

FY 2010 Energy and Water Development Subcommittee Appropriations Bill

REQUEST FORM

Member: Jeff Bingaman

Project Name: Jemez Canyon Dam, NM

Project Recipient Name, Phone Number, Address: ACOE Albuquerque District, 4101 Jefferson Plaza NE, 87109

Project Location (if different from above): Sandoval County

Project Purpose: The project is located in Sandoval County, New Mexico, on the Jemez River about 2 miles upstream of the confluence of the Jemez River and the Rio Grande, about 5 miles northwest of Bernalillo, New Mexico. The project consists of an earth fill dam 861 feet long with a maximum height of 149.6 feet above streambed, an off/channel uncontrolled saddle spillway 428 feet wide and a 13-foot diameter gated outlet in the left abutment. The dam controls flood waters from a 1,034 square mile drainage area. Project has been operational since 1953. Funding for on-going Endangered Species Act Biological Opinion (BiOp) related work for the Jemez Sediment Mobilization and Pool Mitigation studies has been provided through FY08. No funding was provided in FY09 to continue BiOp required work. Jemez Canyon Dam has an opportunity to provide significant water and sediment management benefits for the middle Rio Grande valley. Realizing this opportunity will require changes to operations. Such changes have occurred in the past and have impacted Santa Ana Pueblo resources and interests requiring mitigation. Impacts from future operational changes will also have to be resolved and closely coordinated with the Santa Ana Pueblo. The Pueblo's ancestral Tamaya village has drainage problems, attributable to Corps past construction of an encircling "ring levee" for high flood storage protection, that require repair. Routine Operation and Maintenance funding supports six Federal positions and could potentially generate another six private sector jobs. Full funding of the remaining activities has the potential to generate three private sector jobs.

Project Benefit to the Taxpayer: P.L. 80-858 Flood Control Act of 1948 and P.L. 81-516 Flood Control Act of 1950. The project provides flood damage reduction as one unit of the flood control plan for the Rio Grande and its Tributaries.

Agency: ACOE

Program Account Name and sub account if applicable: O&M

FY 2008 Funding Level (\$ in Thousands): \$4,173

FY 2009 Funding Level (\$ in Thousands): \$635

Member's FY 2010 Funding Request (\$ in Thousands): \$1,256

Type of Entity (Federal, State, or Local Government, University, Not-for-Profit, or Private Company): Federal Government

New Study or Construction Start (Y/N): N

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REQUEST FORM

Member: Jeff Bingaman

Project Name: Jicarilla Apache Municipal Water Supply

Project Recipient Name, Phone Number, Address: Jicarilla Apache Tribe, P.O. Box 507, 87528

Project Location (if different from above): Dulce, NM

Project Purpose: Funding will be used to continue to repair and replace the drinking water delivery and wastewater system on the Jicarilla Reservation. This project, authorized by P.L. 107-331, has received only limited funding in recent years. Nonetheless, because environmental compliance work is done and additional construction work is anticipated, the project could put additional funding to work quickly.

Project Benefit to the Taxpayer: To fulfill trust responsibility to Indian tribes and to provide safe drinking water to communities

Agency: BOR

Program Account Name and sub account if applicable: Water & Related Resources: Upper Colorado Region

FY 2008 Funding Level (\$ in Thousands): \$1,476

FY 2009 Funding Level (\$ in Thousands): \$3,000

Member's FY 2010 Funding Request (\$ in Thousands): \$3,000

Type of Entity (Federal, State, or Local Government, University, Not-for-Profit, or Private Company): Federal Government

New Study or Construction Start (Y/N): N

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REQUEST FORM

Member: Bingaman

Project Name : Land Transfer activities at Los Alamos National Laboratory

Project Recipient Name, Phone Number, Address: Los Alamos County, P.O. Box 30,
Los Alamos, NM 87544

Project Location (if different from above): Los Alamos County, NM

Project Purpose: The environmental cleanup of "land transfer parcels," which are then transferred from the Department of Energy ("DOE") to the county for beneficial reuse. The primary obstacle to DOE transferring land to the County is environmental contamination of the property which occurred during DOE's historic weapons activities. As such, the County specifically requests \$4 million in FY2010 for DOE land transfer environmental activities under DOE's Office of Environmental Management.

