#### OLYMPIA J. SNOWE

154 RUSSELL SENATE OFFICE BUILDING (202) 224-5344

Web Site: http://snowe.senate.gov DEPUTY WHIP

#### United States Senate

WASHINGTON, DC 20510–1903 April 2, 2010 COMMERCE, SCIENCE, AND TRANSPORTATION

OCEANS, ATMOSPHERE, FISHERIES AND COAST GUARD SUBCOMMITTEE

FINANCE

INTELLIGENCE

RANKING MEMBER, SMALL BUSINESS

The Honorable Daniel K. Inouye Chairman Senate Appropriations Committee S-131 The Capitol

The Honorable Barbara A. Mikulski Chairman Senate Subcommittee on Commerce, Justice, Science, and Related Agencies 142 Dirksen Senate Office Building Washington, DC 20510 The Honorable Thad Cochran Ranking Member Senate Appropriations Committee S-146 A The Capitol

The Honorable Richard C. Shelby Ranking Member Senate Subcommittee on Commerce, Justice, Science, and Related Agencies 125 Dirksen Senate Office Building Washington, DC 20510

Dear Senators Inouye, Cochran, Mikulski, and Shelby,

I am writing to request your support for funding in the Fiscal Year 2011 (FY2011) Commerce, Justice, Science, and Related Agencies Appropriations bill for programs and projects that are important to Maine. A description of these requests in alphabetical order by organization follows.

I certify that neither I nor my immediate family members has a pecuniary interest in the congressionally directed spending items that we have requested, consistent with the requirements of paragraph 9 or Rule XLIV of the Standing Rules of the Senate. I further certify that I have posted a description of the items requested on my official website, along with the accompanying justification.

Once again, thank you for your time and consideration. Please feel free to contact my staff with any further questions.

Sincerely.

OLYMPIA J. SNOWE

United States Senator

## Acadia Partners for Science and Learning. Schoodic Education and Research Center Science & Technology Expansion, Winter Harbor, Maine – \$3,735,000.

There is broad agreement that the United States has a critical need to provide stronger math and science education to more students. The Schoodic Education and Research Center is a research learning facility managed by the nonprofit organization, Acadia Partners, in collaboration with Acadia National Park. Acadia Partners develops and maintains educational and research partnerships, delivers programs focused on science literacy, and conducts educational research to promote environmental science literacy and natural resource stewardship. Through partnerships with Maine schools, as well as National Park Service units, post-secondary institutions, government agencies and corporate entities, they are engaging students and teachers in real and important scientist-led, field-based research.

The request for additional support will create a telecommunications infrastructure connecting their campus with outside networks, complete their training facility renovation/construction, and expand an educational research program already successfully delivering programs to Maine's teachers and students. These additional resources will support and solidify their initial success in unique K-16 and teacher training programs that directly link ongoing natural science research with rigorous, field-based education engaging scientists, teachers and students in actual, important research projects.

## Consortium for Wildlife Bycatch Reduction, New England Aquarium, Boston, Massachusetts – \$2,000,000.

In 2005, representatives of major fishing industries and marine scientists from Massachusetts, Maine, New Hampshire, and North Carolina came together to form The Consortium for Wildlife Bycatch Reduction. The first objective of the Consortium, an unparalleled collaboration between industry and science, is to meet the rapidly growing demand for practical, non-regulatory solutions to the bycatch of non-commercial wildlife species through the cooperative development of innovative gear technologies. The second objective is to mitigate conflicts between fishing activities and threatened wildlife including primarily marine mammals, turtles, seabirds, and their habitats, and to promote sustainable fishing practices.

The Consortium began operations with Congressional funding in FY2004 and to date has been particularly active in critical Right Whale rope entanglement research in the Gulf of Maine lobster fisheries as well as the pilot whale problems with pelagic longline gear. All of the Consortium's current projects are in mid-stream and will not be completed unless continued funding is secured. To meet the growing demand, the Consortium needs to broaden its scope to include new projects on sea turtle, marine mammal, and shark interactions with various gears including gill nets, lobster, and pelagic longline.

Because our New England fisheries and communities are already under a severe strain to meet new statutory requirements to end overfishing and rebuild overfished stocks, the Consortium's efforts to keep our fisheries operating and viable has become more critical

than ever. At the same time, interactions with marine mammals and other protected species are becoming an increasing problem in a number of our fisheries. The Consortium's work is exactly what is needed at a time when the urgency has never been greater.

