

S 2156

SECURE Water Act

Congress: 110 (2007–2009, Ended)

Chamber: Senate

Policy Area: Water Resources Development

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Sponsor

Name: Sen. Bingaman, Jeff [D-NM]

Party: Democratic • **State:** NM • **Chamber:** Senate

Cosponsors (5 total)

Cosponsor	Party / State	Role	Date Joined
Sen. Cantwell, Maria [D-WA]	D · WA		Oct 4, 2007
Sen. Domenici, Pete V. [R-NM]	R · NM		Oct 4, 2007
Sen. Johnson, Tim [D-SD]	D · SD		Oct 4, 2007
Sen. Salazar, Ken [D-CO]	D · CO		Oct 16, 2007
Sen. Tester, Jon [D-MT]	D · MT		Oct 26, 2007

Committee Activity

Committee	Chamber	Activity	Date
Energy and Natural Resources Committee	Senate	Reported By	Sep 16, 2008

Subjects & Policy Tags

Policy Area:

Water Resources Development

Related Bills

No related bills are listed.

Science and Engineering to Comprehensively Understand and Responsibly Enhance Water Act or the SECURE Water Act - Directs the Secretary of the Interior (the Secretary), acting through the Commissioner of Reclamation, to establish a climate change adaptation program to: (1) assess each effect of, and risk resulting from, global climate change regarding the quantity of water resources located in specified areas encompassing a watershed that contains a federally authorized reclamation project (service areas); and (2) ensure that strategies are developed to address potential water shortages, conflicts, and other impacts to water users and the environment of each service area.

Directs the Secretary to: (1) consult with the U.S. Geological Survey (USGS), the National Oceanic and Atmospheric Administration (NOAA), the regional integrated sciences and assessments program established by the Administrator of NOAA, and each appropriate state water resource agency to ensure that the Secretary has access to the best available scientific information regarding presently observed and projected future impacts of climate change on water resources; (2) assess specific risks to the water supply of each major reclamation river basin; (3) analyze the extent to which changes in U.S. water supply will impact the Secretary's ability to deliver water to contractors, hydroelectric power generation facilities, recreation at reclamation facilities, fish and wildlife habitat, applicable species listed as endangered, threatened, or candidate species under the Endangered Species Act of 1973 (ESA), water quality issues, flow and water dependent ecological resiliency, and flood control management; and (4) consider and develop strategies to mitigate each impact analyzed.

Requires the Secretary of Agriculture to develop a monitoring plan to acquire and maintain water resources data to strengthen the understanding of water supply trends and to assist in each assessment and analysis. Sets forth reporting requirements. Authorizes the Secretary, in cooperation with any nonfederal participant, to conduct studies to determine the feasibility and impact on ecological resiliency of implementing each mitigation and adaptation strategy. Sets the federal share of study costs at 50%, with a financial hardship exception. Authorizes appropriations for FY2009-FY2023.

(Sec. 5) Authorizes the Secretary to provide grants to, or enter agreements with, eligible applicants to assist in planning, designing, or constructing improvements to: (1) conserve water; (2) increase water use efficiency; (3) facilitate water markets; (4) enhance water management, including increasing the use of renewable energy in water management and delivery; (5) accelerate the adoption and use of advanced water treatment technologies to increase water supply; (6) prevent the decline of species that the U.S Fish and Wildlife Service and National Marine Fisheries Service have proposed for listing under ESA; (7) 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 ESA under which the Commissioner has implementation responsibilities; and (8) carry out any other activity to address any climate-related impact to the water supply that increases ecological resiliency to the impacts of climate change or 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.

Sets forth eligibility requirements. Prohibits the Secretary from providing a grant or entering into an agreement for an improvement to conserve irrigation water unless the applicant agrees not to use any associated water savings to increase total irrigated acreage or to otherwise increase the consumptive use of water. Provides that if a grant or other agreement is for an infrastructure improvement to a federally owned facility, the government shall continue to hold title to the facility.

Limits the federal share of the cost of any infrastructure improvement or activity under a grant or other agreement entered into between the Secretary and an eligible applicant to 50%. Provides that in calculating the nonfederal share of the cost, the Secretary shall: (1) consider the value of any in-kind services that substantially contribute toward the completion of

the improvement or activity; and (2) not consider any other amount that the eligible applicant receives from a federal agency. Limits the amount provided to an eligible applicant to \$5 million. Sets the nonfederal share of the cost of operating and maintaining any infrastructure improvement under a grant or other agreement at 100%. Immunizes the United States from liability for monetary damages for injury arising out of an act, omission, or occurrence that arises in relation to a facility created or improved under this Act, the title of which is not held by the United States, except as provided in the Federal Tort Claims Act.

