

**Fiscal Year 2010
Energy and Water Development**

Name of Project	Project Funding Recipient	Purpose and Amount Requested	Location	Interest of the Taxpayer
Aberdeen Port Railroad Improvements	US Army Corps of Engineers	The purpose is to provide \$4,400,000 to construct a three mile rail spur to link the Aberdeen Port to the Kansas City Southern Railroad.	Aberdeen, MS	The proposed connector will increase economic opportunities by linking the Aberdeen Port and railroad.
Alternative Energy Sources Project	Forrest County	The purpose is to provide \$8,000,000 to remove a large publicly owned building complex from the commercial electric power grid by utilizing alternative energy sources.	Hattiesburg, MS	The proposed funding would allow for implementation and reduce and/or eliminate energy costs and carbon emissions.
Backwater Pumps	US Army Corps of Engineers	The purpose is to provide \$5,000,000 for Backwater Pump construction activities.	Vicksburg, MS	The Yazoo Backwater Pump project will improve flood control capabilities in the South Delta Region.
Big Sunflower River Watershed	US Army Corps of Engineers	The purpose is to provide \$150,000 to initiate a reconnaissance study.	Coahoma, Bolivar and Sunflower Counties, MS	The study is needed to identify proper flood control activities.
Chancery Building Energy Efficiency Improvements	Monroe County	The purpose is to provide \$1,100,000 for extensive roof improvements as well as other building improvements that will improve energy efficiency.	Aberdeen, MS	The building houses many essential governmental activities and is vital to local government operations.
Characterization and Cleanup of the U. S. Nuclear Legacy	Mississippi State University	The purpose is to provide \$5,000,000 to continue an initiative which allows Mississippi State University to partner with the U.S. Department of Energy for the purpose of properly cleaning weapons facilities.	Starkville, MS	It is critical that the U.S. Department of Energy follow specific procedures when cleaning or eliminating current weapons facilities.

City of Amory / Water Treatment Plant Lagoon Project	US Army Corps of Engineers	The purpose is to provide \$1,900,000 to construct a large sludge holding pond.	Amory, MS	The funding will address a lack of capacity for water treatment activities and environmental concerns.
City of Corinth	US Army Corps of Engineers	The purpose is to provide \$7,500,000 for construction of a surface water system and intake structure located on the Tenn-Tom waterway.	Corinth, MS	This funding will allow Northeast Mississippi to improve the local water system.
City of Jackson	US Army Corps of Engineers	The purpose is to provide \$6,000,000 for the construction of a 48-inch water transmission main from the recently upgraded J. H. Fewell Water Treatment Plant to the downtown Jackson area.	Jackson, MS	The funding provided would help maintain a viable water and wastewater system.
Claiborne County, MS	US Army Corps of Engineers	The purpose is to provide \$112,000 to perform surveys and maintenance dredging.	Claiborne County, MS	The funding proposed would ensure proper project depth to enable transportation of goods.
Clean Energy Coalition	University of Mississippi	The purpose is to provide \$5,000,000 to tune support for a consortium of researchers to develop deployable strategies and technologies that will reduce consumption and/or mitigate the environmental impact of energy resources.	Oxford, MS	The goal for researchers is to create a consortium that is focused on innovative solutions to specific, highly focused, and key areas of energy use and production.
Coastal Zone Mapping and Imaging LIDAR (CZMI)	Optech International	The purpose is to provide \$5,000,000 to continue the collection of data to detail topography and bathymetry across the coastal zone.	Kiln, MS	This funding would support the current USACE National Coastal Mapping Program (NCMP) which collects data to support regional sediment management and construction.
Coldwater River Basin Below Arkabutla Lake, MS	US Army Corps of Engineers	The purpose is to provide \$250,000 to conduct a feasibility study to identify proper actions for the purpose of flood control.	Tunica, DeSoto, Panola, Coahoma and Quitman Counties, MS	This project will allow for implementation of flood control activities.