#### Fugro EarthData, Inc., Maine Coastal Mapping, Rockport, Maine - \$4,000,000.

The State of Maine has 3,500 miles of coastline from the Canadian border to New Hampshire. As a result, the Maine coastal community is routinely called upon to make decisions that balance not only the quality of life for its citizenry, but also the quality of the natural and man-made environment, coupled with the ability to mitigate and respond to natural and/or man-made disasters. This funding is urgently needed to develop detailed, accurate, and up-to-date maps of the seabed and the shore along the Atlantic coast of Maine to better assess and address the impacts of environmental changes on coastal communities, to restore and protect coastal habitats, to ensure the safety of a growing population at increasing risk of harm, and to protect infrastructure vital to the health of the State's economy. Such a dataset can be acquired and developed efficiently using existing geospatial technologies, such as airborne laser-based mapping, digital imagery, and marine and terrestrial surveying.

This project will serve as a model for the integration of unique geospatial technologies to better understand, monitor, and deal with changes in Maine's vital and extremely sensitive coastal zone. This funding will be used to develop geospatial information covering the entire Maine coastline using unique mapping techniques such as airborne laser-based systems, digital imagery, and GPS-based terrestrial and marine surveying to map the near-shore seafloor and the terrestrial built and natural environments. The data developed under this project will be used to identify and define Marine Protected Areas (MPAs) and will serve as a baseline for enhanced analysis, planning, and decision-making to address current and future risks associated with natural and man induced changes to the environment, from declining fish and marine life populations to the risk of tsunamis and flooding caused by sea-level rise.

## Good Will Home Association (dba Good Will-Hinckley), Averill Academy Alternative School for At-Risk Youth, Hinckley, Maine – \$600,000.

The project's priority is to continue to serve Maine's most vulnerable youth in an alternative classroom setting, preparing them for post-secondary education and the workforce. Each youth that drops out of school costs the nation \$292,000 over his/her lifetime. Assuming an annual graduating class of 20, a \$20,000 investment per student per year could save the nation over \$4.2 million dollars per year. Without such an investment in Maine, dropouts from the class of 2010 will cost the state \$992 million in lifetime lost wages. Nationally, increasing the graduation rate by just 1% would save the nation \$1.4 billion in incarceration costs. Funding such an endeavor, operated by an institution with a time-tested, proven track record of preparing children with behavioral problems for post-secondary success, would be an invaluable use of taxpayer funds. The project also will create 17 FTEs, including up to 9 teachers. Launching year one of this

newly revised program, and building it to expand in years two and three is the overall goal of this project and requested funding.

GWH wants to enroll 40 new students to the Averill Academy alternative school for atrisk youth (20 8<sup>th</sup> graders and 20 9<sup>th</sup> graders) for the 2011-2012 school year. These students with behavioral, academic, and family problems from the region need special attention such as low student-to-teacher ratio, individualized learning plans, counseling, and support services. A congressional appropriation would help fund/create 17 staff positions (including nine teachers) course material, and capital needs (physical plant improvements).

### Gulf of Maine Lobster Foundation, Northeastern Lobster Resource Regional Collaboration, Kennebunk, Maine – \$1,501,000.

These funds will provide support for continuation of the Lobster Port and Sea Sampling, Regional Ventless Trap Survey, and Settlement Index Surveys. The six states (ME, NH, MA, RI, CT, NY) contract with lobstermen to run these projects and additional funding will continue to provide much needed job opportunities for fishermen. The Port Sampling program is designed to survey the daily catch from lobstermen at different locations along the coast while the Sea Sampling program allows "samplers" to board lobster boats and gather data on any lobsters or by-catch that come up in any traps hauled on a specific day. Information on sex, length, egg bearing status, and overall health is recorded. These are both considered "fishery-dependent" projects as the sampling area is left up to the fishermen. The Regional Ventless Trap Survey is different as it is a "fishery-independent" project. The lobstermen are given specific areas in which they set a specified amount of traps based on location, bottom type, and depth. Again, every lobster and/or by-catch that is brought up in the traps is measured, sexed, and recorded. The Settlement Survey provides useful information in forecasting the adult abundance of lobsters. The modified lobster traps can be used to collect and tag juvenile lobsters which helps evaluate the local population dynamics and movements of American lobsters.