Project Benefit to the Taxpayer: Funding for environmental cleanup/land transfer activities is part of the federal government's responsibility to remediate pollution created by the federal government under the Manhattan Project. DOE is required by law to convey this land to the County. The cleanup activities permit the land to be transferred to the County, thereby allowing the County to create jobs through economic development.

Agency (examples: Army Corps of Engineers, Department of Energy, etc): DOE

Program Account Name and sub account if applicable: DOE-defense environmental cleanup

FY 2008 Funding Level (\$ in Thousands): n/a

FY 2009 Funding Level (\$ in Thousands): n/a

Member's FY 2010 Funding Request (\$ in Thousands): \$4,000

Type of Entity: Local Government, Los Alamos County

New Study or Construction Start (Y/N): Y

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REQUEST FORM

Member: Jeff Bingaman

Project Name: La Joya, NM, Sec. 14

Project Recipient Name, Phone Number, Address, email: Socorro County, NM, P.O. Box I, Socorro, NM 87801

Project Location (if different from above): La Joya, NM

Project Purpose: Socorro County, New Mexico, on behalf of the community of La Joya, has requested assistance in reducing the threat of losing a major section of the La Joya Acequia due to high flow events in the Los Alamos Arroyo near the community of La Joya in Socorro County, New Mexico. The project would reinforce the north and west banks of the Los Alamos Arroyo to protect the La Joya Acequia. Over 500 acres of farm land would be lost if this portion of the acequia was lost.

Project Benefit to the Taxpayer: Emergency Streambank Protection

Agency: Army Corps of Engineers

Program Account Name and sub account if applicable: CAP—Sec. 14

FY 2008 Funding Level (\$ in Thousands): zero

FY 2009 Funding Level (\$ in Thousands): 100

Member's FY 2010 Funding Request (\$ in Thousands): 100

Type of Entity: Local Government

New Study or Construction Start (Y/N): No

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REQUEST SHEET

MEMBER: Jeff Bingaman

Project Name: Las Cruces Dam Environmental Restoration (sec. 1135)

Project Recipient Name, Phone Number, Address: City of Las Cruces, 200 North Church Street, Las Cruces, NM 88004

Project Location: same

Project Purpose: This project is located in the reservoir pool area formed by the existing Las Cruces flood control dam constructed by the Corps of Engineers in the 1970's. Proposed improvements include restoration of riparian vegetation and native Chihuahuan desert vegetation, designated scenic overlooks, wildlife observation areas, trails with interpretive features, and a parking facility for visitors and users of the open space. The U.S. Army Corps of Engineers has conducted a preliminary restoration plan of the proposed project site and has determined it is a candidate for Corps participation through the Section 1135 Ecosystem Restoration Authority of the Water Resources Development Act.

Project Benefit to Taxpayer: Project modification to improve the environment

Agency: Army Corps of Engineers

Program Account Name and sub account if applicable ACOE – CAP Sec. 1135

FY 2008 Funding Level (\$ in Thousands): zero

FY 2009 Funding Level (\$ in Thousands): zero

Member's FY 2010 Funding Request (\$ in Thousands): 2,720

Type of Entity: Local Government

New Study or Construction Start: No

FY 2010 Energy and Water Development Subcommittee Appropriations Bill

REQUEST FORM

Member: Bingaman

Project Name: Microgrids and Renewable Energy and Technologies Research Initiative

Project Recipient Name, Phone Number, Address:

New Mexico State University

P.O. Box 30001

Las Cruces, NM 88003-8001

Project Location (if different from above):

Project Purpose: (three sentences or less)

The Initiative for Microgrids and Renewable Energy Technologies Research will address critical national energy issues of power production and transmission, with an emphasis on renewable and distributed technologies and electrical microgrids. Under the current regional electric grid structure, it is important to demonstrate how the grid can evolve and integrate distributed microgrids that will utilize such renewable and distributed resources to benefit New Mexico's and the nation's citizens while ensuring that such deployment yields a more reliable and stable power grid.

