

GREEN BUDGET FISCAL YEAR 2011

JANUARY 2010

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GREEN BUDGET INTRODUCTION

This report, referred to as the *Green Budget*, highlights the environmental communities' Fiscal Year 2011 National Funding Priorities. The Green Budget, prepared annually by a coalition of national environmental and conservation organizations, illustrates how an infusion of federal money can help meet the environmental challenges of climate change, develop our clean energy resources, and sustain our nation's lands, waters and other natural resources.

Use this document when developing and considering federal budget and appropriations proposals. This report includes a short background on the benefits and challenges for dozens of important environmental and energy programs. Following each program description is a recommended funding level for Fiscal Year 2011. As stewards of our surroundings we have a responsibility to act now and sufficiently fund the programs that help ensure the water we drink is clean, the air we breathe is pure, the energy we use is renewable and sited responsibly, and the wild landscapes and wildlife we care about are protected for the enjoyment of countless Americans today and in the future.

ALASKA WILDERNESS LEAGUE - AMERICAN HIKING SOCIETY - AMERICAN RIVERS
ASSOCIATION OF FISH & WILDLIFE AGENCIES - CENTER FOR BIOLOGICAL DIVERSITY
CHESAPEAKE BAY FOUNDATION - DEFENDERS OF WILDLIFE
EARTHJUSTICE - ENVIRONMENT AMERICA - ENVIRONMENTAL DEFENSE FUND
ENVIRONMENTAL INVESTIGATION AGENCY - FRIENDS OF THE EARTH
LAND TRUST ALLIANCE - LEAGUE OF CONSERVATION VOTERS
MARINE CONSERVATION BIOLOGY INSTITUTE - MARINE FISH CONSERVATION NETWORK
NATIONAL AUDUBON SOCIETY - NATIONAL ESTUARINE RESEARCH RESERVE ASSOCIATION
NATIONAL PARKS CONSERVATION ASSOCIATION - NATURAL RESOURCES DEFENSE COUNCIL
NATIONAL TRIBAL ENVIRONMENTAL COUNCIL - NATIONAL WILDLIFE FEDERATION
OCEANA - OCEAN CONSERVANCY - PHYSICIANS FOR SOCIAL RESPONSIBILITY
POPULATION ACTION INTERNATIONAL - RESTORE AMERICA'S ESTUARIES - SIERRA CLUB
SOUTHERN UTAH WILDERNESS ALLIANCE - THE SURFRIDER FOUNDATION
THE TRUST FOR PUBLIC LAND - UNION OF CONCERNED SCIENTISTS
THE WILDERNESS SOCIETY - WORLD WILDLIFE FUND

¹ The organizations listed on the back cover do not necessarily endorse or have expertise on every recommendation in this report. Please refer to the Program Contacts at the end of this document for more information on a particular program.

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As President Obama begins his second year in office this January, he faces a myriad of daunting challenges ranging from an unpredictable economy to a skyrocketing budget deficit as well as an outdated and unbalanced energy policy, glaring national infrastructure needs, and a world facing the real threat of unchecked global warming. The President's strong leadership continues to present enormous opportunities for progress on all of these issues, including environmental programs too often slashed, marginalized or ignored.

The fiscal year budget of 2010 along with the much needed funding from the American Recovery and Reinvestment Act demonstrated that leadership from the President and from Congress can truly help our country transition to a green energy economy, create jobs, conserve our natural resources, and protect wildlife. After years of misguided priorities and limited resources, 2010 restored hope and optimism to federal departments and agencies that work to protect our environment. These initial investments are already paying dividends, and their future success depends on continued robust levels of funding in 2011.

Providing these critical funds for important energy, water, marine, and natural resource programs will be no easy task as budget deficits and unemployment continue to rise while our country fights two wars in the Middle East. The solutions to our country's recession require economic reforms and the creation of new jobs. Our outdated energy policies and accelerated global warming add additional challenges. However, they also provide a solution. As President Obama said during his speech at the recent climate summit in Copenhagen, "We are convinced that changing the way that we produce and use energy is essential to America's economic future – that it will create millions of new jobs, power new industry, keep us competitive, and spark new innovation."

In addition to enacting meaningful climate legislation, the government must take care of existing programs. Programs that protect the nation's air, water, wildlife, and communities and support a safe and healthy environment were cut drastically during the previous Administration. These devastating cuts must continue to be reversed to provide necessary environmental protections. These investments also provide an additional opportunity to address infrastructure needs, grow our economy and put people back to work.

ENERGY

The Department of Energy (DOE) pursues a range of energy-related activities, including supporting research, development, demonstration and deployment of energy conservation and clean generation technologies, managing our nation's various nuclear programs, and funding a wide range of energy-related scientific research. Within DOE, the Office of Energy Efficiency and Renewable Energy (EERE) has received increased appropriations in the past few fiscal cycles, and a significant boost of funding through the American Recovery and Reinvestment Act of 2009 (ARRA). It will be important to ensure this funding continues to support a diverse suite of early stage and maturing clean technologies and that recent ARRA expenditures are spent, monitored and leveraged in a strategic and effective manner.

There are a number of important programs within DOE that require additional funding to meet the challenge of dramatically reducing the carbon-intensity of our energy system, including the following:

• Wind generating capacity has increased tenfold from 2.5 GW in 2000 to 25 GW by the end of 2008. Investment in the **Wind Energy Program** is critical to drive new innovations into the marketplace and advance domestic manufacturing of wind power. As the DOE's "20 percent Wind Energy by 2030" report found, meeting the 20 percent wind energy goal by 2030 requires capital costs to decrease by 10 percent and capacity factors to increase by 15 percent. Technology improvements through federal research and development and programmatic funding to overcome other challenges are crucial to meeting the 20 percent mark.

- The U.S. currently maintains global leadership of thin film solar technologies, due in large part to significant investment made by the federal government during the past decade. The **Solar Energy Technologies program** needs funding that ensures the sustained transfer of this U.S. innovation into the marketplace to leverage previous federal investments, capture global scale-up of thin film technologies within the U.S. (i.e. become a net exporter) and meet growing domestic demand.
- Of all the DOE energy efficiency programs, **the Building Technologies Program** continues to yield perhaps the greatest energy savings. A National Research Council study found that just three small buildings R&D programs –electronic ballasts for fluorescent lamps, refrigerator compressors, and low-e glass for windows have already achieved cost savings totaling \$30 billion at a total federal cost of about \$12 million. The DOE Building Technologies Program recently added solar heating, cooling, and lighting to its portfolio. Expanded funding for these technologies is needed. Additionally, federal appliance standards already save an estimated 2.5 percent of all U.S. electricity use; existing and draft standards are expected to save consumers and businesses \$186 billion by 2020. Developing standards is a costly process and DOE needs adequate resources to carry out its responsibilities.
- Making energy intensive industries more efficient is one of the fastest, cheapest ways to achieve real global warming reductions in the near future. In McKinsey & Company's July 2009 report on energy efficiency potential in the U.S.², they estimate the industrial sector can reduce its primary energy consumption by 21 percent relative to business-as-usual by 2020 exclusively through capturing profitable (i.e. positive net present value) energy efficiency opportunities. This potential will not be captured, however, unless Congress supports financing mechanisms and more R&D to develop transformational technologies. Given the **Industrial Technologies Program's** critical role in this effort as the only government program focused on improving industrial efficiency, we believe that increased funding is both appropriate and necessary.
- As a result of a competitive Funding Opportunity Announcement by DOE through its **Energy Efficiency** and Conservation Block Grant Program, a large number of communities around the country are investing significant resources into developing aggressive and credible retrofit programs. However, with only \$390 million available under the current program to fund awards to states and larger municipalities, the competitive portion of the EECBG program will likely only assist 8-12 jurisdictions in establishing new retrofit markets. The program could be expanded at marginal additional administrative expense. By substantially expanding the funds dedicated to the competitive EECBG program, the federal government could expedite the creation of sustainable retrofit markets in many more communities, and make enduring retrofit jobs a reality in jurisdictions throughout the country.

HEALTH, AIR & WATER

The Environmental Protection Agency (EPA) has the largest responsibility protecting our air and water and ensuring that toxins are reduced to the minimal level possible. Additionally, the agency has put itself in the forefront of the battle against climate change as it prepares to regulate carbon dioxide emissions. These are tall tasks for an agency that has suffered through more than a decade of being a second tier administration priority. In order to protect our communities and reasonably manage climate change emissions the EPA will need the financial support from Congress that started in the FY 2010 Interior, Environment, and Related Agencies Appropriations bill.

The FY10 funding levels for the EPA were a huge reversal of the previous trends and returned the agency close to its capacity in 2000, but its responsibilities have grown exponentially since then- more oversight of water pollution

² http://www.mckinsey.com/clientservice/electricpowernaturalgas/US_energy_efficiency/

and addressing climate change, let alone enforcement of current laws. The progress shown in FY 2010 needs to be built on so that we have a stable and reliable regulatory system.

The regulatory programs within EPA had been given only lip service for the bulk of the last decade, allowing loopholes to be taken advantage of and oversights to occur. The bulk of EPA's regulatory work is funded out of the Environmental Programs and Management account. This overarching account must be focused on and provided with an increase of at least \$400 million this year.

Our nation's infrastructure is crumbling and our water infrastructure is in some of the worst condition of any-routinely given almost failing grades by the American Society of Civil Engineers. Our communities are struggling to finance the upgrades that are needed to ensure that clean water is delivered to our homes and business and that the system is designed to manage the impacts of climate change. The American Recovery and Reinvestment Act and the FY 10 Appropriations were a good start but need to be continued, particularly the investment within the Clean Water and Drinking Water State Revolving Loan Fund green infrastructure and water efficiency which will help communities adapt to the negative impacts of climate change.

OCEANS

The National Oceanic and Atmospheric Administration (NOAA) is responsible for: protecting marine and coastal habitats; managing commercial and recreational fisheries; protecting marine wildife; expanding scientific exploration and ocean observation; sustaining coastal economies; managing National Marine Sanctuaries; forecasting weather; and a number of critical activities. As uses in the ocean expand, programs within NOAA will need additional congressional support.

Our oceans are currently managed under 140 laws implemented by 20 federal agencies without a unifying vision to ensure the overall health and productivity of ocean ecosystems and resources and the services they provide. Recognizing this, President Obama formed an Ocean Policy Task Force in June 2009 to develop a national ocean policy, create a governance structure and marine spatial planning framework to implement that policy. The final recommendations will need a commitment of funding if we expect to move forward with implementation.

In addition, if the Administration intends to make climate change a national priority, then funding for NOAA needs to substantially increased, because activities related to understanding and responding to climate change impacts cannot be funded at the current budget level. This increase should include funds necessary for climate change research, monitoring, outreach, and adaptation efforts, and NOAA's oversight of the siting, monitoring, and eventual decommissioning of renewable energy projects in the ocean.

LANDS AND WILDLIFE

America's lands and wildlife have played a vital role in defining our nation's character and shaping our culture, economy and natural environment. These resources support vital natural systems that provide us with clean air and water, food, medicines and other products we all need to live healthy lives. Federal programs that support conservation of lands and wildlife – both efforts on public lands and voluntary efforts on private lands – are an essential tool in preserving this incomparable natural heritage, yet these were marginalized to a critical point during the prior administration and historically have not been funded commensurate with the need. While the FY 10 budget and final appropriations bills made strides in reversing recent damage, continued funding increases are crucial. Moreover, the growing impacts of climate change will require commitment of significant additional amounts of funding. Here are just a few examples of the overall need.

Our national network of public lands – our national wildlife refuges, national forests, national parks and lands managed by the Bureau of Land Management (BLM) – comprises a treasure of immeasurable value, encompassing almost one-third of the country and well worth a robust investment. These places will be on the forefront and serve as key anchors in the battle to safeguard natural systems from the ravages of climate change.

- The U.S. Fish and Wildlife Service National Wildlife Refuge System, spanning more than 150 million acres, is our nation's only public lands system dedicated to wildlife conservation and recently was given significantly expanded responsibilities for new marine national monuments. The 40 million people who visit refuges each year contribute an estimated \$1.7 billion to local economies. Yet the Refuge System's operations and maintenance backlog totals \$3.5 billion, and past failures to keep pace with the \$15 million increase per year needed to address fixed costs led to plans for a massive downsizing that has been averted for the present by restorative funding increases provided over the past three years. However, the annual Refuge System budget needs to reach at least \$808 billion in the coming years to eliminate the need for restructuring and to ensure that the Refuge System meets its mission.
- The National Forest System encompasses 193 million acres of forests and grasslands that provide habitat for an amazing array of fish and wildlife; superlative recreational opportunities; energy, mineral and timber resources; and 18 percent of the nation's drinking water to nearly 124 million Americans. More than 420 animals and plants listed under the Endangered Species Act and an additional 3,500 at-risk plants and animals are found on Forest Service lands, yet programs that support wildlife such as Wildlife and Fisheries Habitat Management, Land Management Planning, and Inventory and Monitoring face dire funding shortfalls including the loss of 15 percent of botanists and fisheries and wildlife biologists since 2003. In addition, watershed health is being severely degraded by the Forest Service's oversized road system, but lack of funding has hampered progress towards shrinking this fiscally and environmentally disastrous system. Moreover, sound planning regulations are the foundation of balanced management of all the resources on our national forests and grasslands and Secretary Vilsack's stated commitment to develop legal planning regulations requires a commensurate investment. Finally, resources are needed to establish restoration programs and plans to transition the national forests and grasslands to a restoration focus and economy.
- Lands overseen by the Bureau of Land Management encompass 258 million acres, the largest of any of the federal land management agencies that includes the National Landscape Conservation System, yet its funding is the most meager. Values supported by BLM lands are similar to many of those on National Forest System lands and the importance of these places for the preservation of vital natural systems such as sagebrush, prairie grassland, and desert and the fish and wildlife that live there is increasingly being realized. The diverse habitats managed by BLM support over 3,000 species of fish and wildlife, more than 300 federally proposed or listed species, and more than 1300 sensitive plant species, however programs that support wildlife such as Wildlife and Fisheries and Threatened and Endangered Species Management, Plant Conservation, and Challenge Cost Share receive only skeletal funding. Further, the continuing practice of diverting BLM wildlife program resources to support ever-growing energy development on its lands must be stopped, and, given the greatly expanded renewable energy initiative, wildlife programs must have the resources to ensure that development occurs in a balanced fashion so that sustainable fish and wildlife populations can be maintained.
- The National Park System is the crown jewel of America's public lands. The 392 historic sites, battlefields, national monuments and parks roll out the welcome mat to nearly 300 million visitors per year. These important places protect habitat for 378 threatened or endangered species, preserve 1.5 million

archeological sites, showcase 100 million museum items including George Washington's inaugural coat, provide a home for the world's largest carnivore, the Alaskan Brown Bear and the world's largest living things, Giant Sequoia trees, and protects the highest point in North America-- Mt. McKinley, the longest cave system in the world at Mammoth Cave National Park, and the country's deepest lake-- Crater Lake. These lands are vibrant, living environments and historic sites where the pressures brought by burgeoning visitation must be carefully calibrated and managed to ensure that the resources themselves are preserved, unimpaired for the enjoyment of future generations. Five years remain before the National Park System celebrates its centennial. In that time, visibility and focus on the role that national parks play in American society will swell at the same time that the National Park Service is struggling to manage these lands with a significant shortfall in operations funding and a mammoth backlog of construction and major maintenance projects that exceeds \$9 billion. Continued investment in the parks, with an eye to recovery by the 2016 centennial, will not only be critical to the parks themselves, but to the gateway communities that surround them. Studies have shown that every dollar invested in parks generates four times the economic benefit for the communities that surround the parks – a factor that may be critical to the economic recovery of a great many rural communities from Alabama to Alaska.