The lobster fishery has been hit hard by economic down turns and decreases in a healthy fishery. All three projects will help provide financial assistance to lobstermen while gaining access to their knowledge of the Gulf of Maine fishery. These data collection programs provide critical information that is used for the continued assessment of American lobster (Homarus americanus) abundance and recruitment, as well as size composition and poundage of landed lobsters – an assessment that is not possible without access to long-term data sets. The Port and Sea Sampling projects have been collecting representative samples of lobster catches in federal and state waters, in some cases for up to 30 years. Continuation of these Port and Sea Sampling operations will enhance the detailed catch, effort, and biological data that are representative of each state's fishery, and the Gulf of Maine as a whole. In response to the 2005 lobster stock assessment, the Regional Ventless Trap Survey was created in order to collect more data on the spatial distribution of lobster, length frequency, and will generate accurate estimates of the relative abundance and recruitment for American lobster. The Settlement Survey provides useful information in forecasting the adult abundance of lobsters. The growth

model used in the settlement survey can project the impact of the observed settlement patterns of juvenile lobster and how they will affect the future fishery landings. The results of these surveys can be used as an early warning of population changes of the lobster species and can feed into the stock assessment models.

#### Gulf of Maine Research Institute, Community-Based Research to Support the Maine Lobster Industry, Portland, Maine – \$725,000.

Atlantic herring is a critical economic component to sustaining Maine's lobster industry, the backbone of Maine's fishing and coastal communities. In recent years, the Maine lobster industry has contributed nearly \$1 billion to the Maine economy while providing more than 10,000 jobs to Maine residents. Herring constitute the primary bait purchased by Maine lobstermen; with coastal waters the primary source. Reductions in the allowable harvest by 57 percent since 2006 have greatly reduced the supply of lobster bait and created economic hardship on lobster and herring industries. Management decisions have been based on data and modeling exercises with well-recognized problems, including no direct estimates of the herring resource in coastal Maine waters where most herring are harvested. These management decisions underscore the lobster industry's dependence on and susceptibility to the fate of herring management and the need for credible data. The Gulf of Maine Research Institute, the Maine Lobstermen's Association, and the Gulf of Maine Lobster Foundation request funds to purchase critically-needed acoustic equipment and conduct lobster and herring industry-based surveys of herring resources in coastal Maine waters.

The cutting-edge acoustic instrumentation will enable remote classification of herring, minimizing the need for traditional sampling methods (e.g., trawls, gill nets) that are inoperable in Maine's coastal waters due to the density and extent of lobster traps. Such direct and quantitative estimates of Atlantic herring will provide the critical resource assessments necessary for informed management decisions that balance conservation needs for sustaining Atlantic herring populations and economic needs of the Maine lobster industry. This community-based approach will provide critical data necessary for informed management decisions that balance conservation needs for sustaining herring populations and economic needs of the Maine lobster and herring industries and their positive impact on the Maine economy.

# Gulf of Maine Research Institute, Support for Fishing Industry Sectors Along the Coast of Maine, Portland, Maine – \$600,000.

The groundfish industry was once a major contributor to Maine's fishing economy. However, landings and value have declined precipitously as a result of regulations designed to rebuild depleted stocks. The number of active limited access groundfish vessels declined from 145 in 2000 to 65 in 2008. Total fishing revenues from all groundfish combined declined from \$22 million in 1990 to only \$11 million in 2008. A novel approach for the Gulf of Maine, the formation of fishing industry sectors, is being implemented on May 1, 2010. The sector approach involves the application of economic incentives to reduce the impacts of fishing, promote rebuilding of groundfish stocks, and

increase industry profitability. There are three major challenges to the successful implementation of sectors in Maine that are addressed by the three objectives in this proposal. The first is the large number of stocks that have only limited information available upon which to base estimates of sustainable catch levels (the so-called "data poor species"). The second challenge is to fully harvest the underutilized species in the region (e.g. redfish, haddock in the Gulf of Maine) by working with the industry and determine the distribution of underutilized species and develop gear to harvest them to increase catch rates and improve industry economics. The third approach will be the modification of fishing gear and vessels to reduce the bycatch of unwanted species and sizes, the direct impact of the gear on the environment, as well as the impact on the wider ecosystem by reducing the environmental footprint of vessels.

## Maine Department of Marine Resources (DMR), Maine/New Hampshire Inshore Trawl Survey, Augusta, Maine – \$400,000.

The National Marine Fisheries Service (NMFS) trawl survey is not able to survey the shallower inshore waters of the Gulf of Maine because of the extremely rough topography and abundance of lobster gear. In 2000, the Maine Department of Marine Resources and the New Hampshire Fish and Game Department initiated a trawl survey of the inshore waters to provide data on fishery resources from over 10,000 square kilometers of important spawning and nursery grounds that had previously lacked survey information. These inshore waters were formerly productive fishing grounds for many species of groundfish, and are currently the most valuable fishing habitat for the American lobster resource in the U.S. Filling this information gap is a high priority for both state and federal resource managers, as well as fishermen.