Project Benefit to the Taxpayer: (three sentence or less)

The project will demonstrate how smart grid technology can be used to integrate power from renewable systems and distributed sources into the existing electrical grid to yield a more reliable and stable power grid. The project will also address regulatory and economic issues in developing and deploying smart grid technologies.

Agency (examples: Army Corps of Engineers, Department of Energy, etc): DOE

Program Account Name and sub account if applicable: Electricity Delivery and Energy Reliability Program

FY 2008 Funding Level (\$ in Thousands):

FY 2009 Funding Level (\$ in Thousands): \$925,000

Member's FY 2010 Funding Request (\$ in Thousands): \$4,000,000

Type of Entity: New Mexico State University is a public state land-grant university

New Study or Construction Start (Y/N): N

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REQUEST FORM

Member: Jeff Bingaman

Project Name: Middle Rio Grande Endangered Species Collaborative Program, NM (MRGESCP)

Project Recipient Name, Phone Number, Address: ACOE Albuquerque District, 4101 Jefferson Plaza NE, 87109

Project Location (if different from above): Middle Río Grande Basin

Project Purpose: The purpose is to fulfill requirements set forth by the 2003 *Biological Opinion on the Bureau of Reclamation's (Reclamation) Water and River Maintenance Operations, Army Corps of Engineers' Flood Control Operations, and Non-Federal Actions* (2003 BiOp), or any related subsequent biological opinion and the Collaborative Program *Long Term Plan* by carrying out and funding the necessary planning studies, watershed surveys and assessments, or technical studies at 100 percent Federal expense. This program facilitates Corps compliance under Section 7 of the Endangered Species Act. Identified program goals listed in the Long Term Plan include alleviating jeopardy to the listed species in the Program area and developing adaptive management tools to support a sustainable Biological Opinion. Funding for this program has the potential to generate twenty-four private sector jobs as well as support three Federal positions.

Project Benefit to the Taxpayer: The MRGESCP is a multi-stakeholder partnership working to protect and improve the status of endangered species along the Middle Rio Grande (MRG) of New Mexico while simultaneously protecting existing and future regional water uses. Two species of particular concern are the Rio Grande silvery minnow and the southwestern willow flycatcher.

Agency: ACOE

Program Account Name and sub account if applicable: O&M

FY 2008 Funding Level (\$ in Thousands): \$0

FY 2009 Funding Level (\$ in Thousands): \$200

Member's FY 2010 Funding Request (\$ in Thousands): \$3,150

Type of Entity: Federal Government

New Study or Construction Start (Y/N): N

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REQUEST FORM

Member: Jeff Bingaman

Project Name: Middle Rio Grande Flood Protection, Bernalillo to Belen, NM

Project Recipient Name, Phone Number, Address: Middle Rio Grande Conservancy District, P.O. Box 581, Albuquerque, NM, 87102

Project Location (if different from above): same

Project Purpose: The authorized project is located along the Rio Grande between Bernalillo and Belen, New Mexico. The project consists of constructing 50 miles of levees to replace existing spoil bank levees. Creation of 75 acres of wetlands from borrow areas within the bosque, and the acquisition of 200 acres to satisfy fish and wildlife mitigation requirements. Major developed areas that will be protected include Corrales, Los Lunas, Bosque Farms, Belen, Mountainview and Isleta Pueblo. Construction of the Corrales Unit was completed in July 1997. A General Reevaluation Report for the remaining units is currently underway.