The Land and Water Conservation Fund (LWCF) continues to be the premier federal program to conserve irreplaceable lands throughout the nation. It is a critical and popular tool to acquire inholdings, expansions of public lands, and new federal designations throughout the national parks, national wildlife refuges, national forests, wild and scenic river corridors, national scenic and historic trails, the Bureau of Land Management lands and other federal areas. President Obama has pledged to fully fund LWCF by 2014, and Secretary of the Interior Salazar sees the program as a catalyst for his Great Outdoors America initiative. In 2010, Congress began to restore much needed funding to LWCF by appropriating over \$300 million to the program. More is needed in the coming years, however, to reach the full funding level of \$900 million. These investments are critical to maintaining the health of our public lands, our quality of life, our recreational opportunities and our economic well-being.

Conservation programs within the Farm Bill are crucial to wildlife conservation on private lands. Because roughly 70 percent of lands in the contiguous U.S. are in private ownership and because more than 65 percent of threatened and endangered species exist on private lands, how farmers, ranchers, and other private landowners manage their lands has a huge impact on the future of wildlife. The 2008 Farm Bill, while providing increased funding for some working lands programs like the Environmental Quality Incentives Program, left traditional conservation programs like the Wildlife Habitat Incentives Program funded at the same level as the 2002 Farm Bill. These programs must all be funded at no less than the levels mandated in the 2008 Farm Bill, which are still below the levels needed to meet our nation's many conservation challenges.

Our nation's 2,000 mile border with Mexico encompasses a spectacular array of wildlife and habitats severely impacted in recent years by illegal immigration and related enforcement, with little committed funding forthcoming to address needs such as resource protection, habitat restoration, and monitoring. Most damaging are large scale construction projects including hundreds of miles of border security infrastructure deemed not subject to federal environmental laws through a broadly opposed waiver invoked by the Secretary of Homeland Security that necessitate substantial sums of money to mitigate extensive adverse impacts on wildlife and habitat.

Finally, climate change is the challenge of our time and the federal government must embark on a coordinated effort at the landscape scale, supported by a comprehensive national strategy, effective science, and robust funding, to help preserve the nation's array of lands and wildlife in the face of its impacts. Crosscutting programs in the Department of the Interior and Agriculture that support this effort, such as Fish and Wildlife Service's Landscape Conservation Cooperatives, Climate Change Adaptive Science Capacity, and State and Tribal Wildlife Grants Program, Bureau of Land Management Tackling Climate Impacts, and the USGS National Climate Change and

Wildlife Science Center, are just in their initial stages and must receive significant funding in the coming years to have any chance of success in the face of this overwhelming peril.

CONCLUSION

President-elect Obama and the 111th Congress have made a strong initial investment in our country's natural resources after years of neglect and misguided priorities. This report is intended to serve as a guide towards achieving further progress. It outlines the most critical needs for many environmental programs and agencies, and provides a recommendation of the funding needed to satisfy those needs. The decisions to provide sufficient funding for our important environmental priorities will have significant implications in improving air quality, cleaning up our water resources, enhancing public health levels, protecting our diverse wildlife, and maintaining our unique landscape. Investments in these priorities now can help to halt and reverse the degradation that is happening to our exceptional wildlife and lands. We owe it to the future generations of Americans to make the necessary investments now to preserve our natural heritage, public health, clean air, and water.

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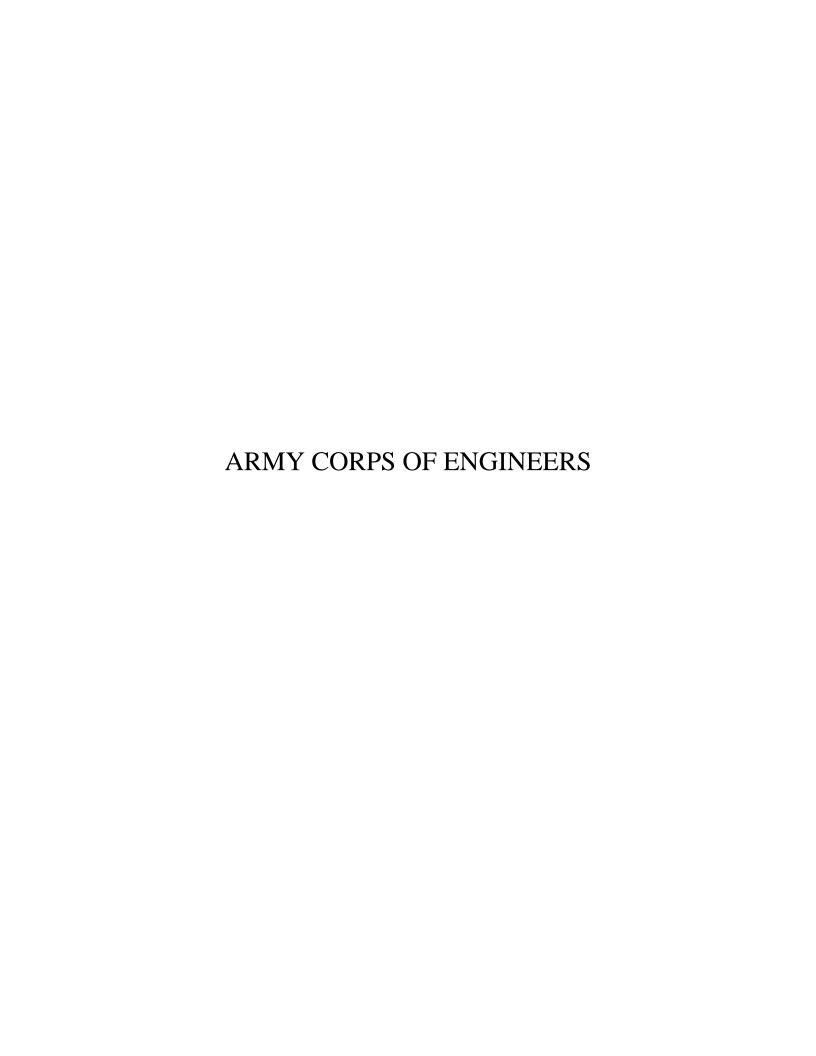
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Project Modification for Improvement of the Environment

The Project Modification for Improvement of the Environment program (Section 1135) allows the U.S. Army Corps of Engineers (Corps) to restore river systems degraded by existing Corps projects. Under Section 1135, the Corps can modify existing dams and flood control projects to increase habitat for fish and wildlife, and restore areas affected by Corps projects. Non-federal interests must provide for 25 percent of project costs, and modifications must not interfere with a project's original purpose. The need for funding of such modifications through the Corps' Continuing Authorities program has escalated in recent years with many new projects being authorized without commensurate funding. WRDA 2007 increased the program's annual authorized ceiling from \$25 million to \$40 million.

FY 11 Recommendation:

Project Modification for Improvement of the Environment - \$40.0 million Fully funded at its authorized level at an increase of \$15.8 million over the FY 10 enacted level of \$24.2 million

Aquatic Ecosystem Restoration

Established in 1996 Section 206, the Aquatic Ecosystem Restoration program, allows the Corps to undertake small-scale projects to restore aquatic habitat, even in areas not directly harmed by past Corps projects. Projects carried out under this program must improve the quality of the environment, be in the public interest, and be cost-effective. Individual projects may not exceed \$5 million, and non-federal interests must contribute 35 percent of project costs. WRDA 2007 authorized an additional 43 projects and increased annual programmatic ceiling from \$25 million to \$50 million.

FY 11 Recommendation:

Aquatic Ecosystem Restoration - \$50.0 million Fully funded at its authorized level; an increase of \$22.9 million over the FY 10 enacted level of \$27.1 million

Flood Hazard Mitigation and Riverine Restoration (Challenge 21)

Escalating flood losses are a continuing national concern. Over the past 25 years, the federal government has spent more than \$140 billion for traditional structural flood control projects and flood damage recovery. Flooded communities are increasingly seeking and implementing non-structural solutions to reduce flooding. In addition to reducing flood losses, non-structural projects help meet many other goals of riverside communities, including improving water quality, increasing opportunities for recreation, and improving and restoring wildlife habitat. Challenge 21, a flood damage reduction program authorized in 1999 and reauthorized in 2007, is designed to help support non-structural flood control solutions. Challenge 21 allows the Corps to relocate vulnerable homes and businesses in smaller communities, restore floodplain wetlands, increase opportunities for riverside recreation, and improve quality of life in riverside communities. Challenge 21 also authorizes the Corps to work with other federal agencies to help local governments reduce flood damages and conserve, restore, and manage riverine and floodplain resources with local communities providing 35 percent of project costs. Widespread need exists for such funding across the nation, including through many specifically authorized non-structural projects, and especially in Coastal Louisiana communities devastated by hurricanes.

FY 11 Recommendation:

Flood Hazard Mitigation and Riverine Restoration Program - \$20.0 million Fully funds program at an increase of \$20.0 million over the FY 10 enacted level of \$0.0

National Levee Safety Program

The National Levee Safety Program (NLSP) was established by the Water Resources Development Act of 2007 with two primary requirements- form a Committee on Levee Safety to develop recommendations and an implementation plan for a National Levee Safety Program, and inventory federal and non-federal levees across the nation. There are thousands of miles of levees across the U.S. that were constructed and are maintained in a haphazard way by all levels of government and private entities. Millions of people live and work in the flood risk areas behind these levees and have the right to know the condition of the structures they rely on. As a key initial step to assess levee safety, the Corps is developing a comprehensive inventory of levees across the nation ,but much work remains to be done toward completing this inventory.

FY 11 Recommendation:

National Levee Safety Program - \$20.0 million An increase of \$10.5 million over the FY 10 enacted level of \$9.5 million

Navigation and Ecosystem Sustainability Program (NESP)

The Navigation and Ecosystem Sustainability Program is a long term plan to balance navigation needs and ecological restoration in the Upper Mississippi River System. It will tackle many of the cumulative environmental impacts incurred from operating the river as a navigation system. The Corps will have a wide range of options from flood plain restoration and dam removal to land acquisition through easements to accomplish its restoration goals. Projects developed under this program will undergo independent analysis and will be monitored to assure that project goals are being met and taxpayer dollars are being used wisely. The NESP was authorized as part of the Water Resources Development Act of 2007.

FY 11 Recommendation:

Navigation and Ecosystem Sustainability Program - \$17.0 million An increase of \$10.7 million over the FY 10 enacted level of \$6.276 million

Upper Mississippi Environmental Management Program: II, IA, MN, MO & WI

More than half of the fish and wildlife habitat created by the Mississippi River's backwaters and side channels could be lost by 2035 if the management of the river does not improve. This would lead to a catastrophic collapse of the nation's most productive and diverse inland fishery. Loss of river habitat also threatens a \$1.2 billion river-recreation industry, which supports 18,000 jobs. The Upper Mississippi River Environmental Management Program (EMP), the primary habitat restoration and monitoring program on the Upper Mississippi, has a goal of restoring more than 97,000 acres of habitat; the Army Corps reports that EMP has restored or created 28,000 acres of habitat.

FY 11 Recommendation:

Environmental Management Program - \$33.2 million

Fully funded to program authorization at an increase of \$16.8 million over the FY 10 enacted level of \$16.4 million

Missouri River Fish and Wildlife Recovery Project: IA, NE, KS & MO

The Missouri River Fish and Wildlife Recovery Project is the primary habitat restoration program for the lower Missouri River between Sioux City and St. Louis. Congress established it in 1986, primarily to help reverse the long-term impact on habitat due to the federally sponsored channelization and stabilization projects of the Pick-Sloan era. Supporting the Missouri River Fish and Wildlife Recovery Project will help reverse the decline of river wildlife by restoring historic chutes, side channels, wetlands, backwaters, and other habitat that fish and wildlife need to survive.

FY 11 Recommendation:

Missouri River Fish and Wildlife Recovery Project - \$85.0 million An increase of \$28.3 million over the FY 10 enacted level of \$56.7 million

Lower Columbia River Ecosystem Restoration OR & WA

Coastal estuaries in the Pacific Northwest play a vital role in supporting healthy stocks of wild salmon and steelhead trout and other species and improving the quality of life of countless communities. They provide critical habitat for other fish and wildlife, offer abundant recreational opportunities, support the cultural and subsistence practices of the region's Indian tribes, and improve water quality by filtering out toxic contaminants, sediments, and other pollutants. The Northwest Coastal Estuary Program, run by the Corps, is a stakeholder driven program that offers a great opportunity to enhance fish and wildlife habitat on the Lower Columbia River and Tillamook Bay. The program is designed to restore more than 16,000 acres of critical fish and wildlife habitat, augment existing monitoring efforts, and help citizens protect and manage resources by bringing together local governments, state, Indian tribes and federal agencies, environmental groups, ports, and citizens.

