) groundwater reserves; and

(D) estimates of undeveloped potential resources (including saline and brackish water and wastewater);

(2) significant trends affecting water availability, including each documented or projected impact to the availability of water as a result of global climate change;

(3) the withdrawal and use of surface water and groundwater by various sectors, including—

(A) the agricultural sector;

(B) municipalities;

(C) the industrial sector;

(D) thermoelectric power generators; and

(E) hydroelectric power generators;

(4) significant trends relating to each water use sector, including significant changes in water use due to the development of new energy supplies;

(5) significant water use conflicts or shortages that have occurred or are occurring; and

(6) each factor that has caused, or is causing, a conflict or shortage described in paragraph (5).

(e) Authorization of appropriations

(1) In general

There is authorized to be appropriated to carry out subsections (a), (b), and (d) $20,000,000 for each of fiscal years 2009 through 2023, to remain available until expended.

(2) Grant program

There is authorized to be appropriated to carry out subsection (c) $12,500,000 for the period of fiscal years 2009 through 2013, to remain available until expended.

(Pub. L. 111–11, title IX, §9508, Mar. 30, 2009, 123 Stat. 1343.)

§ 10369. Research agreement authority

The Secretary may enter into contracts, grants, or cooperative agreements, for periods not to exceed 5 years, to carry out research within the Bureau of Reclamation.

(Pub. L. 111–11, title IX, §9509, Mar. 30, 2009, 123 Stat. 1346.)

§ 10370. Effect

(a) In general

Nothing in this chapter supersedes or limits any existing authority provided, or responsibility conferred, by any provision of law.

(b) Effect on State water law

(1) In general

Nothing in this chapter preempts or affects any—

(A) State water law; or

(B) interstate compact governing water.

(2) Compliance required

The Secretary shall comply with applicable State water laws in carrying out this chapter.

(Pub. L. 111–11, title IX, §9510, Mar. 30, 2009, 123 Stat. 1346.)

§ 10371. Water prediction and forecasting

(a) National Water Center

(1) Establishment

(A) In general

The Under Secretary of Commerce for Oceans and Atmosphere shall establish a center—

(i) to serve as the research and operational center of excellence for hydrologic analyses, forecasting, and related decision support services within the National Oceanic and Atmospheric Administration and the National Weather Service; and

(ii) to facilitate collaboration across Federal and State departments and agencies, academia, and the private sector on matters relating to water resources.

(B) Designation

The center established under subparagraph (A) shall be known as the ''National Water Center''.

(2) Functions

The functions of the National Water Center shall include the following:

(A) Improving understanding of water resources, stakeholder needs regarding water resources, and identifying science and services gaps relating to water resources.

(B) Developing and implementing advanced water resources modeling capabilities.

(C) Facilitating the transition of hydrologic research into operations.

(D) Delivering analyses, forecasts, and inundation information and guidance for all hydrologic events in the United States, including flash flooding, riverine flooding, and water resources outlooks.

(E) In coordination with warning coordination meteorologists, providing decision-support services to inform emergency management and water resources decisions.

(b) National instructions

(1) In general

Not later than one year after December 31, 2020, the Under Secretary, acting through the Director of the National Weather Service, shall make public an operations and services policy directive for the National Water Center.

(2) Contents

The directive required by paragraph (1) shall include national instructions to perform the functions of the National Water Center, including the following:

(A) Operational staff responsibilities.

(B) Guidelines for content, format, and provision of hydrologic and inundation products developed by the National Water Center.

(C) Procedures for cooperation and coordination between the National Water Center, the National Weather Service National Centers for Environmental Prediction, National Weather Service River Forecast Centers, and