Project Benefit to the Taxpayer: Reducing the Risk of flood and storm damage

Agency: Army Corps of Engineers

Program Account Name and sub account if applicable: Construction

FY 2008 Funding Level (\$ in Thousands): 295

FY 2009 Funding Level (\$ in Thousands): 383

Member's FY 2010 Funding Request (\$ in Thousands): 800

Type of Entity: local government

New Study or Construction Start (Y/N): No

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REQUEST FORM

Member: Bingaman

Project Name: MILPA Solar Holdings

Project Recipient Name, Phone Number, Address: NEC Energy Resources, LLC, 53 South Main Street, Suite 310, Hanover, NH 03755

Project Location (if different from above): Lordsburg, NM

Project Purpose: To incorporate innovative designs into proven solar power technology to reduce the cost and improve the performance of solar power production; to explore novel designs and concepts for the integration of solar power with an existing gas-fired power peaking unit, reducing the incremental cost of renewable power and relieving intermittency and reliability concerns; to establish New Mexico, and particularly Hidalgo County, as one of the leading solar power locations in the U.S., strategically located to resolve capacity and renewable power demands in multiple energy markets, including New Mexico, California, and Texas.

Project Benefit to the Taxpayer: Local Residents: Over \$20 million in additional tax base, approximately 40 construction jobs, approximately 5 high-paying operational positions. Citizens of New Mexico: The project will advance the State's ambitious goal of generating 20% of its electricity from renewable resources by 2020. The project also will spur the further development of the State's vast solar resources and their competitive position with the region, creating the cornerstone of a multibillion dollar industry.

Agency (examples: Army Corps of Engineers, Department of Energy, etc): **DOE**

Program Account Name and sub account if applicable: Energy Efficiency and Renewable Energy (Solar Energy)

FY 2008 Funding Level (\$ in Thousands): N/A

FY 2009 Funding Level (\$ in Thousands): N/A

Member's FY 2010 Funding Request (\$ in Thousands): \$1.1 million

Type of Entity: Private Company

New Study or Construction Start (Y/N): Y

FY 2010 Energy and Water Development Subcommittee Appropriations Bill

REQUEST FORM

Member: _Senator Bingaman_____

Project Name: __National Academy of Science Carbon Sequestration Flux Rates Study

Project Recipient Name, Phone Number, Address: _National Academies Board on Earth Sciences and Resources, 500 5th St, NW, Washington, DC 20001

Project Location (if different from above): __As above_____

Project Purpose: _With the likelihood in the future of a carbon-constrained economy with vastly increased carbon emissions trading, plans to permanently sequester anthropogenic carbon dioxide must be based on the best available scientific information. At present, a range of scientific opinions have been advanced concerning sequestration and leakage (flux) rates for potential sequestration methods at and beneath the Earth's surface. An National Academy of Science committee will review existing scientific information and provide advice on:

- The ability of surface environments (forests, soils) to sequester carbon dioxide, and the carbon dioxide flux rates associated with the various environments and land management practices.
- The opportunities and challenges associated with geologic sequestration, including an assessment of the permanence of sequestration.
- The priority research that will be required to better characterize carbon dioxide flux rates in both surface and geologic sequestration situations.

Project Benefit to the Taxpayer: There has been public dissemination of frequently contradictory information on the subject, the committee's report will include a non-technical statement of its findings that would be suitable for wide public distribution. This study also will support ongoing efforts within the DOE and DOI in trying to determine if carbon sequestration is a viable option for offsets and credits within a carbon constrained legislative framework (cap and trade bill for emissions reduction).

Agency: DOE – Fossil Energy

Program Account Name and sub account if applicable (examples: ACOE – General Investigations, Construction, General, Operations and Maintenance; DOE-science, energy supply, weapons): DOE, FE R&D, Fuels and Power Systems, Carbon Sequestration

FY 2008 Funding Level (\$ in Thousands): 0

FY 2009 Funding Level (\$ in Thousands): 0

Member's FY 2010 Funding Request (\$ in Thousands): \$1,440 (\$1.44 million)

Type of Entity: National Academy of Science

New Study or Construction Start (Y/N): Y

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REQUEST FORM

Member: Senator Bingaman

Project Name: National Academy of Sciences Study of Laboratory-Scale Pulsed Power Science and Technology Programs

Project Recipient Name, Phone Number, Address: Department of Energy. 1000 Independence Ave., SW, Washington, DC 20585

Project Location (if different from above): National Academies of Science, Washington, D.C. 20001

Project Purpose: In order to advance high density physics research and development it is important that pulsed power research receive greater recognition as a national asset. The timely completion of a report, and recommendations based on it, by the National Academy or similar independent entity would significantly aid in the determination of what emphasis and priority this research requires.