FY 11 Recommendation:

Lower Columbia River Ecosystem Restoration - \$2.0 million An increase of \$400,000 over the FY 10 enacted level of \$1.6 million

Water Resource Priorities Study

Authorized in the WRDA 2007, this study is intended to assist in identifying regional and national flooding vulnerabilities, the effects of existing programs on floodplain development patterns and improvements to programs to reduce flooding risks.

FY 11 Recommendation:

Water Resource Priorities Study - \$2.0 million An increase of \$2.0 million over the FY 10 enacted level of \$0.0

Floodplain Management Services and Planning Assistance to States

Two Corps of Engineers continuing authorities programs, Flood Plain Management Services (FPMS) and Planning Assistance to State (PAS), have been especially valuable in helping to reduce the nation's flood risk through nonstructural flood damage reduction solutions, while at the same time often promoting protection and restoration of the environment. Both these programs have been underfunded and highly subscribed, but can provide critically needed assistance to communities and states in addressing flood-related problems through floodplain management and land use planning, development of open space and greenways, building elevations, and floodproofing. This can often be accomplished at far less cost than traditional and environmentally-damaging structural methods such as dams, levees, stream channelization, jetties and sea-walls.

FY 11 Recommendation:

Fully fund the Flood Plain Management Services - \$15.0 million Fully fund the Planning Assistance to States - \$10.0 million An increase of 6.94 million and 2.84 million, respectively, above the FY 10 enacted levels of \$8.059 million (FPMS) and \$7.161 million (PAS)

Individual Dam Removal River Restoration Projects

Over the past 110 years, the United States has led the world in dam building for a variety of uses, including hydropower, irrigation, flood control and water storage. While they can provide benefits to society, numerous dams have outlived their intended purpose and no longer make sense. Many are old, unsafe, and represent a threat to their river ecosystems. Individual dam removal projects initiated by the Corps need federal appropriations to move forward. These projects will restore natural river functions and restore access to migratory fish habitat, and provide cultural and economic benefits to neighboring communities. Each of these projects has been endorsed by a wide range of stakeholders and approved for federal action.

FY 11 Recommendation:

Matilija Dam Removal - \$1.0 million for construction An increase of \$1.0 million over the FY 10 enacted level of \$0.0 Rindge Dam Removal - \$595,000 An increase of \$595,000 over the FY 10 enacted level of \$0.0

Rio Grande Environmental Management Program

The Rio Grande River Basin and its tributaries provide key environmental services including flood control, clean drinking water, reduction in fire risk, and wildlife species habitat. A healthy and functioning river ecosystem helps sustain the economy and quality of life for millions of people living in the southwest US, provides improved recreational opportunities, and supports local and regional tourism.

The Water Resources Development Act of 2007 (Public Law 110-114), enacted in November 2007, authorized the development of a Rio Grande Environmental Management Plan (RGEMP referred to Section 5056). Under this law, the Army Corps is required to create a program for 1)

the planning, construction, and evaluation of measures for fish and wildlife habitat rehabilitation and enhancement and for 2) long-term monitoring, computerized data inventory and analysis, applied research, and adaptive management within the Rio Grande River Basin. The Act authorizes an appropriation of \$15 million to carry out this effort for each of fiscal years 2008 through 2011 but has never been funded.

FY 11 Recommendation:

Rio Grande Environmental Management Program - \$15.0 million *An increase of \$15.0 million over the FY 10 enacted level of \$0.0*

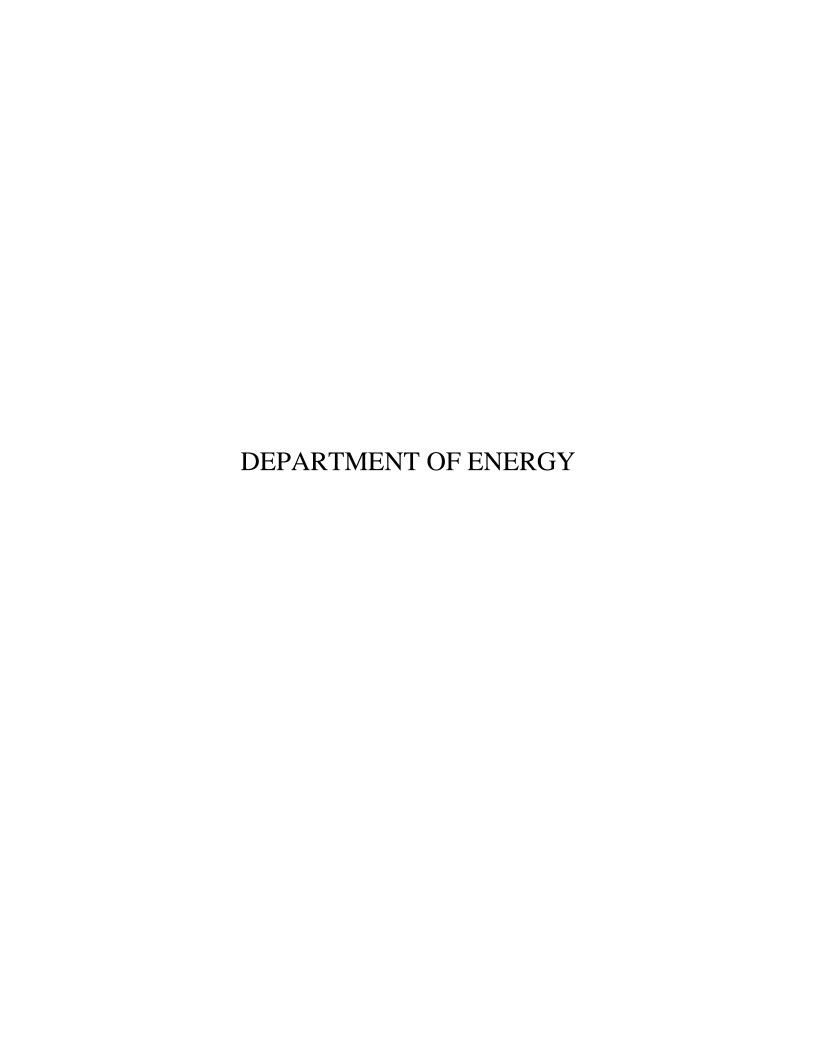
Estuary Restoration Program

The Army Corps of Engineers' Estuary Restoration Program is a comprehensive program for the restoration of our nation's estuaries, authorized through the Estuary Restoration Act. Among the most productive ecosystems on earth, estuaries provide vital habitat to fish and wildlife species, and important environmental, cultural, and recreational benefits to human populations. The Act encourages coordination among all levels of government, and engages the unique strengths of the public, non-profit, and private sectors. The Act ensures a strong federal commitment and resources to restore estuary habitat by authorizing \$25 million for the Army Corps for implementation of on-the-ground restoration projects.

FY 11 Recommendation:

Estuary Restoration Program - \$5.0 million

An increase of \$4.0 million over the FY 10 enacted level of \$1.0 million



Since the release of our last Green Budget, there have been several potentially transformative developments in the clean technology sectors and at the Department of Energy (DOE). Through the American Recovery and Reinvestment Act of 2009 (ARRA), DOE received a one-time boost of \$36.7 billion in funding, spread across a range of programs. ARRA included provisions for new grants, deployment mechanisms and loan guarantees that were unique in scope and impact. DOE added hundreds of new staff and outside analysts to manage the use and commitment of ARRA's provisions. The arrival of the Obama Administration brought a renewed dedication to the implementation of a clean energy economy. A new Nobel-prize winning physicist was sworn in as DOE Secretary, along with a plethora of senior staffers, many possessing deep clean energy and efficiency expertise. The President himself proposed spending \$150 billion over the next decade on alternative energy resources.

However, other negative developments temper this optimism and threaten the progress we are making. America's nascent renewables and energy efficiency industries face a weak economic and investment environment. Furthermore, temporarily low (and heavily-subsidized) fossil fuel prices make it difficult for renewable technologies to compete on even footing. Federal budget constraints and the sunset of numerous ARRA provisions could further hinder the promising steps we have taken to propel our new clean energy future.

It is within this context, and an understanding of the truly unique environment that DOE is currently operating in, that we make our recommendations for DOE appropriations in the upcoming FY 11. There are two main considerations driving our recommendations:

- The importance of supporting a diverse suite of early-stage and maturing clean technologies.
- The value of ensuring that recent ARRA expenditures are awarded, monitored and leveraged in a strategic and effective manner.

Supporting a Diverse Suite of Technologies

The environmental community does not seek to pick individual technologies. No one clean technology or efficiency project can de-carbonize our energy, transportation and manufacturing infrastructures. Instead, we believe a wide-ranging portfolio approach is critical. The core priorities of DOE's Office of Energy Efficiency and Renewable Energy (EERE) should remain focused on development and deployment of a diverse portfolio which includes early-stage and maturing technologies that abate carbon emissions at low cost. As needed, DOE should work towards this goal by reprioritizing funds away from mature, carbon-intensive technologies and projects that should be able to compete in the marketplace on their own.

Spending Stimulus Funding Effectively and Sustainably

Ensuring that recent ARRA expenditures are awarded, monitored and leveraged in a timely, strategic and effective manner is essential. DOE should be provided with the necessary funding to hire and reallocate appropriately certified and trained staff and external consultants to meet these goals. Additionally, funding should be available to guarantee the development of necessary monitoring protocols and accountability procedures.

DOE is home to much of the energy efficiency and renewables research, development, and deployment activities in the country. During a time of economic crisis, the DOE has the opportunity to help forge a stable energy future that supports instead of hinders our economy, make our country safer, and make our environment cleaner. Clean technology, which should be fostered at DOE, is a good investment for taxpayers. DOE must step in and be a leader on research, development, demonstration, and deployment to ensure that vital private and public sector investment in clean energy continues, and that we continue on the important path to national energy independence.

ENERGY EFFICIENCY AND RENEWABLE ENERGY

Biomass and Biorefinery Systems R&D Program

Biomass power funding should support cleaner combustion, gasification, pyrolization, and digestion technologies for electric generation with biomass. A variety of feedstocks should be tested for emissions within these technologies with an emphasis on distributed generation with small biomass systems. Programs should work together to develop a biorefinery or polygeneration plant that can be operated in the U.S. to produce clean fuel, power, and chemicals. The biomass program should limit its focus on the use of corn and instead concentrate on sustainably-sourced cellulosic feedstocks, such as agricultural and forestry waste materials, and waste oils for biodiesel.

Moreover, the program should develop biomass based energy for applications, such as aviation, where few sustainable alternatives exist. In developing these resources, it is critical that the program estimate the environmental impacts of competing technologies at broad commercial deployment. Understanding the individual and aggregate direct and indirect impacts of feedstock cultivation through product end use will provide a clearer comparison of technology pathways and will enable a sustainable foundation for emerging technologies. Avoiding foreseeable environmental impacts will foster commercial success by limiting exposure to regulatory and political risks once these technologies achieve mass deployment.

The biofuels program should focus on cost reductions for advanced biofuels, including fermentation, gasification or pyrolization of cellulosic biomass and biomass waste streams into biofuels, bioproducts, and biopower. Additional funds should be allocated towards research, development and demonstration of next generation biofuels such as algae, building on existing efforts via ARRA. These funds should go towards establishing information resources for all stakeholders; specifying sustainability metrics; encouraging industry collaboration; establish precautionary principals with regards to synthetic biology and other genetic technologies used for algae fuel production; and conducting life cycle analysis (LCA) of multiple algae fuel production processes. Appropriations associated with biomass power should be directed towards industry commercialization partnerships.

Finally, increased funding should be provided for sustainability research, which will focus on limiting the environmental impacts from biofuels production. Sustainability initiatives are currently supported within the Feedstocks Infrastructure and Strategic Priorities and Impact Analysis subprograms. The Feedstocks sub-program manages field-based research to evaluate nutrient and carbon cycling and develops sustainability criteria. Strategic analysis activities include conducting lifecycle analysis of GHG emissions (including direct and indirect emissions), and analyzing land use change and water usage and degradation from biofuels production and use. Funding in the past few years has been limited for these programs – around \$5 million in FY 10. We recommend significantly increasing funding for sustainability projects and programs through the Feedstocks Infrastructure and Strategic Priorities and Impact Analysis subprograms to \$25 million per year.

FY 11 Recommendation:

Biomass and Biorefinery Systems R&D Program - \$270.0 million

An increase of \$48.0 million from the FY 10 enacted level of \$222.0 million (which included an additional \$786.5 million in ARRA funding)

Solar Energy Technologies Program

The Solar Energy Technologies (SET) program supports research and development on technologies such as solar photovoltaics (PV) and concentrating solar power. While not directly receiving ARRA funds, the solar industry received significant indirect support from ARRA, including cash grants in lieu of tax credits, manufacturing tax credits, and subsidized loan guarantees. This support, combined with increased investor interest, innovative new financial mechanisms, and a significant decrease in manufacturing costs, builds on several years of impressive solar growth, and has the potential to dramatically increase solar deployment.

Given this expected growth, addressing integration issues (i.e. integrating variable solar power into the grid) will be a big challenge. SET efforts in market transformation and particularly systems integration should be supported by increases in funding. Allowing SET to leverage ARRA investments in smart grid technologies could also be beneficial for broader grid integration efforts. A corollary issue to the anticipated increase in solar installations within market transformation is the challenge of managing environmental permitting and siting issues. We support the rapid deployment of those renewable energy sources that are needed to help stabilize the climate, provided that it occurs in ways that also protect wildlife, land, water and air. In order to ensure that large-scale deployment occurs quickly and sustainably, we support expanding SET's efforts in this area with additional funding in order to advance model state and regional renewable energy projects. Importantly, there are several areas within the market transformation and integration sub-programs that benefit both PV and CSP technologies (especially permitting and environmental initiatives, interconnection and integration). Thus investment in these overlapping sub-programs could benefit both PV and CSP, maximizing the efficacy of funding.

A key area with significant domestic economic potential involves SET's new manufacturing initiative that seeks to foster cooperation across the solar industry on common issues, and facilitate collaboration among scientists, engineers and others within the academic community. For example, the U.S. currently maintains global leadership of thin film technologies, due in large part to significant investment during the past decade. SET needs funding that ensures the sustained transfer of this U.S. innovation into the marketplace to leverage the federal investment, capture global scale-up of thin film technologies within the U.S. (i.e. become a net exporter) and meet growing domestic demand.