Collection and Study of Basic Data, AR, IL, KY, LA, MS, MO and TN	US Army Corps of Engineers	The purpose is to provide \$1,300,000 to collect essential data used in planning and design of authorized flood control projects and complete LIDAR mapping.	MS/AR/LA	The data collected is critical to continuing flood control activities.
Cooling Heating and Power (Micro-CHP) and Bio-Fuel Application Center	Mississippi State University	The purpose is to provide \$2,000,000 to research technology for increased energy efficiency through the use of distributed electric and thermal energy delivery systems at or near end-user sites.	Starkville, MS	The funding provided would support regional cooling, heating, and power centers.
DeSoto County Regional Wastewater Program	DeSoto County Regional Utility Authority	The purpose is to provide \$8,000,000 for wastewater infrastructure to meet increased demand resulting from population expansion.	DeSoto County, MS	The funding provided reduces the impact of pollutants and provides for economic development opportunities.
Electrical Infrastructure Improvements Project	City of Amory	The purpose is to provide \$4,200,000 to improve electricity capabilities and meet increased demand resulting from economic development.	Amory, MS	This funding would allow the City of Amory to meet increased demand and continue to provide an adequate electrical infrastructure.
ERDC Research and Development	US Army Corps of Engineers	The purpose is to provide \$35,000,000 to maintain USACE research activities.	Vicksburg, MS	The funding provided operates R&D activities and is critical for the Corps of Engineers to ensure that projects are safe, environmentally sustainable, and cost effective.
Fundamental Methods and Models for Scientific Computing for Nuclear Energy, Security, and Safety	Mississippi State University	The purpose is to provide \$10,000,000 to pursue multiscale modeling, validation and verification methodologies, multiscale experiments, technology transfer, and enabling technologies to advance our country's large scale computing capabilities.	Starkville, MS	This investment will allow for the development of scientific methods to ensure that new power plants are both safe and efficient.

Green Mississippi Center	Jackson State University	The purpose is to provide \$10,000,000 for the construction of a state-of-the-art facility on the JSU campus that will serve as a clearinghouse for green construction techniques and best practice information statewide.	Jackson, MS	In keeping with stated Federal objectives, the GMC will utilize funding (provided over two years) to facilitate a region-wide response to President Obama's call for innovation and collaboration as the nation works to meet job creation and energy-efficiency goals. This initiative will provide an incubator for small businesses in the region and a clearinghouse for green construction techniques and best practice information statewide.
Greenville Harbor, MS	US Army Corps of Engineers	The purpose is to provide \$700,000 to continue channel maintenance.	Washington County, MS	The funding provided would allow for efficient harbor operations and vessel flow.
Gulf Intracoastal Water Way	US Army Corps of Engineers	The purpose is to provide \$4,570,000 to continue operations and maintenance.	Mobile, AL	The funding provided would allow for efficient operations and vessel flow.
Gulf of Mexico Hydrates Research Consortium	University of Mississippi	The purpose is to provide \$1,200,000 to continue the Gulf of Mexico Hydrates Research Consortium's efforts to develop and deploy an integrated multi-sensor station on the seafloor in the Gulf of Mexico to provide continuous monitoring of gas hydrates and the gas hydrate stability zone via return of data in near-to-real time.	Oxford, MS	The monitoring station is designed to identify buried hydrates, determine what triggers their catastrophic failure and provide information leading to the safe, responsible recovery of hydrates and associated gas.
Gulfport Harbor	US Army Corps of Engineers	The purpose is to provide \$5,000,000 to continue channel maintenance.	Gulfport, MS	The funding provided would allow for efficient harbor operations and vessel flow.
Gulfport GRR Study	US Army Corps of Engineers	The purpose is to provide \$600,000 to study economic benefits of deepening and widening the Gulfport channel.	Mobile, AL	The study would determine the feasibility of deepening and widening the Gulfport channel to increase economic opportunities.