Authorizes the Secretary to enter into agreements with any university, nonprofit research institution, or organization with water or power delivery authority to fund research activities designed to conserve, increase efficiency of, or enhance management of water resources, including increasing the use of renewable energy in the management and delivery of water. Requires such agreements to be available to all reclamation projects and programs that may benefit from project-specific or programmatic cooperative research and development. Allows grants or other agreements made under this Act to be for the mutual benefit of the United States and the other party. Authorizes appropriations.

(Sec. 6) Directs the Secretary of Energy to: (1) assess each effect of, and risk resulting from, climate change regarding water supplies required for the generation of hydroelectric power at each federal water project that is applicable to a Federal Power Marketing Administration; and (2) consult with USGS, NOAA, the regional integrated sciences and assessments program established by the Administrator of NOAA, and each appropriate state water resource agency, to ensure that the Secretary has access to the best available scientific information regarding the impacts of global climate change on water resources that are used to produce hydroelectric power. Authorizes appropriations for FY2009-FY2023.

(Sec. 7) Directs the Secretary to establish and lead a climate change and water intragovernmental panel to: (1) review the current scientific understanding of each impact of climate change on the quantity and quality of U.S. water resources; and (2) develop any strategy that the panel deems necessary to improve observational capabilities, expand data acquisition, or take other actions to increase the reliability and accuracy of modeling and prediction systems to benefit water managers and to increase the understanding of the impacts of climate change on aquatic ecosystems.

Requires the panel to consult with state water resource agencies, the National Advisory Committee on Water Information, drinking water utilities, water research organizations, and relevant water user, environmental, and other nongovernmental organizations to: (1) 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 necessary to improve the understanding of the federal government and the states regarding each impact of climate change on water resources; (2) identify data gaps in current water monitoring networks; (3) establish data management and communication protocols and standards; (4) consider options for the establishment of a data portal to enhance access to water resource data relating to each nationally significant watershed and aquifer in the United States; (5) expand and integrate each panel initiative with any existing interagency initiative; (6) facilitate the development of hydrologic and other models to integrate data that reflects groundwater and surface water interactions; (7) apply such models to water resource management problems identified by the panel, including the need to maintain or improve ecological resiliency at watershed and aquifer system scales; and (8) facilitate the development of mechanisms to effectively combine global and regional climate models with hydrologic and ecological models to produce water resource information to assist water managers in the development of adaptation strategies that can be incorporated into long-term water management and flood-hazard mitigation decisions.

Authorizes the Secretary to provide grants or enter into contracts to carry out demonstration, research, or methodology development projects to assist in the implementation of the strategy developed by the panel. Limits the federal share of

the cost of any such project to \$1 million. Requires such entity to report the results to the Secretary. Authorizes appropriations for FY2009-FY2013.

(Sec. 8) Directs the Secretary to proceed with implementation of the national streamflow information program, as reviewed by the National Research Council in 2004. Requires the Secretary to: (1) measure streamflow and related environmental variables in nationally significant watersheds in a reliable and continuous manner, to develop a comprehensive source of information on which public and private decisions relating to the management of water resources may be based; (2) provide for a better understanding of hydrologic extremes through the conduct of intensive data collection activities during and following hydrologic extremes; (3) establish a base network that provides resources necessary for the monitoring of long-term changes in streamflow and the conduct of assessments to determine the extent to which each long-term change is related to climate change; (4) integrate the national streamflow information program with data collection activities of federal agencies and appropriate state water resource agencies to enhance the comprehensive understanding of water availability, improve flood-hazard assessments, identify any data gap regarding water resources, and improve hydrologic forecasting; and (5) incorporate principles of adaptive management in the conduct of periodic reviews of information collected under the program to assess whether the program objectives are being adequately addressed.

Directs the Secretary to: (1) improve methodologies relating to the analysis and delivery of data; and (2) investigate, develop, and implement new methodologies and technologies to estimate or measure streamflow in a more cost-efficient manner.

Requires the Secretary, within 10 years, to: (1) increase the number of streamgages funded by the program to not less than 4,700 sites; and (2) ensure all streamgages are flood-hardened and equipped with water-quality sensors and modernized telemetry. Requires each site to conform with the program plan as reviewed by the National Research Council. Sets the federal share of the cost of carrying out the national streamgaging network at 100%. Authorizes appropriations: (1) necessary to operate the program for FY2009-FY2023; and (2) to carry out network enhancements for each of FY2009-FY2019.