FY 11 Recommendation:

Solar Energy Technologies Program - \$250.0 million

An increase of \$25.0 million over the FY 10 enacted level of \$225.0 million

Wind Energy Program

Wind energy continues to demonstrate strong growth and continued potential as a mature, clean, affordable energy resource. Wind generating capacity has increased tenfold from 2.5 GW in 2000 to 25 GW by the end of 2008. We support the rapid deployment of wind generation that is needed to help stabilize the climate, provided that it occurs in ways that also protect wildlife, land, water and air. DOE's Wind Energy program is responsible for RD&D efforts to improve wind energy generation technology, enhance domestic economic benefit from development, and to address barriers to the use of wind energy in coordination with stakeholders.

Federal investment is now more important than ever and continued research is critical to drive new innovations into the marketplace and to advance domestic manufacturing of wind power. With credit markets still in flux and natural gas prices under \$6 per million Btu, the need for the US industry to maintain a competitive position is urgent. As the Department of Energy's "20 percent Wind Energy by 2030" report found, meeting the 20 percent wind energy goal by 2030 requires capital costs to decrease by 10 percent and capacity factors to increase by 15 percent.

Technology improvements through federal research and development and programmatic funding to overcome other challenges are crucial to meeting the 20 percent mark.

Furthermore, with insufficient transmission transfer capacity to access remote wind resources, infrastructure constraints will continue to be the most critical barrier to the continued expansion of wind energy, both on and offshore. The Department of Energy can play a critical role by funding research to reduce the cost of wind power, especially for wind turbines designed to access lower wind speeds. Making lower wind class sites economic would increase the available wind resource considerably and make available vast areas with access to existing transmission capacity. This could enable an accelerated expansion of wind in the near term while new transmission is planned and built for the next generation of development. The National Renewable Energy Laboratory has already taken important first steps toward pursuing this low wind speed turbine technology research and an acceleration of the program could likely be undertaken quickly, but a renewed commitment to its funding is required now.

FY 11 Recommendation:

Wind Energy Program - at least \$95.0 million

An increase of \$15.0 million over the FY 10 enacted level of \$80.0 million (which included an additional \$118.0 million in ARRA funding)

Geothermal Technology Program

Domestic geothermal energy holds tremendous promise, producing predictable, baseload, renewable power at rates that are cost competitive with conventional energy sources. A recent report calculated that over 40,000 megawatts of geothermal power was available domestically with existing technologies. Moreover, with the development of advanced, new enhanced geothermal systems (EGS), potential geothermal capacity could reach over 500,000 megawatts. The U.S. needs to continue developing the technology and resource knowledge necessary to tap this extensive geothermal opportunity.

In the past two years, the geothermal program has seen a significant bump in funding, both in annual appropriations, and through almost \$400 million in ARRA funding. These grants were directed towards improving geothermal exploration and drilling prospects, identifying and developing new geothermal fields and data collection. Given the potential of geothermal energy, and the extensive funding that has been provided in recent years, this growing research effort should be continued. Congress formulated a comprehensive new authorization for geothermal research, which was authorized as part of EISA 2007. DOE should be directed and funded to implement this new initiative—the "Advanced Geothermal Energy Research and Development Act of 2007."

This new legislation provides DOE direction to implement a wide-ranging geothermal research program that develops the technology and information needed to tap the potential of geothermal energy across a range of applications. It provides specific direction for research into a series of areas, ranging from developing new exploration technology to enhancing environmental stewardship to EGS technology demonstrations. Congress has authorized \$90 million to be spent in FY 11 on these initiatives. They should be fully funded at the authorized level.

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¹ United States Geothermal Energy Market Report, Islandsbanki Geothermal Research, October, 2009; accessed: http://www.islandsbanki.is/english/industry-focus/sustainable-energy/research-and-publications/usgeothermal/

FY 11 Recommendation:

Geothermal Technology Program - \$90.0 million

An (increase/decrease) of \$46.0 million from the FY 10 enacted level of \$44.0 million (which included an additional \$400.0 million in ARRA funding)

Water Energy Program

New technologies that can capture energy from the oceans, such as wave, tidal, ocean current, and ocean thermal energy conversion (OTEC) power hold great promise for reducing worldwide fossil fuel use. According to the Electric Power Research Institute, ocean renewable energy in U.S. waters has the estimated potential to supply 10% of today's electrical demand. Recent increases in funding for DOE have led to the establishment of two National Marine Renewable Energy Centers in 2009 to assess the potential contribution of marine and hydrokinetic energy sources, and to develop siting best practices to minimize environmental and navigational impacts.

As a nascent industry around water energy grows, additional funding is needed for baseline monitoring data that can inform environmental analyses. Continued investment in basic research and development, and incentives for pilot and demonstration projects is critical. Once pilot and demonstration projects are deployed, federal funding to study, monitor and report on common impacts to the environment and coastal communities and the effectiveness of corresponding mitigation measures will be imperative for the industry to be sustainable. DOE should work in conjunction with National Oceanic Atmosphere Administration (NOAA) on baseline research and monitoring that can advance specific pilot and demonstration projects. In addition, there is a need for research and development (R&D) funding on project design that will have minimal effects on marine fish and wildlife. DOE should work in conjunction with NOAA to develop an R&D program for avoidance of fish and wildlife impacts. The exploration and development of ocean renewable power projects will also benefit from a publicly accessible common library of all available information on such projects. DOE should work in conjunction with NOAA to compile and publish such a library.

Marine Spatial Planning (MSP) is another critical tool in the development of offshore renewable energy. Properly administered MSP is designed to implement ecosystem-based management with the careful deployment of renewable energy technologies. A proper MSP framework needs to be developed and implemented in the United States to foster sustainable development in our oceans. A federal organization needs to take the lead on organizing the protection, maintenance, and restoration of ecosystem health and intergovernmental coordination of deployed renewables. This entity should be structured to compel accountability and transparency. In addition to federal action, regional involvement will be an important part of this process. Federal agencies can advance planning on an ecosystem basis by considering planning for all activities in or affecting marine waters in a region. The development of these federal and regional strategic marine spatial plans will require significant coordination, and funding.

New investment in existing water energy programs is also essential. Hydropower energy accounted for 7 percent of total U.S. electricity generation and 73 percent of generation from renewables in 2005. Funding for the hydropower program should be directed primarily to DOE's Advanced Hydropower Turbine System (AHTS) program and related activities. The funding should also support broadening the DOE's hydropower program to study other operational and environmental issues related to hydropower production, including the potential of hydrokinetic hydropower (dam-less hydropower) technologies. Funding should also be made available to conduct research and development that will improve the environmental, technical, and societal benefits of hydropower.

FY 11 Recommendation:

Water Energy Program - \$100.0 million

An increase of \$50.0 million from the FY 10 enacted level of \$50.0 million

Vehicle Technologies Program

As the economy recovers, the DOE's Energy Information Administration (EIA) predicts rising gasoline prices, surpassing \$3.00 per gallon within 3 years and \$4.00/gal by 2017. To help working families reduce their fuel bills, combat global warming, and reduce the U.S.'s dangerous dependence on oil, increasing the fuel economy of motor vehicles is a top priority. The Department of Transportation and the Environmental Protection Agency recently proposed improved vehicle fuel economy and greenhouse gas emissions standards to reach the equivalent of 35.5 miles per gallon (mpg) by 2016. While the 2016 standards can be achieved with existing commercialized technology, federal research and development on advanced technologies to improve fuel economy and cut emissions carried out by the DOE Vehicle Technologies program are essential to achieving further reductions in petroleum consumption and global warming pollution.

A central plank of President Obama's campaign platform was to strengthen America's oil security and energy independence by cutting oil consumption by at least 10 million barrels per day by 2030. Achieving this goal requires boosting fuel economy to at least 55 mpg by 2030. The Vehicle Technologies program should prioritize research to reach the 2030 oil reduction targets and put the transportation sector on a trajectory to meet long-term GHG emissions reduction targets of 80 percent by 2050. To that end, the Vehicle Technologies program should focus on technologies such as advanced lightweight materials, advanced batteries, improved power electronics, electric motors, and advanced combustion engines, and solutions that integrate plug-in vehicles to the grid in a way that maximizes grid security and stability and GHG reductions.

FY 11 Recommendation:

Vehicle Technologies Program - \$355.0 million

An increase of \$44.0 million from the FY 10 enacted level of \$311.0 million (which included an additional \$43.4 million in ARRA funding)

Building Technologies Program

Energy use by residential and commercial buildings accounts for over one-third of the nation's total energy consumption, including two-thirds of the electricity generated in the U.S. Residential and commercial building emissions together make up approximately 38 percent of annual U.S. greenhouse gas emissions and are growing twice as fast as the overall average.

Of all the DOE energy efficiency programs, the Building Technologies Program continues to yield perhaps the greatest energy savings. A National Research Council study found that just three small buildings research and development programs – in electronic ballasts for fluorescent lamps, refrigerator compressors, and low-e glass for windows – have already achieved cost savings totaling \$30 billion, at a total federal cost of about \$12 million. The DOE Building Technologies Program recently added solar heating, cooling, and lighting to its portfolio. These technologies are crucial for further reducing energy consumption and indirect carbon emissions from buildings. Expanded funding for these technologies is needed.

The Building Technologies Program account has been chronically underfunded. However, substantial progress was made last year when Congress increased funding to \$200 million (from \$140 million in 2009.) Congress should

maintain funding for targeted areas including building codes and standards, Energy Star, equipment standards and analysis, the Commercial Buildings Initiative (CBI), and the Building America Program. Congress should also establish funding for the new national building rating program and increase funding for EIA data collection. Additionally, DOE should re-invigorate the research and development program on equipment such as heating and cooling, appliances, windows, and building envelope, all of which have been underfunded for several years. The Equipment Standards and Analysis sub-account of the Building Technologies Program should receive \$25 million. Federal appliance standards already save an estimated 2.5 percent of all U.S. electricity use; existing and draft standards are expected to save consumers and businesses \$186 billion by 2020. A number of standards, however, are many years behind schedule and appear stalled. DOE recently settled a lawsuit brought against the Department demanding that it issue long overdue minimum efficiency standards required by federal law for many energy-using products. Developing standards is a costly process and DOE needs adequate resources to carry out its responsibilities.

FY 11 Recommendation:

Building Technologies - \$220.0 million, including at least \$40.0 million for the Building America/ Zero Net EnergyHomes Program, \$30.0 million for CBI, \$25.0 million for building energy codes, \$10.0 million for the national building rating programs, and \$15.0 million for DOE Energy Star.

An increase of \$20.0 million over the FY 10 enacted level of \$200.0 million

Industrial Technologies Program

Making energy intensive industries more efficient is one of the fastest, cheapest ways to achieve real global warming reductions in the near future. In McKinsey & Company's July 2009 report on energy efficiency potential in the U.S.², they estimate the industrial sector can reduce its primary energy consumption by 21 percent relative to business-as-usual by 2020, exclusively through capturing profitable (i.e. positive- net present value) energy efficiency opportunities. This potential will not be captured, however, unless Congress supports financing mechanisms and more R&D to develop transformational technologies. Given ITP's critical role in this effort as the only government agency focused on improving industrial efficiency, we believe that increased funding is both appropriate and necessary.

Making energy intensive industries more efficient is one of the fastest, cheapest ways to achieve real global warming reductions in the near future. In McKinsey & Company's July 2009 report on energy efficiency potential in the U.S.³, they estimate the industrial sector can reduce its primary energy consumption by 21 percent relative to business-as-usual by 2020, exclusively through capturing positive- net present value(NPV) energy efficiency opportunities. Industry will, however, need assistance, financing, and technological developments to capture such savings. Consequently, we believe increased funding for ITP is essential to fully realize this potential.

ITP is organized into two main programs. The first is R&D, which receives approximately 80 percent of the funding. The remaining funding goes towards Technology Delivery.

The R&D program invests in the development of more energy-efficient, transformational technologies, some of which are specific to certain high-priority, energy-intensive industries (e.g., aluminum and steel) and some of which are "crosscutting technologies" that are common to a wide range of industries (e.g., CHP). Due to a lack of

² http://www.mckinsey.com/clientservice/electricpowernaturalgas/US energy efficiency/

³ http://www.mckinsey.com/clientservice/electricpowernaturalgas/US_energy_efficiency/

sufficient funding, more resources are currently being allocated toward "crosscutting technologies." Costs are often shared with the private sector in the case of industry-specific R&D.

The Technology Delivery program helps companies across the country identify and address affordable energy-saving and carbon-reducing opportunities in their plants through conducting plant assessments, and providing technical assistance, tools, and training to improve industrial energy efficiency. According to DOE, ITP's Save Energy Now effort (housed within the Technology Delivery Program) conducted 200 plant assessments in 2007 that identified large energy and cost savings for a variety of manufacturers. These savings were equivalent to 5 to 15 percent of plant energy use, which translated to an average cost savings of \$2.5 million per plant annually.

A February 2009 Peer Review of ITP⁴, with the evaluators consisting of 10 prominent third-party experts, determined that ITP "effectively uses its resources to achieve *significant results*, despite its recent continually declining budget... The Technology Delivery program was found to be deserving of particularly high praise." In addition, the peer review panel found that "ITP's current goal to reduce industrial energy intensity by 25% in ten years is unrealistic and too ambitious at current ITP budgetary levels... More funding and an articulated long term commitment to the program are needed from the new Administration and Congress to achieve the current goals."

One of the major barriers to capturing industrial energy efficiency is the lack of sufficient financing options. Greater funding for ITP should go in large part to supporting the build-out of this capability within ITP to be able to understand - and work with third-parties to develop – financing mechanisms that could help industry deploy energy-efficient technologies. Through this, the effectiveness of the Technology Deployment program would be significantly enhanced.

FY 11 Recommendation:

Industrial Technologies Program - \$150.0 million

An increase of \$54.0 million over the FY 10 enacted level of \$96.0 million

Federal Energy Management Program

The federal government is the single largest energy consumer in the United States. In an effort to cut energy consumption by the federal government, the Federal Energy Management Program (FEMP) has helped worked with federal agencies to cut the federal building's energy waste by 24 percent from 1985 to 2001 – a reduction that now saves federal taxpayers roughly \$1 billion each year in reduced energy costs. The program has also helped DOE obtain nearly 7 percent of its energy use from renewable energy sources, surpassing the federal 2.5 percent goal.

