

**FY 2010 Requests**  
**Senate Appropriations Committee**  
**Subcommittee on Energy and Water Development**

**Ala Wai Canal, Oahu, Hawaii**

**\$408,000**

**US Army Corps of Engineers – Honolulu District**

Funding will be used by the Army Corps of Engineers to continue the feasibility phase studies including the alternatives formulation and preparation for the External Peer Review. The Ala Wai watershed encompasses more than 16 square miles and the Ala Wai Canal as part of that watershed is a two-mile long manmade waterway constructed during the 1920's to create and protect the Waikiki area on the island of Oahu. Accumulation of silt and debris from the Manoa, Palolo, and Makiki streams has significantly reduced the carrying capacity of the Canal. Severe storms over the years have resulted in the Canal overflowing and flooding the Waikiki district. Most recently, the October 30, 2004, storm in Manoa was estimated to have caused over \$100 million in damages to property and irreplaceable documents in the University of Hawaii's library and resulted in the community and agencies seeking to expand the Ala Wai Canal project to include flood mitigation measures in the upper stream areas. It is estimated that approximately 2,200 properties would be affected by a 100-year storm event in the Ala Wai watershed. Funding provided would assist in mitigating and reducing flooding threats to property and roads, while ensuring public safety and enhancing human and environmental health.

**Alternative energy project for Maui transportation center; Kahului, Maui**

**Maui Economic Opportunity; Kahului, Maui**

**\$500,000**

**Energy Efficiency and Renewable Energy, Department of Energy**

Funding would support the incorporation of an alternative energy system, including both solar photovoltaic and wind, at a new transportation center. The project will reduce operating costs for the center, thereby permitting increased transportation services for low-income and elderly populations.

**Anahola Watershed Area, Kauai, Hawaii**

**\$200,000**

**US Army Corps of Engineers – Honolulu District**

Funding will be used by the Army Corps of Engineers to initiate federally funded investigations to determine whether federal interest exists in a cost shared feasibility study to implement watershed improvements. Major flooding in the Anahola area on the island of Kauai has highlighted the lack of any flood control infrastructure, and the need for flood mitigation. Due to the lack of a functioning agricultural irrigation system, water that would have otherwise been diverted into the irrigation system is seen now as increased storm water runoff. Continued flooding occurred in February 2008, further highlighted the need for flood mitigation. Additionally, the sediment and pollution runoff from these flood events continue to cause major degradation of Anahola Stream and nearshore marine ecosystems that are vital to the Island's economy and way of life. Further, the sponsor the County of Kauai, fully endorses and supports this multipurpose watershed project.

**Development of high yield feedstock and biomass conversion; Honolulu, Hawaii  
Hawaii Natural Energy Institute, University of Hawaii at Manoa; Honolulu, Hawaii  
\$6 million**

Funding would be used to develop high yield tropical feedstocks, optimize biomass conversion of feedstocks into consumable energy, and demonstrate the integration of bioenergy systems for Hawaii. The long-term goal of the project is to increase Hawaii's energy self-sufficiency. An extended bioenergy industry will provide new opportunities for Hawaii's agricultural sector, support rural employment, and develop green industries that are compatible with goals of environmental preservation.

**Energy Efficiency and Conservation Block Grant Program  
At least \$3,200,000,000**

**Department of Energy, Electricity Efficiency and Renewable Energy**

I joined Senators Menendez, Sanders, and Lugar, as well as a number of other Senate colleagues, in writing to Subcommittee Chairman Dorgan and Ranking Member Bennett to request inclusion of at least \$3.2 billion for the Energy Efficiency and Conservation Block Grant (EECBG) Program, authorized in the Energy Independence and Security Act of 2007. This partnership program will help local officials expand on the success of local initiatives to increase energy efficiency, promote energy conservation, and expand renewable energy supplies. The program creates jobs at a time when so many are struggling economically, reduces consumers' energy bills, and can help curb greenhouse gas emissions into the atmosphere.