Project Benefit to the Taxpayer: Pulsed power is a technology that efficiently compresses electrical energy in space and time in order to create intense particle beams or extreme states of matter at very high temperatures and densities. The technology is applied to a variety of weapon assessment and certification issues as well as to the study of thermonuclear fusion. There is also high interest in the use of pulsed power technology from researchers in basic science fields such as high energy density science, condensed matter physics, planetary science, and laboratory astrophysics.

Agency (examples: Army Corps of Engineers, Department of Energy, etc): DOE

Program Account Name and sub account if applicable: DOE – Atomic Energy Defense Activities – NNSA – Weapons Activities

FY 2008 Funding Level (\$ in Thousands): n/a

FY 2009 Funding Level (\$ in Thousands): n/a

Member's FY 2010 Funding Request (\$ in Thousands): \$500

Type of Entity: Non Profit

New Study or Construction Start (Y/N): Y

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REQUEST FORM

Member: Senator Bingaman

Project Name: National Quantitative Risk Analysis Center

Project Recipient Name, Phone Number, Address: Sandia National Laboratories, 1515 Eubank Blvd. SE, Albuquerque, NM 87123 and University of Nevada, Las Vegas.

Project Location (if different from above): Not determined.

Project Purpose: (three sentences or less): Quantitative risk, safety, and performance analyses of complex systems with large subsystem uncertainties are central to many of the issues facing the nation's policy and regulatory decision-makers (e.g. carbon sequestration facilities, waste repositories, energy security, etc). This request is to support funding of a National Quantitative Risk Analysis Center as a means to retain US leadership in the advancement of international standards and methods for quantitative risk analysis, and to provide risk, safety and performance analysis services to a range of end-user agencies and programs, including potential host communities or oversight groups. The National Quantitative Risk Analysis Center would foster innovation in risk assessment methods and standards by providing a research and development environment combining the US technical expert community with high-performance modeling and simulation computational resources, and thereby maintain US technical leadership and provide services of interest to the national and international community.

Project Benefit to the Taxpayer: (three sentences or less): US Taxpayer benefits are derived from: a) this effort's collaboration between a university and Sandia National Laboratories that will enable knowledge transfer (university degree program) and technology transfer (sharing of validated software and infrastructure with trained private sector practitioners), b) the creation of an applied science organization that will provide centralized independent risk, safety or performance assessments of complex systems on behalf of federal, state and local government or industry customers, including independent review and consultation for those host communities of potential facilities involving complex risk, safety and performance factors, and, c) the maintaining of US leadership in quantitative risk assessment that is vital to the US desire to establish the standards by which the international community will implement facilities (e.g. reprocessing, sequestration, repositories) involving complex and uncertain risk, safety and performance factors.

Agency (examples: Army Corps of Engineers, Department of Energy, etc): DOE

Program Account Name and sub account if applicable: (examples: ACOE – General

Investigations, Construction, General, Operations and Maintenance; DOE-science, energy supply, weapons): DOE – Nuclear Energy

FY 2008 Funding Level (\$ in Thousands): n/a

FY 2009 Funding Level (\$ in Thousands): n/a

Member's FY 2010 Funding Request (\$ in Thousands): \$30,000

Type of Entity (Federal, State, or Local Government, University, Not-for-Profit, or Private Company): Department of Energy National Security Laboratory and University partner

New Study or Construction Start (Y/N): Y