FY 11 Recommendation:

Federal Energy Management Program - \$40.0 million

An increase of \$8.0 million from the FY 10 enacted level of \$32.0 million (which also included an additional \$43.4 million in ARRA funding)

Weatherization Assistance Program

In FY 09, the Obama administration called on DOE to ramp up Weatherization Assistance program to achieve the weatherization of 1,000,000 homes each year for the next 10 to 15 years. The first two years of the necessary

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⁴ http://www1.eere.energy.gov/industry/about/pdfs/itp_peerreview_report2008.pdf

funding for this came from ARRA, which dramatically increased the WAP budget in order to meet this 7-fold increase in the rate of home weatherization. To continue to make significant progress towards the goal of weatherizing 1,000,000 homes each year, the WAP budget should be increased from the FY 10 level of \$210 million to \$500 million.

On average, weatherization reduces heating bills by 31 percent and overall energy bills by \$274 per year. During the last 27 years, WAP has provided weatherization services to more than 5 million low-income families. By reducing energy consumption and energy bills, weatherization helps low-income families save money. In addition, maintaining the level of WAP expansion created by ARRA would support many additional jobs. In tough economic times, it is federal money well spent.

FY 11 Recommendation:

Weatherization Assistance Program - \$500.0 million

An increase of \$290.0 million from the FY 10 enacted level of \$210.0 million (which included an additional \$8.1 billion in ARRA funding)

State Energy Program

Traditionally, the State Energy Program (SEP) provides grants to states to address their energy priorities, implement global warming initiatives and fund energy efficiency and renewable energy projects. Prior to ARRA, much of the program's resources have been shifted from grants to the SEP special projects account, which is charged with market transformation and with finding crosscutting solutions targeted at market sectors.

With ARRA however, the State Energy Program received a major one-time boost in allocations of \$3.1 billion. To date, half of those funds have been awarded to all fifty states, plus the District of Columbia and U.S. territories, to support a range of efficiency and renewables programs.

It will be important to ensure that the one-time ARRA increase not impact longer-term SEP initiatives. The SEP should receive additional funds for the new, important special projects account while growing the existing grants program.

FY 11 Recommendation:

State Energy Program - \$125.0 million

An increase of \$75.0 million from the FY 10 enacted level of \$50.0 million (which included an additional \$3.1 billion in ARRA funding)

The Energy Efficiency and Conservation Block Grant Program

The Energy Independence and Security Act of 2007 established a new Energy Efficiency and Conversation Block Grant Program within DOE authorized at \$2 billion per year for state and local governments initiatives that promote innovative best practices to reduce fossil fuel emissions and energy use and achieve greater energy efficiency in the building, transportation and other appropriate sectors. ARRA appropriated \$3.2 billion to this program, with \$2.7 billion awarded through formula grants, and up to \$453.72 million allocated through competitive grants. The competitive block grants will be awarded to those states and municipalities that can demonstrate a viable plan to expeditiously establish sustainable and market-transformational building retrofit programs at the community level that will create jobs and substantially leverage private capital.

DOE designed its Funding Opportunity Announcement for the competitive grants so applicants have to consider all relevant aspects of creating a functioning retrofit market in their respective communities, including workforce training and development, program design, marketing and delivery, and the development of innovative and sustainable financing mechanisms. DOE's requirement that competitive grant funds are leveraged by at least 5:1 will bring significant amounts of private capital to the table. The application process alone has generated an entirely unprecedented collaboration among private capital sources, local governments and utilities specifically directed at establishing definable and financeable pipelines of retrofit projects that did not exist before across all real estate sectors. As an added benefit, the competitive EECBG process spurred the adoption of enabling legislation by various state and local legislatures, providing the legal framework for PACE and other new financing mechanisms.

As a result of the competitive grant FOA, a large number of communities around the country are investing significant resources into developing aggressive and credible retrofit programs. The jurisdictions that receive competitive EECBG awards will be able to jump start the process of establishing the retrofit service delivery channels that are critical to ensuring that the jobs we hope to create actually materialize. However, with only \$390 million available under the current program to fund awards to states and larger municipalities (in amounts ranging up to \$75 million per grant), the competitive portion of the EECBG program will likely only assist 8-12 jurisdictions in establishing new retrofit markets – a small fraction of the entities that are putting together program applications. DOE has already expended considerable resources in carefully designing the competitive EECBG program, and the program could be expanded at marginal additional administrative expense. By substantially expanding the funds dedicated to the competitive EECBG program, the federal government could expedite the creation of sustainable retrofit markets in many more communities, and make enduring retrofit jobs a reality in jurisdictions throughout the country.

FY 11 Recommendation:

The Energy Efficiency and Conservation Block Grant Program – competitive portion (also known as the Retrofit Ramp-up Program) – \$1.0 billion

An increase of \$1.0 billion of the FY 10 enacted level of \$0.0. An increase of \$546.28 million over the ARRA enacted level of \$453.72 million for the competitive portion of the EECBG program, but a decrease of \$2.2 billion from the FY 10 enacted level of \$3.2 billion for the overall EECBG program

International Subprogram

In FY 10, the International Subprogram was part of the Office of Energy Efficiency and Renewable Energy. This subprogram was allocated a budget of \$10 million with the objectives of advancing U.S. goals for climate, energy security and economic matters; accelerating clean technology innovation; and transforming the EE and RE markets in key developing countries. The Department of Energy has signed a series of international agreements to institute regional partnerships for the promotion of clean technology development. These partnerships, which did not exist in previous years, have the potential to play a valuable role in accelerating clean technology. In light of the important role of recent regional partnerships in developing a coordinated international response to climate change, the International Subprogram has an important function in fostering international clean technology cooperation. For FY 11, its budget should be expanded accordingly.

The International Subprogram's activities should take the following forms in FY 11:

- Support of the Major Economies Forum (MEF) Clean Energy Ministerial Process

 The MEF clean energy forum will facilitate joint action and coordination of energy efficiency and renewable energy research, policy and deployment. DOE should provide key policy and technical support for the MEF process and should coordinate with the Department of State to provide administrative support for meetings, negotiations and joint policy development.
- Regional Clean Energy Centers in Partner Developing Countries:

 Regional Clean Energy Centers in partner developing countries should also facilitate joint clean energy R&D by teams of scientists and engineers from the United States and the partner countries, as well as serve as a clearinghouse to help researchers in each country. The Regional Clean Energy Centers should also be supported by private funding when possible. Initial research priorities should include building energy efficiency, renewable energy technology, carbon reduction technologies, and clean vehicles.
- Technological R&D in Key Areas Through Clean Energy Research Centers with India and China R&D support should be aimed at expanding current DOE research activities in clean energy through bilateral technical cooperation with India and China. This bilateral cooperation shall be carried out in Clean Energy Research Centers operated by the two signatory countries. R&D should focus on activities with international application as well as best practice and strategy sharing for various clean energy technologies including:
 - o Energy efficiency in buildings and industrial activities
 - o Renewable electricity generation from wind, solar, sustainably-produced biomass, geothermal, marine, or hydrokinetic sources
 - o Electric vehicles
 - o Carbon reduction technologies
 - Black carbon emissions
- Bilateral and Regional Policy and Technical Support

DOE is also increasingly playing a key role in providing policy and technical expertise to partner developing countries for energy efficiency as well as renewable energy deployment through bilateral and regional energy efforts. The international sub-program must also work with the National Labs and non-governmental policy experts to facilitate joint and coordinated clean energy policy development with partner developing countries.

FY 11 Recommendation:

International Sub-Program – \$160.0 million

An increase of \$150.0 million of the FY 10 enacted level of \$10.0 million

ELECTRICITY DELIVERY AND ENERGY RELIABILITY

This program works to develop technologies and implement policies that will improve the reliability, energy efficiency, system efficient and security of the nation's energy delivery system. Following the allocation of \$4.2 billion to Smart Grid technologies from the ARRA, additional funding will be needed to track the success of this funding. Lessons learned from these programs will be instrumental for future rounds of funds to further accelerate the deployment of smart grid technologies and to ensure their benefits to grid security, system reliability, environmental performance and economic payback were adequately realized.

The Energy Storage and Power Electronics Program needs continued increases in funding for storage technology that can provide critical load following and voltage regulation services to ensure reliable grid operation and efficient asset utilization across the system.

Finally, increased funding should be provided to address issues related to transmission system and distribution feeder operation with large quantities of variable generation from renewables (which would previously have occurred in the Renewable and Distributed Systems Integration Program). As the penetration of renewables such as wind and solar continues to increase, the marginal magnitude of their impact on system operation will continue to accelerate and keeping funding for these critical priorities at pace with these challenges will be an essential piece of meeting the nation's energy and environmental goals.

FY 11 Recommendation:

Office of Electricity Delivery and Energy Reliability - \$212.0 million *An increase of \$40.0 million from the FY 10 enacted level of \$172.0 million*

SCIENCE

Office of Science

The national laboratories represent one of the largest scientific research systems in the world. In addition, the Office of Science contributes significant funding toward several cross-agency climate-change initiatives including the Climate Change Science Program, the Climate Change Research Initiative, and the Climate Change Technology Program, among other programs. Last year, almost \$4.8 billion was allocated to the DOE's Office of Science to conduct basic R&D on mostly non-renewable energy technologies and sciences. This funding is almost exclusively allocated by the Office of Science to the national laboratories. An additional \$1.6 billion was provided by ARRA.

It is vital to increase funding for the Office of Science on a long-term and predictable basis to ensure America retains its competitive edge. While it would be preferable to target funding toward low carbon technologies, efficiency and climate change, it is difficult given the DOE's traditional focus on fossil and nuclear research, overlapping scientific missions and budgets across different programs and the need to avoid micro-managing long-term basic research. Therefore we propose a 5% increase in funding for the Office of Science, with the preference that this be targeted towards addressing climate change and fostering clean energy technologies.

FY 11 Recommendation:

Office of Science - \$5.1589 billion

An increase of \$245.2 million from the FY 10 enacted level of \$4.9037 billion

Advanced Research Projects Agency - Energy

The Advanced Research Projects Agency - Energy (ARPA-E) has been conceived as a small and nimble research entity, sponsoring transformational energy R&D currently screened out by risk-averse institutes and labs. It will further bridge the gap between basic research (especially at universities) and industrial development, while possessing greater independence and isolation from pressure to deliver short-term results.

In FY 09, ARPA-E received limited funding of \$15 million, which was significantly supplemented with \$400 million from ARRA, much of which has been allocated towards near-market-ready technologies. We propose that

ARPA-E should be funded with \$100 million, focused on high-risk, high-reward R&D, with a goal of increasing that funding to \$500 million by FY 15.

FY 11 Recommendation:

Advanced Research Projects Agency - Energy - \$100.0 million

An increase of \$85.0 million from the FY 10 enacted level of \$15.0 million

ENVIRONMENTAL CLEANUP

Uranium Enrichment Decontamination and Decommissioning Fund

The uranium enrichment decommissioning and decontamination fund (the Fund) was established in the Energy Policy Act of 1992 to clean up three uranium enrichment facilities located at Oak Ridge, Tennessee; Paducah, Kentucky; and Portsmouth, Ohio; and old mill tailings sites. Revenue for the Fund is generated by taxpayers and previously, by the nuclear industry, which used the plants starting in 1964 to enrich uranium for commercial reactor fuel at electric utility power plants. In 2007, the authorization for the taxpayer and industry fee expired, despite a \$12 billion shortfall in the estimated fund amount required to complete the cleanup. Congress should reauthorize this fee and continue to make the polluters pay for cleanup using the fairly distributed formula from the past program. In addition, the sale of any surplus material on site should be attributed to the government's share of the cleanup. While Congress considers reauthorization of the fee, it is imperative that expenditures from the fund continue so that these sites can be cleaned up and the surrounding communities protected.

FY 11 Recommendation:

Uranium Enrichment Decontamination and Decommissioning Fund - \$573.9 million

Same as the FY 10 enacted level of \$573.9 million (which included an additional \$390.0 million in ARRA funding)

Defense Environmental Cleanup

The Defense Environmental Cleanup (DEC) budget provides funding for the environmental cleanup and public health risk reduction at the more than 130 former nuclear weapons production sites around the country, including the Idaho National Laboratory, Oak Ridge National Laboratory in Tennessee, the Hanford Reservation in Washington, the Savannah River Site in South Carolina, the Waste Isolation Pilot Plant in New Mexico, several National Nuclear Security Administration sites, the federal contribution to the Uranium Enrichment D&D Fund, and of course core funding for Program Direction, Program Support, Technology Development and Deployment, and Safeguards and Security.

The DEC program has been and remains the world's largest and most expensive cleanup program and this year comes in at \$5.6 billion. As noted above, the DEC program has the responsibility to clean up the toxic and radioactive legacy of Cold War nuclear weapons production. In 2008, DOE estimated the total environmental liability to be at least \$266 billion. Even if current funding levels are maintained for the foreseeable future, the cleanup of the most contaminated sites will take decades more. Funding should be adequate to ensure that thorough cleanup continues and the Department does not seek to use relaxed cleanup requirements to save money and abandon waste on site.

With respect to radioactive contamination, a fundamental problem remains DOE's self-regulating status with respect to the cleanup of radionuclides, and therefore radioactive contamination. These inappropriate exemptions from environmental laws are not only archaic, but increase the long-term costs and environmental liabilities of the

program as they allow for practices such as continued dumping of radioactive materials into unlined soil ditches. Also, it is important to fully fund the cleanup to ensure that cleanup agreements with State and Tribal entities are met. This will not only prevent the spread of additional contamination, but ensure that the federal government does not pay penalties for unnecessarily missing important cleanup milestones. Further, compliance milestones and associated costs to meet those milestones should be publicly available. And in a related matter, the American Recovery and Reinvestment Act of 2009 (ARRA) requires transparency and accountability provisions that should be required for all DEC programs. The administration should use the ARRA provisions to institute a new level of transparency on the Energy Department cleanup.

The largest budget item for the DEC program is the ongoing work to address the remediation of the 239 underground tanks containing approximately 90 million gallons of high-level radioactive waste. This cleanup is essential to protect important water resources, such as the Snake River Aquifer, the Tuscaloosa Aquifer, and the Columbia River. For the past several years and during the previous administration, DOE has attempted to reclassify significant portions of this waste on an unfounded technical basis. Such reclassification might save budget dollars in the near-term, but will assuredly cost more over the long-term as abandoning millions of gallons of the most highly radioactive waste in the world will not be tolerated by any State. Thus, we continue to encourage HLW funding to remain focus on removal of all of the waste from the tanks and appropriate vitrification for ultimate geologic disposal.