The Maine/New Hampshire Inshore Trawl Survey provides stock assessment information on over 50 species of state-, interstate-, and federally-managed marine resources in the Gulf of Maine that would otherwise be lacking. Surveys are conducted each spring and fall from the Massachusetts-New Hampshire border to Canada out to 100 fathoms. In its eighth year, the Maine-New Hampshire Inshore Trawl Survey now provides data on population abundance, distribution, recruitment, and mortality of more than 30 recreationally and commercially valuable species, several of which are not covered by the offshore federal survey. Survey data are the basis for inshore assessments of nine species including cod and haddock for the Groundfish Assessment Review Meeting that is presently underway. Survey data have already altered the outcome of assessments for lobster, monkfish, herring, and American shad; management of winter flounder and northern shrimp and effected design of surveys on sea scallops and Jonah crabs. Survey data have also helped delineate essential fish habitat, evaluate fishery closures, climate change, and ecosystem based management.

# Maine Department of Marine Resources (DMR), Endangered Whale Entanglement Risk Assessment, Augusta, Maine – \$1,000,000.

The Federal Atlantic Large Whale Take Reduction Plan (ALWTRP) recently instituted a ban on floating groundlines for fixed gear fisheries outside an exemption line in Maine

and is now preparing to regulate the vertical (buoy) lines used to mark and haul gear. A lack of data from Maine's coastal fishing habitats has resulted in Maine's fishing industries being regulated using data from other states under the "worst case scenario." This has resulted in blanket measures instead of targeted regulations that address specific threats.

The current schedule for regulations on vertical lines in fixed gear fisheries (lobster primarily) will have a draft rule published by the spring of 2013. Data from Maine's inshore waters is needed prior to the publication of this final rule (~2014) to inform the process and allow for area specific regulations directly targeting risk of entanglement. The compliance surveys systematically and randomly check fishermen and gear for compliance with the new regulations set forth by the ALWTRP and calculates the rate of compliance within the industry. The Maine Marine Patrol is the only enforcement group surveying gear in this method and the results will be used as a model for agencies across the east coast.

## Maine Department of Marine Resources (DMR), Maine Lobster Fishery Research and Management Support, Augusta, Maine – \$525,000.

Maine fishermen provide 85 percent of US lobster landings. As other fisheries have declined, fishermen have increased their dependence on the lobster resource. Lobster supports Maine's largest fishery, contributing nearly 80 percent of the ex-vessel revenue to Maine, and sustaining nearly 7,000 fishermen and coastal communities. With few other employment options, Midcoast and Downeast Maine have the most fisheries-dependent communities in New England. These communities are now almost exclusively dependent on the lobster resource: effective lobster management is critical to their economic stability. These funds will help improve the scientific data upon which management decisions are made in Maine's most important fishery, and will ensure that Maine's management meets interstate planning (Atlantic States Marine Fisheries Commission) compliance requirements.

The sea sampling program began in 1985 at the request of industry, managers and scientists to gain insight into the discarded portion of the lobster population. The program is now the largest at-sea sampling program for lobster in the northeast. Sea sampling is our only opportunity to monitor V-notching (an integral component of lobster management) in the Maine lobster fishery. The port sampling program began in 1967, and is the region's first comprehensive survey of the lobster fishery and associated resource. Time-series of catch rates and biological data from both programs complement each other and have been used in numerous investigations of width/length relationships, fecundity, size-at-maturity, sex ratio, geographic variation, growth, V-notch composition and selectivity.

Data from these programs are critical to DMR's understanding of the resource and contribute directly to the ASMFC American lobster stock assessment. The ventless trap survey provides a critical regional index of juvenile lobster distribution and abundance. Small-mesh traps designed to catch juvenile lobsters are deployed by local lobstermen.

Collaborating with local fishermen and deploying traps allows samples to be collected in complex bottom and in high trap density areas inaccessible to trawls. The lobster settlement index tracks the annual pattern of newly settled lobsters and provides a 5-7 year forecast of future juvenile and adult lobster populations. The survey is a collaborative effort between DMR scientific staff, commercial divers, and academic institutions. Patterns of settlement are the first of an integral series of programs that provide a comprehensive picture of the distribution and abundance of lobsters along the coast of Maine and a predictive look into future harvest.

# Maine Department of Marine Resources (DMR), Maine Groundfish Research, Augusta, Maine – \$475,000.

Port-sampling program:

The Department of Marine Resources conducts many port sampling programs for commercial fisheries in the state. These programs are important because they collect biological, catch and effort information. Biological samples include; lengths, weights, sex, maturity, otoliths (ear bones for aging), and tissue for genetics work. All of these data are critical to understand the exploited population. A port sampling program for groundfish in Maine is critical to the management of this species complex. Funding would cover travel, sampling tools and general field supplies.