Directs the Secretary to develop a systematic groundwater monitoring program for each major aquifer system in the United States. Requires the Secretary: (1) to establish appropriate criteria for monitoring wells to ensure the acquisition of long-term, high-quality data sets, including real-time instrumentation and reporting; (2) in coordination with the Advisory Committee and state and local water resource agencies, to assess the current scope of groundwater monitoring based on the access availability and capability of each existing monitoring well and to develop and carry out a monitoring plan that maximizes coverage for each major aquifer system in the United States; and (3) prior to initiating any specific monitoring activities within a state, to consult and coordinate with the state water resource agency with jurisdiction over the aquifer and comply with all applicable state laws.

Directs the Secretary: (1) to provide data necessary for the improvement of understanding regarding surface water and groundwater interactions; (2) by expanding the network of monitoring wells to reach each climate division, to support the groundwater climate response network to improve the understanding of the effects of climate change on groundwater recharge and availability; and (3) to support the objectives of the assessment program. Sets the federal share of the cost of carrying out the monitoring program at 100%. Directs the Secretary to give priority to those activities for which a state or local government agrees to provide a substantial share of the cost of establishing or operating a measuring device to carry out a monitoring activity. Authorizes appropriations for FY2009-FY2023.

Directs the Secretary to study and report to Congress on available data relating to significant U.S. brackish groundwater

resources. Authorizes appropriations for FY2009-FY2011.

Authorizes the Secretary to provide grants to entities with expertise in water resource data acquisition and reporting to: (1) investigate, develop, and implement new methodologies and technologies to estimate or measure water resources data in a cost-efficient manner; and (2) improve methodologies relating to the analysis and delivery of data. Directs the Secretary to give priority to entities that propose the development of new methods and technologies for: (1) predicting and measuring streamflows; (2) estimating changes in the storage of groundwater; (3) improving data standards and methods of analysis; (4) measuring precipitation and potential evapotranspiration; and (5) water withdrawals, return flows, and consumptive use. Directs the Secretary to encourage partnerships among federal agencies, academic institutions, and private entities. Authorizes appropriations for FY2009-FY2019.

(Sec. 9) Directs the Secretary, in coordination with the Advisory Committee and state and local water resource agencies, to establish a national water availability and use assessment program to: (1) provide a more accurate assessment of the status of U.S. water resources; (2) assist in the determination of the quantity of water available for beneficial uses; (3) assist in the determination of the quality of U.S. water resources; (4) identify long-term trends in water availability; (5) use each long-term trend to provide a more accurate assessment of the change in the availability of water in the United States; and (6) develop the basis for an improved ability to forecast the availability of water for future economic, energy production, and environmental uses.

Requires the Secretary to conduct an ongoing assessment of: (1) water use in hydrologic accounting units and major aquifer systems in the United States; and (2) water availability, by developing and evaluating nationally consistent indicators that reflect each status and trend relating to the availability of U.S. water resources, maintaining a national database of water availability data that meets specified requirements, and developing and applying predictive modeling tools that integrate groundwater, surface water, and ecological systems.

Authorizes the Secretary to provide grants to state water resource agencies to assist them in: (1) developing water use and availability datasets that are integrated with datasets developed or maintained by the Secretary; or (2) integrating any water use or water availability dataset of the state water resource agency into each appropriate dataset developed or maintained by the Secretary.

Sets forth: (1) grant criteria and maximum amounts; and (2) reporting requirements. Authorizes appropriations for FY2009-FY2023, with appropriations through FY2013 for the grant program.

(Sec. 10) Authorizes the Secretary to enter into contracts, grants, or cooperative agreements, for periods not to exceed five years, to carry out research within the Bureau of Reclamation.

(Sec. 11) Provides that nothing in this Act: (1) supersedes or limits any existing authority provided, or responsibility conferred, by any legal provision; and (2) preempts state water law or any interstate compact governing water. Directs the Secretary to comply with applicable state water laws in carrying out this Act.

Actions Timeline

- **Sep 16, 2008:** Committee on Energy and Natural Resources. Reported by Senator Bingaman with an amendment in the nature of a substitute. Without written report.
- **Sep 16, 2008:** Placed on Senate Legislative Calendar under General Orders. Calendar No. 979.
- **Sep 11, 2008:** Committee on Energy and Natural Resources. Ordered to be reported with an amendment in the nature of a substitute favorably.
- **Dec 11, 2007:** Committee on Energy and Natural Resources. Hearings held. Hearings printed: S.Hrg. 110-312.
- **Oct 4, 2007:** Introduced in Senate
- **Oct 4, 2007:** Sponsor introductory remarks on measure. (CR S12781-12782)
- **Oct 4, 2007:** Read twice and referred to the Committee on Energy and Natural Resources. (text of measure as introduced: CR S12782-12786)