Additionally, we remain concerned that a still significant portion of DEC's budget is used to maintain weapons infrastructure costs and non-cleanup related missions. For example, the DEC funds could be used for reprocessing of research reactor fuel at the Savannah River Site, even though that activity would increase the stockpile of separated highly-enriched uranium while generating even more highly radioactive liquid wastes. Congress must ensure adequate funding to meet all health, safety and environmental requirements and to comply with legal mandates, while endorsing non-reprocessing options. Money for work unrelated or detrimental to cleanup, such as reprocessing, should be stripped from the budget.

FY 11 Recommendation:

Defense Environmental Cleanup Program - \$6.0 billion An increase of \$400.0 million from the FY 10 enacted level of \$5.6 billion

Non-Defense Environmental Cleanup

Non-Defense Environmental Cleanup appropriation provides funding to complete the safe cleanup and risk reduction of the environmental legacy at sites contaminated as a result of civilian nuclear research and fuel production/reprocessing activities. Specifically, money from this account is spent on four programs: (1) Gaseous Diffusion Plants; (2) Fast Flux Test Reactor Facility Decontamination and Decommissioning; (3) West Valley Demonstration Project; and (4) Small Sites including the Argonne National Laboratory, Atlas (Moab) Site, Brookhaven National Laboratory, Closure Sites Administration and Program Support, Energy Technology Engineering Center, Idaho National Laboratory, Inhalation Toxicology Laboratory, Los Alamos National Laboratory, Lawrence Berkeley National Laboratory, Laboratory for Energy-Related Health Research, Oakland Sites, and Stanford Linear Accelerator Center. As the cleanup of these sites progresses, the risk and hazard to human health and the environment is greatly reduced.

FY 11 Recommendation:

Non-Defense Environmental Cleanup Program - \$244.7 million Same as the FY 10 enacted level of \$244.7 million (which included an additional \$483.0 million in ARRA funding)

DEPARTMENT OF ENERGY

LOAN GUARANTEE PROGRAMS

To boost investment in energy efficiency, the federal government should expand its Loan Guarantee Program established under Title XVII of the Energy Policy Act of 2005 to allow it to guarantee energy efficiency financing programs for building retrofits and on-site renewable energy systems, and fund this mandate with \$1 billion. Federal credit support will provide access to long-term, low-cost sources of capital at minimal cost to the federal government, and can leverage private capital by a ratio of up to 20:1. By utilizing the existing Title XVII framework, and by spelling out certain critical regulatory criteria in advance, the efficiency loan guaranty program could be operational within a matter of months, to jump start the efficiency retrofit financing market.

Of the \$51 billion in total DOE loan guarantee authority, \$18.5 is allocated for new nuclear reactors. The 2009 economic stimulus bill appropriated \$6 billion in subsidy costs for a new Section 1705 of Title XVII created for existing renewable energy and transmission projects. (Of the \$6 billion, \$2 billion were subsequently reallocated to Cash for Clunkers.) Thus far, the only loan guarantees to be distributed are for a \$535 million solar panel manufacturing project to Solyndra in California and a \$59 million conditional guarantee to Nordic Windpower and Beacon Power.

No conditional loan guarantees for new nuclear reactors have been distributed, but even if they were, they could not become final until at least 2012, which is the earliest that a license could be issued by the Nuclear Regulatory Commission. Originally, four projects were on the short list for nuclear guarantees: Calvert Cliffs in Maryland (EPR design), Vogtle in Georgia (AP1000 design), VC Summer in South Carolina (AP1000 design), and South Texas in Texas (ABWR design). The EPR design is in early review stage at the NRC. At the joint request of the French, Finnish, and British regulators, the EPR vendor Areva has agreed to revise the design so the day-to-day and emergency systems cannot fail at the same time. In October, the Nuclear Regulatory Commission (NRC) rejected the amended AP1000 reactor design, because it cannot withstand severe weather such as hurricanes, tornados and earthquakes. Meanwhile, costs have skyrocketed: the estimated costs of the South Texas Project reactors have increased from \$13 billion to \$17 billion and the City Council of San Antonio is looking into withdrawing from the project, VC Summer has increased by more than \$1 billion, and the EPR design at Bell Bend in Pennsylvania increased from \$4 billion to \$13-15 billion (there is no public cost estimate for the Calvert Cliffs reactors).

The credit rating agency *Moody's* is unimpressed by loan guarantees, concluding that new reactors are "bet-the-farm" endeavors and that the proposed loan guarantees for nuclear construction would "only modestly mitigate increasing risks." To protect taxpayers and ensure public safety, the U.S. government should not give out loan guarantees or "conditional" guarantees before a reactor is fully licensed. In the case of other guarantees, DOE has more than sufficient amount of authority for FY 11 from previous appropriations and the stimulus bill.

FY 11 Recommendation:

Expand loan guarantee program to include energy efficiency finance for building retrofits and on-site renewable energy systems.

Fuel Cycle R&D - \$0.0 million *No additional authority in FY 11*

DEPARTMENT OF ENERGY

ENERGY INFORMATION ADMINISTRATION

The Energy Information Administration (EIA) releases the most frequently cited energy reports, and its forecasts and analyses are key drivers of energy policy and investment. We recommend funding for EIA at the \$133 million level requested in the previous year. Funding for EIA and the valuable information it provides should be commensurate with the importance of the products they produce.

Priority should be placed on EIA's Commercial Building Energy Consumption Survey (CBECS) and the Residential Energy Consumption Survey (RECS), which serve as the baseline for many initiatives designed to reduce energy consumption in both new and existing buildings. In recent years EIA has needed to reduce the frequency and breadth of these surveys due to reduced budgets. As we look to EIA data as the basis for current and future programs it is essential that these data are robust and collected frequently.

With increased funding, EIA will increase the sample size of both the CBECS and RECS survey, improve the quality of building characteristic and consumption data, and allow for greater breakdown of energy use by end use. Programs with expanded survey designs and frequency would be a vast improvement over current programs because they would permit more complex analysis of key indicators of energy use, publications of more building types, and more accuracy for secondary uses of the data by other Federal agencies.

FY 11 Recommendation:

Energy Information Administration - \$133.0 million An increase of \$22.0 million from the FY 10 enacted level of \$111.0 million

NEW PROGRAMS

Energy Sustainability and Efficiency Grants and Loans for Institutions

Institutions of higher education, public schools, and local government collectively have a major impact on our nation's energy usage and carbon emissions. Higher education alone spends over \$6 billion on energy each year and \$11 billion on building construction and renovation. Energy Sustainability and Efficiency Grants and Loans for Institutions were authorized by the Energy Independence and Security Act (PL 110-140, Title 4, Subtitle F, Section 471) under the jurisdiction of the Department of Energy (DOE). This program authorizes \$750.0 million in federal assistance for renewable energy and energy efficiency projects at an institution of higher education, a public school district, a local government or a municipal utility. This bill authorizes the Department of Energy to make up to \$500 million in loans for energy efficiency programs and up to \$250.0 million in innovation grants annually. The innovation grant program funds technical assistance, energy efficiency improvements to facilities, and innovation grants for projects that test new techniques in energy efficiency and sustainable energy production. At least 50 percent of the total innovation and energy efficiency improvement grant money must be awarded to institutions of higher education, of which 50 percent of all the grants must go to institutions with endowments of less than \$100.0 million, and at least 50 percent of the innovation grants must go to institutions with endowments less than \$50.0 million. At least one energy-efficiency improvement grant and two innovation grants each year must be made to institutions of higher education in each State.

FY 11 Recommendation:

Energy Sustainability and Efficiency Grants and Loans for Institutions - \$750.0 million Energy Sustainability and Efficiency Grants - \$250.0 million Energy Sustainability and Efficiency Loans - \$500.0 million

DEPARTMENT OF ENERGY

An increase of \$750.0 million over the FY 10 enacted level of \$0.0 million

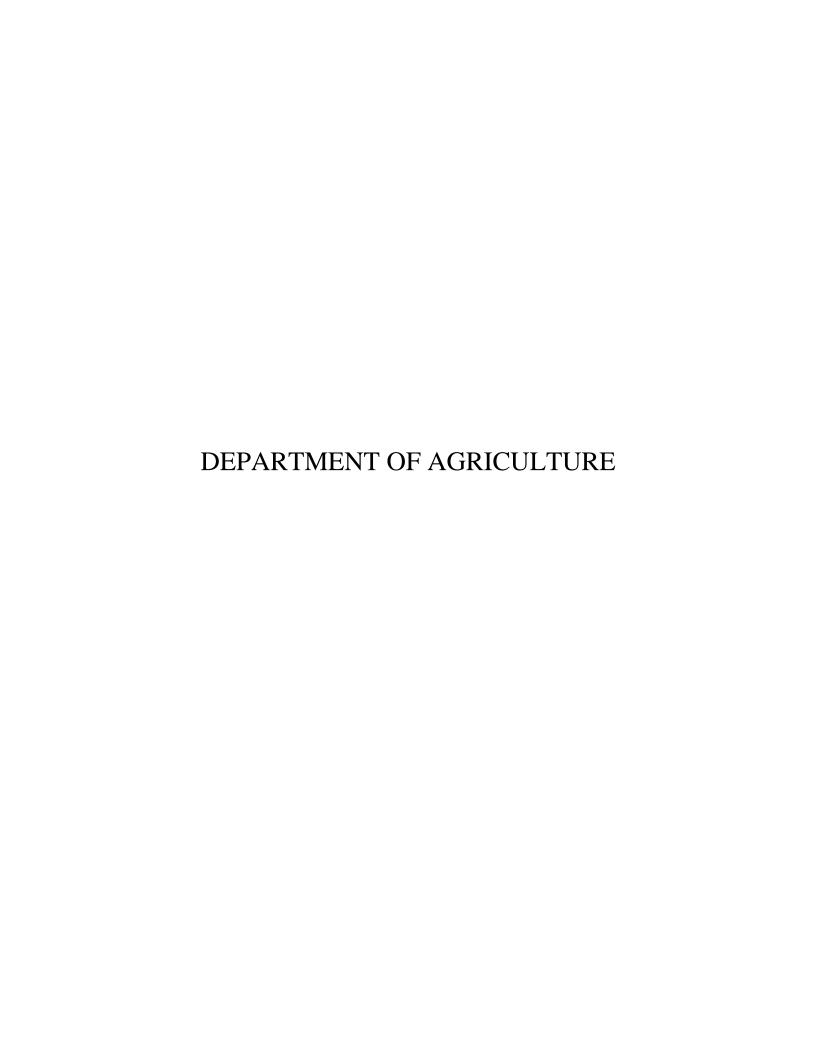
Community College Energy Training Program

The Community College Energy Training Act of 2009, which is expected to pass in the 111th Congress, will provide competitive grants to community colleges who want to initiate workforce training and education in clean industries and practices. The training areas include: Alternative energy, including wind and solar energy; Energy efficient construction, retrofitting, and design; Sustainable energy technologies, including chemical technology, nanotechnology, and electrical technology; Water and energy conservation; Recycling and waste reduction; and Sustainable agriculture and farming. The grant programs in the bill are administrated by the Department of Energy, in coordination with the Department of Labor. The bill would authorize \$100 million for each of the fiscal years FY 11 through FY 15 for grants to community colleges.

FY 11 Recommendation:

Community College Energy Training Program - \$100.0 million

An increase of \$100.0 million over the FY 10 enacted level of \$0.0 million



Natural Resources Conservation Service and Farm Service Agency

In the summer of 2008, Congress reauthorized the Farm Bill, calling it the Food, Conservation, and Energy Act of 2008. There are several small changes that affect how some of the private lands programs are implemented by the Natural Resources Conservation Service (NRCS). Finding adequate funds for the Conservation Title proved to be a real challenge for Congress. The new Farm Bill authorizes \$7.9 billion in new conservation spending. The funds predominately go to working lands programs like the Environmental Quality Incentives Program (EQIP) and leave the traditional conservation programs like the Wildlife Habitat Incentives Program (WHIP) funded at the same level as the 2002 Farm Bill. The Farm Bill also created a new program authorized at \$438 million over 5 years in new resources to protect and restore the Chesapeake Bay Region. The FY 11 budget should fully fund these programs at their newly-authorized amounts in order to maximize the conservation benefits they are able to offer to the private land owner.

The conservation programs within the Farm Bill are more important than ever given longstanding backlogs of qualified applicants for these programs, increased pressure on farmland from the biofuels boom, sprawling development, and the ongoing problems of wildlife habitat decline and water quality. The NRCS Farm Bill conservation programs include: the Wetlands Reserve Program (WRP), which provides farmers with cost-share assistance and easements to restore wetlands that have been degraded by agriculture; the Wildlife Habitat Incentives Program (WHIP), which provides assistance to producers to improve and protect wildlife habitat; the Environmental Quality Incentives Program (EQIP), which provides incentives to producers to help address a wide range of natural resource issues and to comply with environmental laws; the Conservation Stewardship Program (CSP), which provides incentives to producers who implement and maintain stewardship practices on their working lands; the Farm and Ranch Lands Protection Program (FRPP), which offers farmers payments for easements to keep their land in agricultural usage; and the Grasslands Reserve Program (GRP), intended to restore and protect up to 2.2 million acres of grasslands focusing on grazing lands, grasslands threatened with conversion, and native prairie.

The US Department of Agriculture Farm Service Agency administers the Conservation Reserve Program (CRP), which provides farmers with incentives to plant grasses and trees that protect highly erodible farmland and farmed wetlands, and create riparian buffer areas.

FY 11 Recommendation:

Fully fund all of the Farm Bill conservation programs at the funding levels mandated in the 2008 Farm Bill.