#### Longline hook survey:

The Department of Marine Resources has undertaken a longline hook survey in the near-shore Gulf of Maine. This survey targets groundfish species that are normally not caught by trawl gear due to the habitat they live in (rocky un-towable bottom), or their ability to out swim a slow moving trawl. Some of the species included in this category are Atlantic halibut, cusk, and wolfish. All three of these fish are listed as species of concern by the federal government, largely due to the lack of basic abundance and distribution data. The longline survey was very successful in its first year collecting valuable data that was immediately used by the Northeast Fisheries Science Center in stock assessments. However, the funding source is not long-term and this survey will likely come to an end after only two years of data collection.

#### Maine Department of Marine Resources (DMR), Herring Research, Augusta, Maine - \$350,000.

With an estimated U.S. complex-wide biomass of 1.8 million metric tons, herring provide a significant forage base for other commercially and recreationally important fish species as well as marine mammals, and birds. Atlantic herring is the second largest commercial fishery on the east coast in terms of volume; landings have recently been in excess of 222 million pounds with an estimated value of \$15.5 million. The fishery also supports a domestic value added industry (canned sardines and frozen whole fish) worth approximately \$50 million, is a critically important bait source used in the Atlantic lobster fishery estimated at over \$300 million, and supports a traditional social network of communities in coastal Maine.

Maine DMR maintains primary responsibility for monitoring the east coast Atlantic herring fishery and since 1960 has processed all of the biological samples collected from the Atlantic herring fishery. In addition to processing biological samples, responsibilities include compiling catch data, monitoring area quotas, entering, and compiling data from dealer reports, and providing aging data for stock assessments. This appropriation would provide continued support for DMR's current East Coast herring sampling program and the bycatch survey of the herring fishery initiated as a pilot study in 2003. Additionally, sampling would also be conducted in the Atlantic mackerel and Atlantic menhaden fisheries.

Adequate bycatch data is a high priority research need for effective management of any stock. Since 2003, Maine has conducted portside bycatch studies at processing plants from Cape May, NJ, through Eastport, ME, targeting directed Herring and Mackerel landings. This request would allow coverage to expand from about 10% to about 40% of landings, a more statistically-significant level. Monitoring of the bycatch provides vital data used in assessments for both Herring and Mackerel, as well as answering important question related to bycatch of river herring and groundfish. This project has proven more cost effective than at-sea observing, yet compliments the data collected by federal observers.

# Maine Department of Marine Resources (DMR), Maine Groundfish Permit Banking Program, Augusta, Maine - \$5,000,000.

Funds will be used to purchase federal limited access northeast multispecies permits. The fishing privileges attached to them will be distributed to vessels that are based in and land their catch in Maine. In addition, funds will be used to upgrade and/or purchase monitoring software to track fishing privilege usage, as well as to assist with sector shoreside monitoring. The Pilot Program needs this additional funding in order to expand the socio-economic relief to all size vessels, the City of Portland (vessels docked there, fishing vessel owners who reside there, and the associated infrastructure) and to ensure a viable future for all of Maine's groundfishing industry and coastal communities

Maine's groundfishing industry has constricted so it is now almost wholly contained within Southern Maine. This project will improve communities all along the Maine coast by restoring and preserving Maine's groundfishing industry, which is currently on the brink of collapse. Particularly, it will provide much-needed assistance to the groundfishing industry of Portland, which currently contains the main infrastructure upon which all of Maine's groundfishing industry depends. Given the direct economic and cultural importance of fishing, and the associated indirect benefits it creates to tourism, culture and quality of life, this project is of great significance to the state of Maine.

# <u>Maine Department of Marine Resources (DMR), Preventing Closure of Maine Commercial River Herring Fisherics, Augusta, Maine – \$581,000.</u>

The closure of river herring fisheries by the Atlantic States Marine Fisheries Commission (ASMFC) (i.e., Massachusetts, Rhode Island, Connecticut, Virginia and North Carolina)

and observed declines in river herring abundance have led to concerns over current mortality levels and whether they are high enough to prevent further stock declines. The Commission and the public have also expressed concern over the lack of monitoring of river herring populations, fisheries and bycatch. Maine remains one of only three states with river herring populations that currently meet ASMFC sustainability requirements. Unfortunately, Maine's river herring will close in 2011 unless DMR can collect the data necessary to satisfy the updated sustainability criteria contained in the ASMFC American Shad and River Herring Pan Amendment 2.

A number of commercial fishermen and lobster fishermen coastwide depend on river herring to provide a portion of their annual income or as bait for their lobster traps. Recurring lobster bait shortages in Maine and looming closure of the river herring fisheries have caused profound concern in many coastal communities that depend on these resources to maintain commercial fishing infrastructure, commercial fishing supply businesses, and income for commercial fishing communities.