**Global Seismographic Network (GSN) equipment renewal; sites worldwide  
Incorporated Research Institutions for Seismology; Washington, DC  
\$500,000**

**Nonproliferation and Verification Research and Development, National Nuclear Security Administration, Department of Energy**

The Global Seismographic Network (GSN), managed by the Incorporated Research Institutions for Seismology (IRIS), is the core national system for seismic monitoring, research, and educational training. The entire network of 130 core stations transmits data in real-time to the US, where the data are openly available to all government, public, and private researchers. The GSN is a multi-use, multi-agency scientific resource essential to the achievement of many missions. It serves as key, first-warning element in tsunami warning systems, provides core data for global earthquake monitoring and prompt response to natural disasters, is the cornerstone scientific facility for the study of earthquakes and the Earth's interior; provides data to support the Air Force's operational mission to monitor the world for foreign nuclear tests, and supplies the single largest contribution (46 sites) to the international monitoring system for the Comprehensive Nuclear Test Ban Treaty (CTBT). The GSN represents a \$100,000,000 taxpayer investment. However, GSN equipment (sensors, electronics, data acquisition) is now more than 15 years old, obsolete, and increasingly difficult to effectively maintain. It is essential to invest in new equipment in order to sustain and revitalize the GSN as a multi-use, multi-agency national resource.

### **Global Threat Reduction Initiative**

**MELE Associates; Rockville, Maryland**

**report language:** *“Of the total funds requested for the Global Threat Reduction Initiative, at least \$50 million should be used for Nuclear and Radiological Domestic Material Protection.”*

**National Nuclear Security Administration, U.S. Department of Energy NNSA**

The Nuclear and Radiological Domestic Material Protection subprogram supports the securing of domestic buildings containing high priority nuclear and radiological materials worldwide from theft and sabotage. These domestic sources present a more imminent danger to U.S. residents due to accidents or intentional sabotage.

### **Hawaii Energy Sustainability Program; Honolulu, Hawaii**

**University of Hawaii at Manoa; Honolulu, Hawaii**

**\$6 million**

Funding would support achievement of the goal to derive at least 70 percent of the Hawaii’s energy from renewable sources by 2030 and to validate technology and processes that will allow mainland grids to increase their use of intermittent renewable technologies. This support will (1) provide for the development of analyses and tools to identify optimal path(s) forward, (2) allow continued development of critical partnerships to bring emerging technologies to Hawaii, and (3) fund projects to validate key technologies and the ability to integrate these technologies into the energy mix. Funding would help to support the continued development of models and scenario analysis for evaluating high renewable penetration into the electricity grid; the characterization of benefits, costs, performance issues, environmental and societal issues, and impacts of various solution scenarios for each of the main islands; robust policy analysis to support legislative solutions to ensure a systematic and reliable transformation of Hawaii’s energy systems; technology assessment, including models and evaluation of resource requirements for crop production and conversion technologies; integrated systems evaluation, including characterization of benefits, costs, performance issues, and environmental and societal impacts of various energy systems; and validation of technology integration solutions through field demonstration with an emphasis on solutions benefitting Hawaii’s agricultural sector.

### **Kahului Harbor Modifications, Maui, Hawaii**

**\$200,000**

**US Army Corps of Engineers – Honolulu District**

Funding will be used by the Army Corps of Engineers to initiate federally funded investigations to determine whether Federal interest exists in participating in a cost shared feasibility study for modifications to Kahului Harbor. Maui is faced with a critical situation due to the lack of sufficient harbor capacity to provide for the island’s needs. Kahului Harbor is the only commercial harbor servicing the island of Maui and because of its location, it is currently constrained in terms of berthing capacity and terminal space. However, a potential expansion area is available at the west coral stockpile area, which was created during the construction of the original harbor in 1931. This new area has the potential to support commercial vessels and associated breakwater improvements. Support of this project will address cargo transportation inefficiencies and decrease damage to vessels and port facilities currently plaguing the harbor’s operation.