Hamilton Water District Improvements Project	US Army Corps of Engineers	The purpose is to provide \$2,300,000 to construct a water supply facility.	Aberdeen, MS	This funding is needed to meet increased water supply demand resulting from newly created economic activity.
High Speed Wind Turbine Noise Model with Suppression	University of Mississippi	The purpose is to provide \$2,300,000 to investigate both leading and trailing edge blade geometry modifications to suppress noise.	Oxford, MS	The funding proposed would identify methods for controlling noise from wind turbines for the purpose of increasing public acceptance of wind turbine technology.
Hinds County Title I Building Renovation	Hinds County Board of Supervisors	The purpose is to provide \$7,500,000 for the development and implementation of an energy efficiency plan for governmental buildings located in Hinds County.	Hinds County, MS	The funding requested would allow Hinds County to identify and implement energy efficiency strategies.
Innovative STEM Education - Planning	University of Mississippi	The purpose is to provide \$1,000,000 to implement a cohesive approach to recruiting students to careers in science and science education.	Oxford, MS	The funding provided would allow the University to expose virtually every undergraduate student to the full range of science related disciplines and increase the number of students seeking science based careers.
Jackson County	US Army Corps of Engineers	The purpose is to provide \$3,500,000 to implement sewer service improvements to meet constraints resulting from increased usage.	Jackson County, MS	The funding provided would allow Jackson County to improve current water and sewer systems for its industrial and residential users.
Lithium Ion Battery for Telecommunications and Data Center Backup	Ultralife Corporation	The purpose is to provide \$4,500,000 to build a lithium ion battery for telecom backup that conforms to the Katrina panel's recommendations and increase the adoption rate of alternative and renewable energy sources.	West Point, MS / New York, NY	The funding would allow for the continued development of battery technologies which lead to greater energy efficiencies.

McKinney Bayou, Tunica County, MS	US Army Corps of Engineers	The purpose is to provide \$250,000 to meet design and implementation requirements.	Tunica County, MS	The funding provided would improve current flood control activities.
Minority Science Initiative: Department of Energy	Thurgood Marshall College Fund (TMCf)	The purpose is to provide \$5,000,000 to assist the Department of Energy in its efforts to recruit minority students who will pursue careers in energy sciences.	District of Columbia	TMCf seeks a partnership with the Department of Energy focused on increasing the number of minority scholars pursuing energy science careers.
Mississippi Channel Improvement Project, AR, LA, MS	US Army Corps of Engineers	The purpose is to provide \$25,000,000 to continue work at four revetment locations and fully fund two dikes.	Mississippi River AR/LA/MS	Stabilization and protection of the navigation channel and adjacent riverbanks are critical to flood risk reduction for public safety and waterborne commerce.
Mississippi Environmental Infrastructure	US Army Corps of Engineers	The purpose is to provide \$20,000,000 to address current Corps of Engineers Environmental Infrastructure concerns.	Vicksburg, MS	The proposed funding will protect the water supply and address water quality concerns.
Mississippi River Levees, AR, MS and LA	US Army Corps of Engineers	The purpose is to provide \$34,339,000 to continue routine operation and maintenance activities.	Multi - State	The funding provided would continue current flood control activities.
Mouth of Yazoo River, MS	US Army Corps of Engineers	The purpose is to provide \$112,000 to perform surveys and maintenance dredging.	Warren County, MS	The funding proposed would ensure efficient operations and maintenance.

Nano Reflectarray Antennas for Solar Power Concentrations	University of Mississippi	The purpose is to provide \$2,500,000 to develop next-generation solar power concentrating technologies. This research project will integrate the advanced reflectarray theory with cutting-edge nanotechnology for concentrating solar power (CSP) systems and applications.	Oxford, MS	The success of this work will effectively reduce the solar energy cost and thus increase our energy security and improve air quality.
Nanostructured Materials for Improved Photovoltaics	University of Southern Mississippi	The purpose is to provide \$1,000,000 to develop photovoltaic devices, which provide renewable energy through the capture of sunlight and conversion to electricity.	Hattiesburg, MS	The funding proposed would allow for commercialization of technology and advancing renewable energy.
Pascagoula Harbor Project	Pascagoula Harbor	The purpose is to provide \$10,900,000 to continue channel maintenance.	Pascagoula, MS	The funding provided would allow for efficient harbor operations and vessel flow.
Port of Itawamba Tri-Modal Improvements	US Army Corps of Engineers	The purpose is to provide \$824,000 for a container on barge facility.	Fulton, MS	The funding will begin a three phase port improvement plan.
Production of High Energy Density, "Green" Fuel for Fuel Cells	Ardica Technologies	The purpose is to provide \$3,500,000 to develop commercial scale technology.	Starkville, MS / San Francisco, CA	The funding will continue the development of fuel cell technologies.
Rankin-Hinds Pearl River Flood and Drainage Control District	US Army Corps of Engineers	The purpose is to provide \$750,000 to complete the decision document and other related preconstruction activities.	Hinds and Rankin Counties, MS	The funding provided would finalize plans to improve flood control capabilities.
Revolutionary Fuel-Efficient Rotary Diesel Engine	Advanced Technologies, Inc.	The purpose is to provide \$1,650,000 to validate the design features and fuel efficiency of this novel rotary design diesel engine.	Starkville, MS	The funding provided would continue the development of rotary diesel engine technology focused on improving performance and fuel efficiency.