Specific data are required for Maine coastal river herring fisheries to meet the assessment criteria established by ASMFC. Sustainable fisheries management plans are required for each state that wishes to continue to fish for river herring. Maine will not be able to meet this request without financial assistance to collect the biological data necessary to complete the established data collection schedule. National Marine Fisheries Stock Assessments have identified that many populations of river herring along the Atlantic coast are in decline or are at depressed but stable levels. However, lack of fishery-dependent and independent data complicate attempts to determine the status of river herring stocks coastwide.

# Maine Department of Marine Resources (DMR), Lamoine Laboratory Expansion and Red Tide Monitoring Program, Augusta, Maine – \$2,000,000.

Expansion of DMR's Lamoine laboratory will enable the DMR to better serve the needs of the shellfish industry in eastern Maine. There are over 1,414 shellfish harvesters in Eastern Maine whose landed value of shellfish in 2007 was worth approximately \$11 million at the docks. Soft-shell clams alone were valued at over \$4.8 million in 2007, and landed by over 746 licensed harvesters. In addition to licensed clam harvesters, there were 42 licensed ocean quahog fishermen, 582 scallop draggers, 44 licensed mussel draggers, and approximately 28 wholesale shellfish dealers in eastern Maine. The value of the shellfish industry in eastern Maine is approximately \$33 million, using a conservative 3:1 multiplier. This is a tremendously valuable industry for an economically-challenged area of the state.

Construction of a new laboratory will provide one-time construction jobs in a part of the state in critical need of economic development. It will make space available for DMR to meet public health needs and more effectively address fishery issues in eastern Maine. This will also create more opportunity for collaboration with the fishing industry and other community organizations. The economic impact of the project will be to more

efficiently operate DMR's shellfish management program in the eastern coastal waters of Maine and help to sustain the Downeast fishing industry.

Funding will also be used to continue the expanded Red Tide sampling program that was initiated with federal disaster funds received following the devastating 2005 Red Tide season. DMR was able to establish a fine-scale Red Tide along the coast that has resulted in more clam flats staying open during Red Tide events. The reduced size of shellfish closures resulting from this monitoring program in recent years has greatly reduced the economic losses to Maine's shellfish industry. This program can only be maintained by continued federal funding.

### <u>Maine Department of Marine Resources (DMR) - Bureau of Sea Run Fisheries and Habitat, Penobscot River Restoration Project, Augusta, Maine - \$2,000,000.</u>

To implement eco-system wide restoration of Penobscot River, the funding request will support ancillary needs that will improve economic opportunities for business along the river and benefit endangered species. For example, the removal of the Great Works Dam and impoundment in Old Town, Maine, will eliminate the process water source for the Old Town Fuel and Fiber pulp mill, which currently employs 200 people. Under a federal (DOE) grant, the mill is developing commercial scale biofuel production from pulping by products. The mill has historically been a pulp mill and this is still one component of its operations today. As a result of two years of engineering work, the Penobscot River Restoration Trust and the mill have agreed upon the design for a replacement water intake system that will cost an estimated \$5.5 million. This system consists of pumps located in the mill that will pump water directly from an in-river structure.

The \$2 million will be matched by state jobs/economic bond and Maine energy efficiency funding and state River bond and other sources to meet the total need of \$5.5 million. This is an excellent opportunity to leverage both economic/community development and natural resource goals by helping secure a more energy efficient intake system designed to be safe for fisheries including endangered Atlantic salmon and other sea-run fish.

# Maine State Planning Office, Phase 1 Development of an Offshore Coastal Atlas to Assist in Ocean Energy Development and Reduction of User Conflicts, Augusta, Maine – \$2,500,000.

Maine's Ocean Energy Task Force identified myriad needs to meet the state's goals for ocean wind power. Needs include new data on ocean characteristics, new data about commercial/recreational uses and an effective way to make information widely accessible. Maine's data needs are estimated at 50 million dollars for baseline studies alone. This project includes the creation of the data integration and public data portal (Atlas) and two data collection/analysis projects. Information will be used by towns, developers, fishermen and managers for energy siting and reduction of user conflicts.

NOAA will potentially be receiving several million dollars to conduct and assist in national marine spatial planning (CMSP). The White House's Ocean Policy Task Force has also recently released an Interim Framework for Coastal and Marine Spatial Planning, promoting state and regional efforts leading to successful planning implementation. Among the many positive effects that CMSP has for management, academia, and the general public are reduction of user conflicts, energy independence supported by clean, renewable energy, potential for fish stock rebuild, greater oil spill response preparedness, and general increased knowledge of the marine environment.