Agriculture Management Assistance Program - \$15.0 million

Agricultural Water Enhancement Program - \$74.0 million

Conservation Reserve Program - 32 million acres

Conservation Stewardship Program - 12.769 million acres

Environmental Quality Incentives Program - \$1.588 billion

Farm and Ranch Lands Protection Program - \$175.0 million

Grasslands Reserve Program - 305,000 acres

Healthy Forests Reserve Program - \$9.75 million

Wetlands Reserve Program - 250,000 acres

Wildlife Habitat Incentive Program - \$85.0 million

Chesapeake Bay Region Watershed Program - \$72.0 million

Voluntary Public Access and Habitat Incentive program - \$17.0 million

TOTAL: \$5.339 billion

USDA ENERGY PROGRAMS

The 2008 Farm Bill provided funding for programs that help farmers, ranchers and rural communities develop and adopt energy efficiency and renewable energy technologies. Key programs include:

Rural Energy for America Program

The Rural Energy for America Program (REAP) provides grants and loan guarantees for farmers and rural small businesses to install and invest in renewable energy projects and energy efficiency upgrades. REAP also provides funding for feasibility studies, energy audits and renewable energy assessments. For FY 11, Congress provided \$70 million in mandatory (Commodity Credit Corporation) funding, plus up to \$25 million in authorized appropriations. Last year, in FY 10, the Obama Administration recognized the urgent need to expand REAP and proposed a total of \$128.1 million for the program. Congress ultimately provided \$99.3 million in funding (\$60 million in mandatory funds plus \$39.3 million in appropriations).

Biomass Research and Development Program

The Biomass Research and Development Program is a joint USDA/Department of Energy program that provides funding for grants, contracts and financial assistance to carry out research, development and demonstration of methods and technologies for producing biofuels and biobased products. The 2008 Farm Bill provides \$30 million in mandatory (Commodity Credit Corporation) funding, plus \$35 million in authorized appropriations, for FY 11. These funds should be weighted towards research into making biofuels and biobased products more environmentally sustainable.

Biorefinery Assistance Program

The advanced biofuels industry has cited the availability of loan guarantees as a major limiting factor in helping this new green-tech industry move forward, along with the many green-tech jobs it is expected to provide. The Biorefinery Assistance Program is designed to help launch production of advanced biofuels production, such as cellulosic ethanol (corn ethanol plants are not eligible) and butanol. Congress provided \$150 million in authorized appropriations annually, plus \$245 million in mandatory (CCC) funding for FY 10 (but no mandatory funds in FY 11). Funds should be directed to the most sustainable of advanced biofuels, such as those that do not cause land use changes and minimize water use.

Repowering Assistance Program

The Repoweing Assistance program encourages new renewable biomass development to help break the "chicken and egg" cycle of building next-generation biofuels plants, and helping to commercialize energy crops. It provides grants or other payments to existing biorefineries to modify their fossil fuel boilers to use renewable biomass. The Farm Bill provided \$15 million in authorized appropriations for FY 11 (Congress provided \$35 million in mandatory funding in FY 09, to remain available until expended).

Community Wood Energy Program

The Community Wood Energy Program provides grants to state or local governments to plan and install wood energy systems to provide power or heat for community facilities such as schools or hospitals. It is a small scale program that can be expected to produce significant economic benefits and jobs in small communities. Congress authorized \$5 million per year in appropriations for the program.

Rural Energy Self-Sufficiency Initiative

The Rural Energy Self-Sufficiency Initiative authorizes grants to rural communities to become more energy self-sufficient. Communities can use grants (up to 50 percent of the cost of the activity) to develop and implement energy system improvement strategies such as energy efficiency upgrades for buildings, renewable electricity

production, and transportation and land use changes which reduce conventional energy use and greenhouse gas emissions. Congress provided \$5 million in authorized appropriations in 2011.

Biomass Crop Assistance Program

The Biomass Crop Assistance Program (BCAP) is a new program that pays producers up to 75 percent of the cost of establishing and planting crops to be used in a biomass facility, plus annual payments to help compensate for lost income while the crops are established. The program also provides cost-share payments for collection, harvesting, storage, and transportation costs up to \$45 per dry ton of biomass. Congress provided that USDA could spend such sums as are necessary for the program from Commodity Credit Corporation funds. USDA has initiated a rulemaking and environmental review process to evaluate how to implement this new program. However, the agency is in the meantime making over a half billion dollars indiscriminately available in collection, harvest, storage, and transportation cost-share support. The effect on the environment, as well as on established businesses that utilize biomass without burning, is potentially very serious. Congress should direct USDA to put the horse back in front of the cart and finish its rulemaking and environmental review prior to disbursing cost share monies, and to prioritize cost-sharing that will establish new and environmentally sound biomass production.

FY 11 Recommendation:

Fully fund key Farm Bill energy programs at the levels authorized by Congress in the 2008 Farm Bill, with additional supplemental funding for REAP consistent with the Obama Administration's FY 10 request.

Rural Energy for America Program - \$130.0 million

Biomass Research and Development Program - \$65.0 million

Biorefinery Assistance Program - \$150.0 million

Repowering Assistance Program - \$15.0 million

Community Wood Energy Program - \$5.0 million

Rural Energy Self-Sufficiency Program - \$5.0 million

Biomass Crop Assistance Program - Appropriate funding guided by a completed rule and environmental review (80% of funding for planting and establishment)

Access to Local Foods and School Gardens

The Child Nutrition and WIC Reauthorization Act (PL 108-625, Title I, Section 122) authorizes a grant program for schools to receive grants of up to \$100,000 to cover start-up costs for a farm to cafeteria project. These competitive, one-time grants will allow schools to purchase adequate equipment to store and prepare fresh foods, develop vendor relationships with nearby farmers, plan seasonal menus and promotional materials, start a school garden, and develop hands-on nutrition education demonstrating the importance of nutrition and agriculture. Use of local produce in school meals and educational activities provides a new direct market for farmers in the area and mitigates environmental impacts of transporting food long distances. At the same time, the program helps children understand where their food comes from and how their food choices impact their bodies, the environment, and their communities at large.

FY 11 Recommendation:

Access to Local Foods and School Gardens - \$10.0 million

An increase of \$10.0 million over the FY 10 enacted level of \$0.0 million

Sustainable Agriculture Research and Education

The Sustainable Agriculture Research and Education (SARE) program (authorized in USC Title 7, Chapter 88, Subchapter I) is the flagship research and education program for sustainable agriculture administered by the U.S. Department of Agriculture's (USDA) Cooperative State Research, Education, and Extension Service. SARE is a competitive grant program providing grants to researchers, agricultural educators, farmers, ranchers, and students in the United States. Education grants range from \$30,000 to \$150,000 and fund projects that usually involve scientists, producers, and others in an interdisciplinary approach. SARE's strength is based on unique features of cost-effective and equitable regional administration, combined with strong farmer participation, practical, outcome-oriented research results, and top-rated public outreach.

SARE's Professional Development Program (PDP) grants provide information and training on sustainable systems to a wide array of USDA personnel, extension agents, and others who provide technical assistance to farmers and ranchers. PDP provides sustainable agriculture education and outreach strategies for Cooperative Extension agents, Natural Resources Conservation Service staff, and other agricultural educators who work directly with farmers and ranchers. PDP funds have been used for both state-specific planning and competitive grants for learning opportunities.

SARE and its PDP program received a total appropriation of \$19.2 million in FY 10. Increasing this amount to \$25 million will allow funds to be used for an authorized federal-state matching grants program that would integrate campus education with the research and extension work currently underway.

FY 11 Recommendation:

Sustainable Agriculture Research and Education - \$25.0 million An increase of \$5.8 million over the FY 10 enacted level of \$19.2 million

Estuary Restoration Program

The U.S. Department of Agriculture's (USDA) Estuary Restoration Program is a comprehensive program for the restoration of our nation's estuaries, authorized through the Estuary Restoration Act. Among the most productive ecosystems on earth, estuaries provide vital habitat to fish and wildlife species, and important environmental, cultural, and recreational benefits to human populations. The Act encourages coordination among all levels of

government, and engages the unique strengths of the public, non-profit, and private sectors. The Act ensures a strong federal commitment and resources to restore estuary habitat by authorizing \$2.5 million for the USDA (newly authorized under the Water Resources Development Act of 2007) for implementation of on-the-ground restoration projects.

FY 11 Recommendation:

Estuary Restoration Program - \$2.5 million

Fully funded at its authorized level, which represents an increase of \$2.5 million over the FY 10 enacted level of \$0.0

USDA Forest Service Introduction

America's national forests have served America well, providing resources such as water and timber to our nation for over one hundred years. However, a century of intensive resource extraction and use has taken a toll. Invading exotic species, beginning with the chestnut blight a century ago, have led to unnatural forest conditions and prevented ecosystem recovery. Shifts in species composition and forest structure, major changes to forest stream flows and channels, and intervention in natural processes such as flood and fire have left us with a legacy of unnatural forests that are no longer able to heal themselves. Increasing loss of open space, increasing wildfire suppression costs, and impending climate change compound these problems. Moreover, it is rapidly becoming apparent that this nation needs the forests more than ever to help combat a warming climate and diminishing clean water supplies.

The Secretary of Agriculture and the Chief of the Forest Service have made strong commitments to restoration-focused management for national forests. In this budget proposal, existing and proposed new U.S. Department of Agriculture Forest Service (Forest Service) programs that would serve to accomplish a restoration agenda are emphasized, including the Vegetation & Watershed Management program (from National Forest System), Legacy Roads and Trails Remediation program (from Capital Improvement & Maintenance), Collaborative Forest Landscape Restoration program (from Wildland Fire Management), Land Management Planning (from National Forest System), and a new Tongass National Forest Restoration program.

Restoration management should be viewed as a way to recover the natural processes, structure, composition and function of a healthy forest ecosystem; it is an intentional effort to restore land, air, and water degraded by human activities to a more natural state, enhancing our forests' ability to adapt and be resilient to disturbances and change. This is a separate and distinct vision from traditional logging or hazardous fuels reduction; while these activities may have a place on national forests, the goals and objectives are not necessarily consistent with ecosystem restoration, and the terms should not be used interchangeably.

In order for the Forest Service to successfully shift its emphasis to restoration, funding mechanisms and contracting procedures must be reformed through a collaboration to emphasize restoration activities and the production of non-market benefits, and to remove incentives for activities that drive our forests toward unsustainable conditions. Such reforms must include specific appropriations that commit realistic, consistent, and adequate multi-year funding for all aspects of restoration: assessment, land management planning, implementation, monitoring, evaluation and adaptation. Four immediate steps can jumpstart this shift:

First, sound land management planning must be recognized as the basis for sound forest management, including the development of science-based restoration strategies and other actions to respond to the threat of climate change. Responding to missteps in previous forest planning efforts, in August 2009 Secretary Vilsack affirmed his commitment to embark on the development of new National Forest Management Act planning regulations that will help aid the agency in tackling what in his view are its two largest challenges: climate change and the protection and restoration of watersheds. In addition to investing in the development of a science-based planning rule that will support intelligent restoration and climate decisions, it is necessary to

Jumpstart a Restoration Vision

- ✓ Invest in forest planning to ensure science-based restoration and climatesmart actions on-theground
- ✓ Create a signature watershed restoration initiative to "right-size" the road system.
- ✓ Establish restoration programs and plans to transition national forests to a restoration focus and economy.
- ✓ Protect Forest Service funding from "fire raids" by standing by the commitment embodied in the FLAME ACT.

provide support to the Forest Service Land Management Planning program to ensure that forest plans currently due for revision meaningfully address restoration and climate issues,

Second, the Forest Service must create a signature watershed restoration initiative; a major component of this initiative must be to "right-size" the radically oversized and fiscally and environmentally disastrous road system. Creating a manageable and sustainable road system would result in the restoration of priority watersheds through the decommissioning of at least 100,000 miles of unneeded and environmentally harmful roads, while simultaneously providing green jobs, restoring and reconnecting habitat for fish and wildlife, improving the forests' ability to adapt to climate change, and meeting the Forest Service's own regulatory requirement to identify the minimum necessary road system. Drawing on funding from the Legacy Roads and Trails Remediation Fund, Vegetation and Watershed Management, Planning, Roads Maintenance, and Deferred Maintenance, the Forest Service should enhance the existing watershed program to build a multi-disciplinary and robust program that will drive and be accountable for achieving watershed restoration goals and transforming the oversized transportation system to a smaller, sleeker, and sustainable one that both improves quality access and protects our drinking water and fisheries.

Third, collaborative and science-based ecosystem restoration of priority national forest landscapes while benefiting local communities must be supported through the Collaborative Forest Landscape Restoration Program, which will also improve forest health, safety, and productivity and help forests adapt to climate change, and benefit communities through improved watershed function, restored fish and wildlife habitat, and ecosystem health. Additionally a new plan for transitioning the Tongass National Forest from timber-based to restoration-based management can contribute to local economies while restoring previously logged and roaded riparian zones and other important wildlife and fish habitats.

Lastly, Congress and the Forest Service must stand by the commitment embodied in the FLAME legislation to protect Forest Service funding from "fire raids", not only ensuring that disruptive funding transfers do not take place but also that the FLAME fund is not replenished to the detriment of other programs. The Forest Service now more frequently manages fires for resource benefits, which permits fire managers to allow wildfires to run their natural courses where it is safe, while at the same time suppressing portions of the wildfires where they pose risk to communities and structures. The continued use of controlled fires would assist ecosystems to become more fire resilient where and reduce the frequency of uncharacteristic wildfires.

The costs of unbalanced and unnatural forests are borne by all Americans, including those who reside in rural communities who must address the consequences of unnatural flood and fire regimes, polluted water, and other effects. Restoration programs offer economic opportunities to these communities —in saved emergency response costs, a cleaner environment, and in new jobs. It took over a century to destabilize our forests, and it will take time to restore them. Collaborative efforts that include Congress, the Forest Service, and partners, including groups supporting this document, can make this vision a reality.

FOREST & RANGELAND RESEARCH

Forest Inventory and Analysis Program (including Carbon Accounting and Research)

Forest Inventory and Analysis (FIA) surveys conducted by the Forest Service provide the only consistent nationwide data on the state of U.S. forests. Climate change will increase both stresses on our forests and demands to manage them for carbon sequestration, biological diversity, biomass fuels and other outputs. Timely, complete, and accurate information about the state of our nation's forests, both private and public, is critically important. The FIA program must receive adequate funding to support the frequent re-sampling (ideally 20 percent of plots each year nationwide) necessary to track changes in forest condition due to climate stresses and changes in management, and to increase sampling of soil carbon, as well as sufficient funding to support full implementation of FIA surveys in all 50 states. In addition, particular states, including Washington, Oregon, and interior Alaska have outstanding and urgent FIA survey needs associated with wildlife and other resources. As the U.S. moves toward binding commitments to reduce greenhouse gas emissions, it is critical that we make realistic assumptions about how our forests can contribute to offsetting other sources. The USDA's Carbon Accounting and Research program, recently transferred to FIA, needs adequate funding to develop a complete and accurate nation-wide monitoring system for terrestrial carbon. Inconsistency of land use and land cover data among agencies is a major source of uncertainty about terrestrial carbon stores and changes over time. The USDA should also be charged with coordinating land use and land cover data collected by all federal agencies.