Rosedale Harbor, MS	US Army Corps of Engineers	The purpose is to provide \$600,000 to continue operations and maintenance.	Bolivar County, MS	The funding provided would allow for efficient harbor operations and vessel flow.
Rural Energy Visibility System	Public Service Commission of Yazoo City	The purpose is to provide \$600,000 to implement a system of automatic meter readers to provide real time data for the purpose of increasing energy efficiency.	Yazoo City, MS	The funding would allow for implementation of cutting edge technology and improved energy efficiency.
Southern Regional Center for Lightweight Innovative Designs	Mississippi State University	The purpose is provide \$8,500,000 for the Southern Regional Center for Lightweight Innovative Designs (SRCLID) to focus research on lightweighting vehicles to reduce emissions and posture the US for less reliance on foreign oil.	Starkville, MS	The funding provided will continue the development of multiscale physics-based material models that lead to increased automobile fuel efficiency.
Strategic Biomass Initiative	Mississippi Technology Alliance	The purpose is to provide \$500,000 to continue MTA's Strategic Biomass Initiative which evaluates the renewable energy production system.	Ridgeland, MS	The funding provided allows for continued study of renewable energy production to improve profitability and identify best management practices.
Supercomputing for the future: Enabling the next generation of problem-solvers in Mississippi	University of Mississippi	The purpose is to provide \$1,400,000 to establish the Mississippi Center for Supercomputing Research. The proposed facility would increase opportunities in computational problem-solving for students, teachers and researchers.	Oxford, MS	The project is strongly aligned with the Mississippi Science and Technology Action Plan for economic development as well as with the America Competes Act. This funding would help meet the demand for advanced computer training and grow a highly skilled workforce.
Sustainable Energy Research Center	Mississippi State University	The purpose is to provide \$11,000,000 to develop new engineering and scientific knowledge and to serve as a catalyst to create renewable transportation fuel industries.	Starkville, MS	The funding provided would continue critical research focusing on commercializing renewable fuels.

Tennessee-Tombigbee Waterway	US Army Corps of Engineers	The purpose is to provide \$35,400,000 to continue current operations and maintenance.	Mobile, AL	The funding will allow for continued operations and maintenance of the Tennessee-Tombigbee river.
Tennessee-Tombigbee Waterway	US Army Corps of Engineers	The purpose is to provide \$100,000 to conduct a study to identify soil erosion control sites.	Mobile, AL	The funding provided would allow the US Army Corps of Engineers to address soil erosion concerns along the Tennessee-Tombigbee Waterway.
Vicksburg Harbor, MS	US Army Corps of Engineers	The purpose is to provide \$537,000 to continue channel maintenance.	Warren County, MS	The funding provided would allow for efficient harbor operations and vessel flow.
West Madison Utility, Flora, MS	US Army Corps of Engineers	The purpose is to provide \$340,000 to implement local flood control activities.	Madison County, MS	This funding would allow the Corps of Engineers to provide emergency streambank protection.
West Pearl River Navigation, LA and MS	US Army Corps of Engineers	The purpose is to provide \$100,000 to conduct a reconnaissance study.	Hancock, Pearl River Co., MS and Washington and St. Tammany Parishes, LA	The purpose is to conduct a study to determine proper actions to address the current deteriorating flood control structure.
Yazoo Backwater Pump	US Army Corps of Engineers	The purpose is to provide \$5,000,000 to fund construction of the Yazoo Pumps.	South Mississippi Delta Region	The proposed project will protect the lower Delta region from storm flood waters.
Yazoo Basin Flood Control, MS	US Army Corps of Engineers	The purpose is to provide \$81,000,000 to continue Corps of Engineers flood control projects throughout the Yazoo Basin.	Multi County, MS	The funding provided would continue Corps of Engineers flood control activities including operations and maintenance, construction and studies.