# Northern Forest Canoe Trail, Northern Forest Explorers Outdoor Program: Connecting Rural Youth with their Backyard Waterways, Waitsfield, Vermont – \$275,000.

Few programs exist to serve the rural young people who also often lack access to the natural world outside their classroom windows. NFCT's Northern Forest Explorers Program engages rural youth in weeklong outdoor educational experiences that support an active and healthy lifestyle, cultivate leadership and teamwork skills, and foster an important understanding of the environment. The program also provides economic benefits for the local communities along the Trail by hiring local guides and other program staff. Participants spend one week paddling on our water trail in their local area, learning camping, paddling, and group skills that will be the basis for a lifetime of physical activity. Participants also learn about the environment and sustainability by becoming experts in the Leave No Trace ethics and basic ecosystem studies. Expert local guides lead the trips, supported by training and curricula from regional outdoor education partners who have developed best practices.

The Northern Forest Explorers program meets the Department of Justice criteria by providing rural youth with a meaningful connection to their place in the world, and a new set of skills and perspectives to guide them toward productive engagement in their communities and the broader society. The program is open to all community students in the 10-14 age category, regardless of ability to pay, with the goal of developing the relationships and sense of belonging that are foundational for productive community involvement for the long term.

# <u>Penobscot East Resource Center, Northern Gulf of Maine Groundfish Sentinel Fishery, Stonington, Maine – \$255,000.</u>

This is the second year of a fisheries project designed to address the specific problem of chronically depleted northern Maine groundfish stocks. Fishermen with habitat-friendly hooks will gather data using a University of Maine research designs. The high-value catch will be marketed locally. Species diversity restoration is essential to sustain the economic health of 50 lobster-reliant Maine coastal communities and could lead to more fish for all of New England. The Sentinel Fishery project seeks to augment the National Marine Fisheries Service's efforts to comply with, and achieve the goals set forth in, the recently reauthorized Magnuson-Stevens Fishery Conservation and Management Act, passed in 2006.

# Phoenix House, Phoenix House of Maine Substance Abuse Treatment for At-Risk Youth, Augusta, Maine – \$800,000.

Phoenix House proposes to develop a recovery high school in partnership with the Maranacook school district and create a supportive, sober, and structured living unit for program completers at Phoenix Academy. Those youth will remain in the familiar recovery environment and in the company of recovering peers while they complete their academic curriculum, improving their odds of maintaining recovery, continuing to build recovery skills, and acquiring the academic credentials for continuing education and employment. Currently, when residents complete their treatment goals at the Academy, they are returned to their home communities and schools, regardless of the appropriateness of those settings. Despite their best efforts to offer transitional services, many encounter significant difficulty. They may return to homes where parents are actively using drugs and/or to schools and peers who do not welcome their return. The stigma is insurmountable in some instances making it extremely challenging to maintain treatment gains. Because the Academy is one of only two residential treatment programs for youth in Maine, their home communities are widely scattered throughout the state. The former residents find themselves far from and out of touch with the culture of recovery, the sober peer group, and the recovery support offered at the Academy. However, at other Phoenix House Academies throughout the country, an opportunity to continue their education in a recovery-oriented environment serves as one of the primary motivators for substance abusing at-risk youth to remain in the treatment system during this vulnerable phase of early recovery.

# <u>Somerset County, Communications Equipment Upgrade, Skowhegan, Maine – \$2,200,000.</u>

Law enforcement, including police, county sheriffs, state troopers, fire department personnel, and others cannot communicate with one another or ambulances, HAZMAT, and EMA officials by cell phone or radio in certain areas throughout the "Route 201 Corridor" of Somerset County, Maine. The Corridor cuts a wide swath running the length of Somerset County, and much of it constitutes a communications "dead zone," which cannot support cell phone, radio, or other communications without the construction of at least six new Communication Towers. This project supports law enforcement by improving facilities and equipment. In rural areas, such as the Route 201 Corridor, it is often difficult for local police and fire departments to communicate. As a result of this project, law enforcement officials from Somerset County, the Maine State Police, as well as U.S. Border Patrol Agents will be able to communicate effectively in the Route 201 Corridor.

The merging of emergency officials in Somerset County has brought the total number of emergency response agencies being dispatched by one facility to twenty-six (26) fire departments; seventeen (17) rescue and transporting ambulances; five (5) full-time law enforcement agencies; and the Somerset County Emergency Management Agency. The lack of interoperability/communications capacity among these officials is a serious public safety concern and must be remedied by the erection of communication towers to facilitate communications.