**Kauai County Sustainable Energy Initiative; Kauai, Hawaii**  
**County of Kauai; Kauai, Hawaii**  
**\$500,000**

**Energy Efficiency and Renewable Energy, Department of Energy**

Funding would support the implementation of advanced energy efficiency and renewable energy technologies in Kauai County. The County of Kauai seeks to support the expanded use of advanced energy efficiency and renewable energy technologies on Kauai. With the funds requested, the County will support implementation of renewable energy and energy efficiency technologies at the Police/Civil Defense Agency/Prosecutors' Facility in Lihu'e, Kaua'i. This project seeks to implement cutting edge energy management systems coordinated with the installation of a renewable energy system and energy efficiency improvements, including energy efficient lighting, HVAC improvements, water use efficiency, and power quality improvements to lower electricity costs. A state-of-the-art energy management system would be used to optimize energy efficiency over time and provide a means to measure and verify performance standards, as well as control energy use. The \$500,000 in requested federal funds would be matched with \$100,000 of county funds or third party financing to cover the total costs of the energy efficiency improvements in addition to the total costs of a renewable energy system (photovoltaic or concentrated solar power system) at the location, which would be roof-mounted, ground mounted or mounted to existing parking lot structures.

**Laupahoehoe Harbor Modifications, Hawaii**  
**\$300,000**

**US Army Corps of Engineers – Honolulu District**

Funding will be used by the Army Corps of Engineers to conduct Preconstruction, Engineering, and Design (PED) activities including engineering analyses, plan development, and the initiation of plans and specifications. The original breakwater built by the Army Corps of Engineers to shelter the bay and boat ramp is not functioning effectively. Commercial and other boaters are unable to launch boats or seek refuge more than 60 percent of the time. Consequently, there are no nearby safe harbors for such users to launch boats or seek refuge. Similar launch facilities are located more than 60 miles away. The existing features do not satisfactorily provide protection during heavy waves and impede the use of emergency vessels from this area.

**Planning Assistance to States—State of Hawaii/Pacific Territories**  
**\$1,000,000**

**US Army Corps of Engineers – Honolulu District**

Funding will be used by the Army Corps of Engineers to meet the technical study needs of the State of Hawaii and Pacific Territories. The Planning Assistance to States program assist state and local governments in the preparing comprehensive plans for the development of water and related land resources. Demand for PAS studies in the Honolulu District's area of responsibility have greatly exceeded available federal funding resulting in significant delays in addressing technical water related issues in the islands. In order to more effectively manage the PAS program, the Honolulu District requires funding in proportion to the area of responsibility and additional flexibility in addressing customer needs.

### **Port Allen Harbor Modifications, Kauai, Hawaii**

**\$200,000**

#### **US Army Corps of Engineers – Honolulu District**

Funding will be used by the Army Corps of Engineers to initiate federally funded investigations to determine whether a Federal interest exists in participating in a cost shared feasibility study for modifications to Port Allen Harbor. Port Allen Harbor users have reported surge problems within the harbor which create hazardous navigation conditions as well as damage to piers, berthing facilities and moored vessels. Additionally, plans to upgrade the nearly 50-year old harbor to accommodate larger vessels to meet the demands of Kauai's growing economy will require modifications to its existing breakwaters in order to adequately protect expanded harbor facilities. This study will identify and evaluate alternatives for modifying navigational features at Port Allen Harbor to address these concerns. The project sponsor, the State of Hawaii, Department of Transportation and harbor users strongly support this project.

### **Renewable Electricity Research and Development Programs**

**\$838,500,000**

#### **Department of Energy, Electricity Efficiency and Renewable Energy**

I joined Senator Menendez, as well as a number of other Senate colleagues, in writing to Subcommittee Chairman Byron Dorgan and Ranking Member Robert Bennett in support of funding for renewable electricity research and development programs. Specifically, we urge inclusion of \$377 million for the Solar Energy Program and an additional \$10 million for solar heating and cooling within the Building Technologies Program; \$105 million for the Geothermal Technologies Program; \$100 million for the Hydropower Technologies Program; \$100 million for Ocean/Marine Renewable Technologies Program; \$170.5 million for the Wind Energy Technologies Program (including \$5.5 million for small wind turbines, \$38 million for cost reduction and reliability increase, and \$4 million for technical assistance for community wind projects); and \$16 million through the Office of Electricity Delivery and Energy Reliability. Research in these technologies is critical for lowering costs, improving efficiency, and surmounting the barriers they face to widespread deployment in the marketplace.

### **South Maui Watershed, Maui, Hawaii**

**\$300,000**

#### **US Army Corps of Engineers – Honolulu District**

Funding will be used by the Army Corps of Engineers to initiate federally funded investigations to determine whether Federal interest exists in a cost shared feasibility study to implement watershed improvements. The area of the South Maui Watershed is an important economic engine for the County of Maui and is experiencing significant development pressures so preservation and maintenance of natural resources is a high priority. Further, ocean water quality in the Kihei-Wailea-Makena area has been compromised during heavy rainfall events in the watershed. In addition the project sponsor, the County of Maui fully endorses and supports this multipurpose watershed project.