#### <u>University of Maine, Maine Climate Information Exchange (MCIX), Orono, Maine - \$1,300,000.</u>

Maine has been progressive in addressing climate change by actions such as the Maine Climate Action Plan (2004), which was focused on greenhouse gas mitigation. In 2008, Governor Baldacci asked the University of Maine to lead an initial assessment of climate change effects in Maine, which resulted in over 75 scientists contributing to the 2009 assessment report "Maine's Climate Future." LD 460 directed the Maine DEP to "...build upon the 2009 climate impact assessment by the University of Maine in evaluating the options available to Maine people and businesses for adapting to the likely environmental effects of climate change." A preliminary Stakeholder Adaptation process began in 2009 with a report due to the Maine Legislature in February 2010. Stakeholders are seeing the need for timely and appropriate information on climate change adaptation, building ecological and economic resilience, and identifying new opportunities that will emerge as a result of climate change across a wide range of sectors in our state's economy.

The scientific consensus is that climate change is responsible for rapidly changing ecosystems. Initiatives to address climate change have largely come from state and local programs, focusing primarily on mitigation. Maine's political and scientific leaders recognize a responsibility to move beyond mitigation to adaptation initiatives that include new opportunities our changing climate brings. To address the climate change challenges of mitigation, adaptation and opportunity, the University of Maine proposes to establish the Maine Climate Information Exchange (MCIX), a climate change information and coordination office, with the Maine Department of Environmental Protection and others, to facilitate the synergy necessary for Maine to make the best use of our collective, but limited, resources in addressing the climate change challenge. MCIX will assist in identifying and developing potential new opportunities for Maine that range, for example, from renewable energy to food security to new markets in recreation and tourism.

### <u>University of Maine, Northern Border University Research Consortium, Orono, Maine – \$1,500,000.</u>

Canada and the United States form the largest bilateral trading relationship in the world and the northern border is the gateway through which massive flows of people and products must pass. Critical economic competitiveness and security issues are directly affected by the border. Despite its importance, understanding of the northern border in the post-9/11 world is fragmented. No comprehensive research capability exists to examine and assess how the border is performing and whether border management policies have been successful in facilitating economic prosperity while enhancing security.

To create a border-wide research capability, six universities have established a Northern Border University Research Consortium (NBURC). An academic, non-partisan consortium, the NBURC will produce reports, briefings, and other policy statements for government officials engaged in border-related issues. The consortium universities comprise Western Washington University, the University of Montana, the University of

North Dakota, Michigan State University, the University of Buffalo, and the University of Maine. Each university has recognized expertise in cross-border research; Western Washington University and the University of Maine each have federally-funded National Resource Centers on Canada. The NBURC will also collaborate with researchers at other American and Canadian institutions.

An advisory board representing governmental and private-sector stakeholders will advise the NBURC's agenda, and consortium research proposals will be vetted through scholarly peer review.

#### University of Southern Maine, Gateway to Science, Portland, Maine – \$865,000.

The Southworth Planetarium, founded in 1970 with a grant from Clara Southworth in memory of her husband Constant Southworth, is the premier astronomical facility in Southern Maine. Each year, over 20,000 adults and students attend programs at Southworth, including over 17,000 K-12 students attending school group showings as part of their science classes. An additional 5,000 people are reached through programs that bring astronomy and science education activities to schools, recreation centers, Scout groups, libraries, and other public venues around the Greater Portland area. These programs include enrichment courses in astronomy, teacher workshops, general presentations, hands-on activities, and astronomical observation. A full two technologies out of date, the Southworth Planetarium is in need of system upgrades to meet its current mission, remain operational, and to address interdisciplinary STEM education opportunities and needs.

#### National Request

# NOAA, Protected Species Research and Management Program for Atlantic Salmon – Increase.

Atlantic salmon populations have declined drastically in the last two hundred years, and many challenges remain in the rebuilding of this endangered population. In fact, in 2009, three new distinct population segments of Atlantic salmon were listed as endangered in Maine's Penobscot, Kennebec, and Androscoggin Rivers. NOAA's Protected Species Research and Management Program for Atlantic salmon greatly assists in management and recovery efforts. I am disappointed that the President's request would decrease funding for this program, particularly in light of the 2009 decision to list three new distinct population segments of Atlantic salmon in three additional Maine rivers as endangered under the Endangered Species Act. Providing the Protected Species Program with increased funding for Atlantic salmon would allow NOAA to continue to provide technical assistance to improve restoration project design, ensure environmental compliance, and advance restoration techniques. This program is essential to reverse the downward population trend of Maine's Atlantic salmon population by protecting against habitat degradation, addressing predatory and other threats to the species, and promoting increased public awareness without decimating the industries that sustain much of Maine's economy.