### **South Molokai Watershed, Oahu, Hawaii**

**\$300,000**

#### **US Army Corps of Engineers – Honolulu District**

Funding will be used by the Army Corps of Engineers to initiate federally funded investigations to determine whether Federal interest exists in a cost shared feasibility study to implement watershed improvements. The South Molokai Watershed consists of several subwatersheds. Geographically, there are primarily ranch lands and some scattered residential lands in the upper elevations, and clusters of urban settlements near the shoreline. Flooding events have taken place at Kawela, within Kaunakakai town and Kapaakea. Also, preservation of hunting, gathering, and fishing activities, as well as water availability are important community values that should be taken into consideration.

### **Testing of Polymeric Hydrogels for Radiation Decontamination**

**\$2,500,000**

#### **Office of Environmental Management, Department of Energy**

Funding would support a large scale test of DeconGel at a Department of Energy facility that already requires nuclear decontamination and/or decommissioning. DeconGel is produced by Cellular Bioengineering, Inc., which is based in Honolulu, Hawaii. The Department of Energy would establish the performance standards and measure the amount of decontamination that occurs as a result of an application of the hydrogel to determine success. It is expected that the decontamination process will be quicker and less expensive than using conventional methods. The testing of potentially cost saving technologies is particularly important given the high cost of cleanup at the nation's uranium enrichment plants with GAO estimating that costs will have exceeded Uranium Enrichment Decontamination and Decommissioning Fund revenues by \$3.8 billion to \$6.2 billion by the completion of cleanup activities.

### **Waiakea-Palai Streams Flood Reduction, Hawaii**

**\$300,000**

#### **US Army Corps of Engineers – Honolulu District**

Funding will be used by the for the Army Corps of Engineers to initiate the Preconstruction, Engineering, and Design (PED) phase, including the preparation of Engineering Design Report (EDR). Separate Continuing Authorities Program (CAP) feasibility studies clearly indicate that there is a common solution to reducing flooding in both drainage areas. There has been significant damage to roads, residences, bridges, drainage systems, and personal property over the years due to flooding of Waiakea and Palai Streams. Funding provided will mitigate and reduce flooding in affected communities.

**Waialua-Kaiaka Watershed, Oahu, Hawaii****\$300,000****US Army Corps of Engineers – Honolulu District**

Funding will be used by the Army Corps of Engineers to initiate federally funded investigations to determine whether Federal interest exists in a comprehensive analysis of watershed problems, including flooding, ecosystem degradation, and lack of irrigation water supply for agriculture. There is a lack of a consolidated inventory of watershed planning information for the Waialua-Kaiaka watershed, the largest drainage area on the island at 80 square miles. The community desires solutions to water resource problems, which include flooding and ecosystem degradation, water conservation, and water supply. The identification of problems and potential remedial actions will provide the momentum for improvements, further economic development, and, conservation of ecosystems. There exists considerable community support through the North Shore Neighborhood Board and local political interest, particularly to alleviate flooding.

**West Maui Watershed, Maui, Hawaii****\$100,000****US Army Corps of Engineers – Honolulu District**

Funding will be used by the Army Corps of Engineers to continue federally funded investigations to determine whether Federal interest exists in a cost shared feasibility study to implement watershed improvements. The West Maui watershed includes the entire area associated with the West Maui Mountains (approximately 90,000 acres) on the island of Maui, Hawaii. Further, it encompasses all of the West Maui drainages from the south at Maalaea, west at Lahaina, north at Honokohau, and east at Wailuku. The completed reconnaissance study identified flood damage reduction, aquatic and marine ecosystem restoration, and shoreline protection projects that could be undertaken by the Corps of Engineers along with county and State agency partners. This project is viable as there is interest by the partners, stakeholders, non-profit organizations, and communities in further developing a watershed management plan that can be used to leverage other available resources. The primary sponsor, the State Department of Land and Natural Resources, fully endorses and supports the multipurpose watershed project and expects that other agencies will co-sponsor this project feasibility study.