FY 11 Recommendation:

Forest Inventory and Analysis Program - \$76.0 million An increase of \$9.1 million over the FY 10 enacted level of \$66.9 million

Forest & Rangeland Research Program

U.S. Department of Agriculture Forest Service Forest and Rangeland Research (FS R&D) provides research and applied science tools to support sound decision-making on National Forest System lands as well as other non-federal forestlands. The FS R&D research station system, comprised of five regional stations, as well as dozens of other local sites, provides land managers with policy relevant knowledge and information appropriate to local ecological conditions. FS R&D supports approximately 500 scientists.

FS R&D includes key foundational programs, such as Forest Inventory and Analysis (FIA), *Research Growth Platforms* in emerging research areas including Climate Change and Watershed Management and Restoration, as well as *Strategic Program Areas*, including Wildlife and Fish, and Inventory and Monitoring. With appropriate support, these programs have the capacity to deliver timely knowledge, information, and tools to forest managers.

Global Climate Change Science Program - Forest Service research, and the information products generated through that research, is critical to helping forest managers understand the likely impacts of climate change on forests, water and wildlife; how forests can contribute to mitigating changes; and what adaptive management strategies might help forests, fish and wildlife survive increasing stresses. Of particular importance will be research and applied information on the nexus between climate, water and wildlife – including at-risk fish populations – a top priority of USDA Secretary Vilsack. In order for forest management strategies to be truly effective in mitigating climate change, better information is needed about the full life-cycle impacts of specific management choices, including more complete understanding of net carbon storage in a variety of forest types and disturbance regimes, in wood products, non-carbon dioxide effects, and the effects of albedo and transpiration on warming. General information about predicted climate changes needs to be scaled down to project the impacts on forest composition, structure, function, productivity, and disturbance as well as aquatic ecosystems. In addition, researchers can generate valuable information on carbon stocks for specific regions and forest types, and develop management strategies that integrate

adaptation with mitigation. A better understanding of the social drivers of land-use change and land management choices is critical to the maintenance and increase of biological diversity as well as forest carbon stores by "keeping forests as forests." In addition, it is crucial that the FS and the new USGS National Global Warming and Wildlife Science Center work together to coordinate their use of resources and research activities.

Wildlife and Fish Research and Development - Wildlife and Fish R&D develops usable knowledge and policy relevant tools to support science-based fish and wildlife management on National Forest System lands, including methods to support "the viability of wildlife populations at the landscape, watershed, and ecosystem scales", a foundational policy objective on USFS lands. With sufficient capacity, the Wildlife and Fish R&D can provide forest managers with decision-support tools reflecting state-of-the-art conservation, monitoring, and adaptive-management strategies to address the challenges of climate change impacts on threatened, endangered and sensitive species. Wildlife and Fish R&D plays a critical role in transferring information from emerging areas of research; for example, Wildlife and Fish R&D can provide managers with information concerning the relationship between disturbance and diversity, including the use of indicator metrics to support effective forest planning.

FY 11 Recommendation:

Forest & Rangeland Research - \$265.1 million¹ (\$41.9 million for Global Climate Change Science, an increase of \$10.0 million; a total of \$37.1 million for Wildlife and Fish R&D, an increase of \$5.0 million; and fixed costs) *An increase of \$20.0 million over the FY 10 enacted level of \$245.1 million*

STATE & PRIVATE FORESTRY

Forest Legacy Program

The Forest Service's Forest Legacy Program (FLP), authorized in the 1990 Farm Bill, provides matching funds to assist states in conserving private working forests - those that provide an array of environmental services and products. These include clean air, clean water, carbon sequestration, a variety of critical fish and wildlife habitats, recreational opportunities, and timber and other forest products. Since its inception, the Forest Legacy Program has provided over \$444 million in matching funds to 42 states and territories for the conservation of over 1.9 million acres of forests valued at over \$1 billion.

Currently, 50 states and territories are active in the program and with four more in the planning stages. In recent years, the identified demand from participating states has exceeded \$200 million annually, and the program has grown rapidly as new states have joined the program. This trend shows no sign of dissipating; in fact, for FY 11, states have requested over \$204 million in FLP funding for projects totaling over 360,000 acres with an estimated value of almost \$440 million. At current funding levels, less than a third can be funded. This leaves thousands of acres of valuable forest lands at risk of development and fragmentation. Research by the USFS has projected that, due to increased populations and expanding urban center demands on our forests, over 44 million acres of private forests are likely to see increased conversion pressure over the next three decades. With ownership of large forested properties changing hands frequently, a concerted effort to keep forests intact is needed and the Forest Legacy Program is the nation's premier program dedicated to that end.

FY 11 Recommendation:

Forest Legacy Programs - \$150.0 million

An increase of \$70.5 million over the FY 10 enacted level of \$79.5 million

¹ Does not include the recommended increase proposed for the Forest Inventory Analysis program.

Community Forest and Open Space Program

The Forest Service projects that more than 44 million acres of U.S. private forests will be converted to development by 2030, severing treasured community connections to the land and threatening important natural resources and economic activities. Local governments, Indian tribes, and local non-profits are eager to purchase these threatened forestlands from willing sellers to help protect their water supplies, support a timber-based economy, and enhance recreational opportunities, scenic beauty and quality of life for local residents. The Community Forest and Open Space Program will help make this financially possible by providing 50-50 matching grants to these entities to acquire forest areas that are economically, culturally, and environmentally important to that locality and threatened by conversion to non-forest uses. This program provides federal grants directly to local governments and non-profits exclusively for full fee acquisition, not conservation easements, and the program's criteria are built around evaluation of a project's community impact even above its natural resource value. As part of this community focus, the new program requires public access and active community engagement in forest planning for parcels. The program also emphasizes opportunities for vocational-technical education in forestry and other forest-based education programs as well as active demonstration sites for model forest stewardship to educate private landowners about forest management.

The Forest Service was provided \$500,000 in the FY 10 Interior and Related Agencies Appropriations Bill to finalize rulemaking. The FY 11 recommendation will provide the agency with funds at the scale necessary to implement the program through project matching grants.

FY 11 Recommendation:

Community Forest and Open Space Program - \$10.0 million

An increase of \$9.5 million over the FY 10 enacted level of \$500,000 – This program must be its own line-item and funded separately from Forest Legacy.

Urban and Community Forestry Program

The Urban and Community Forestry program assistance to promote the stewardship of urban and community trees and forest resources. This program is critical in providing urban populations with access to open spaces. With an urban population of over 225 million individuals, this program has the potential to reach a large portion of the American public. In FY 08, this "little" program reached 177 million people through community assistance in planting, protecting and managing urban and community trees and forests. This is yet another program that is becoming increasing important as climate change affects forest conditions. Our recommendation of \$40 million is significantly exceeded by the actual the need for improving open space and the opportunities for urban and suburban.

FY 11 Recommendation:

Urban and Community Forestry Program - \$40.0 million

An increase of \$9.6 million over the FY 10 enacted level of \$30.4 million

International Program

Forests cover nearly 30 percent of the globe, providing much needed goods and services, including water, food and income generation, to hundreds of millions of households around the world. These households comprise many of the world's poorest communities. Despite the services that they provide, forest cover is declining at a rate of roughly 12.9 million hectares per year. Widespread deforestation and degradation is due to a variety of causes, including human encroachment, unsustainable wood harvesting practices, and conversion to agriculture. Deforestation is significant global issue and is the source for nearly 20 percent of global greenhouse gas emissions.

Forest restoration around the globe will require a complex array of interventions, including international cooperation, incentives and policies. The International Programs of the U.S. Forest Service (USFS/IP) are uniquely positioned to promote global forest conservation by engaging the agency's diverse workforce of scientists, resource managers, international specialists, conservation biologists and partners from the global conservation community.

The Forest Service works closely with other government agencies and non-governmental organizations in a diverse set of landscapes to protect forests, grasslands, biodiversity, migratory species, advance protected area management, assist with landscape level planning, provide wildfire management expertise, prevent illegal logging, promote forest certification and reduce the impacts of extractive forestry. Forest Service engagement overseas provides tremendous benefits to its own workforce, diversifying experiences and offering opportunities for its experts to contribute around the globe while also bringing lessons back home.

FY 11 Recommendation:

International Program - \$16.0 million

An increase of \$6.2 million over the FY 10 enacted level of \$9.8 million

State Fire Assistance Program

The Forest Service has estimated that 21.7 million acres of rural land within 10 miles of national forests in the lower 48 states will experience increased housing development by 2030. These new developments will certainly fall in or create areas known as the wildland urban interface (WUI). Experts have predicted that almost eight million new homes will be built in the WUI between 2005 and 2010. This increase in WUI population is a significant cause of skyrocketing wildfire suppression costs. In addition, because climate change will increase the length of the fire season and potentially the number and size of fires that burn any given year, it is more critical than ever to help these communities prepare for inevitable wildland fires. Communities that are "firesafe" are key to reducing suppression costs – and ultimately restoring functional and fire-resilient wildlands.

State Fire Assistance is the primary federal program that can help communities reduce their fire risk. This program provides funding to help states and communities prepare for and respond to wildland fires, including funding for firefighter training, hazardous fuels reduction near communities, the Firewise program, and Community Wildfire Protection Planning. Congress has directed that State Fire Assistance funds should be used preferentially to support community wildfire protection planning and plan implementation. Many states and communities lack the resources to fully design and implement fire management programs on their own. In fact, skyrocketing suppression expenditures suggest that taxpayers already foot the bill for private landowners who have not taken the necessary steps to protect their properties. Taking proactive steps towards fire preparedness by investing in State Fire Assistance will mean a reduction in these fire suppression costs.

FY 11 Recommendation:

State Fire Assistance Program - \$150.0 million (aggregate increase under Wildland Fire Management and State & Private Forestry

An increase of \$39.6 million over the FY 10 enacted level of \$110.4 million

² Forest Service. National Forests on the Edge: Development Pressures on America's National Forests and Grasslands. www.fs.fed.us/openspace/fote/GTR728.pdf, (2007).

³ Forest Service and Department of the Interior "Quadrennial Fire and Fuel Report" (2005).

⁴ Mall, A. and Matzner, F. (2007). *Safe at Home: Making the Federal Fire Safety Budget Work for Communities.* Natural Resources Defense Council.

Conservation Education Program

The Conservation Education program is a vital component of the Forest Service, serving as a critical link between the people and their public lands. The program is committed to develop an environmentally literate citizenry to sustain the Nation's forests and grasslands, public or private. With over a hundred years tradition in the teaching and practicing conservation, the Forest Service Conservation Education program works with partners to coordinate the development and delivery of high-quality, science-based education materials, products, and services to pre-kindergarten through 12th grade students and their educators, in both formal and non-formal settings.

The Forest Service Conservation Education program is guided by a strong strategic plan that involves students and teachers and provides outdoor laboratories that support school curricula. It emphasizes coordinating and delivering high-quality conservation education programs and materials; providing strong leadership and management of the agency's conservation education program; and, maximizing partnership opportunities to ensure the success of the program deliverables. More than eight million people, most of which come from underserved groups, benefit every year through programs, activities, products, and services provided by the Forest Service Conservation Education program.

Conservation Education program offerings and deliverables are diverse. The agency's programs identify a threepronged approach to: 1) Engage youth in public service, 2) Enhance science-based programs offered through schools and community partners, and 3) Improve curricula of national environmental education programs. Conservation Education programs and Interpretive Services throughout the nation offer opportunities for environmental education at the forest, ranger district, research stations, wilderness areas, and in urban areas. Our conservation education efforts support the Forest Service's and Department of Agriculture's missions and emphasize the use of the best educational practices based on established educational guidelines. Successful deliverables are achieved thanks to the strong partnership strategies established with States, Municipalities, schools, non-profit organizations, sister agencies, and non-traditional partners such as the Department of Health and Human Services Office of the Head Start, just to mention a few of the more than 300 conservation education related programs and activities conducted on a yearly bases. Program activities emphasis in conducting training sessions for educators (formal and non-formal) in developing and or conducting high-quality curriculum and materials; effective educational use of national icons (Smokey Bear and Woodsy Owl) to promote conservation messages and practices among youth; partnering with schools to encourage children to enjoy and appreciate outdoors; using new information technology tools to reach children and their educators, and using the Nation's forests, grasslands and experimental forests as outdoor classrooms. In addition, the new Conservation Education program website (http://fs.usda.gov/conservationeducation) provides a wealth of resources for the conservation education community of practice and educators (formal and nonformal) nationwide.

For decades the Forest Service has made education a priority by funding efforts through multiple channels and programs at headquarters and in the regions. However, in recent years the Conservation Education program has not had an appropriations line item. We estimate that the Forest Service has made close to \$20 million each year available from their general appropriations, with a small amount set aside to operate the Conservation Education Office at Forest Service headquarters. We recommend creating a line item for Conservation Education through the State and Private Forestry mission area and funding this successful program at \$40 million in FY 11.

FY 11 Recommendation:

Conservation Education Program- \$40.0 million

An increase of \$20.0 million over the FY 10 enacted level of \$20.0 million (FY 10 is an estimate and was not a line item)

NATIONAL FOREST SYSTEM

Land Management Planning Program

Given the enormous land management challenges of the coming decades — including the complex dilemmas associated with climate change that face public resources like forests, water and wildlife (i.e. fish and wildlife adaptation, extreme variability in natural processes)—it is imperative to support science-based planning, analysis and decision-making processes on National Forest System lands. Well constructed Land and Resource Management Plans are the very cornerstone of balanced management of our multiple-use lands and support high-quality, legitimate, effective and efficient resource management decisions. Of critical importance will be Forest Service programs associated with data collection and analysis, comprehensive multi-jurisdictional land and resource management planning, and robust monitoring geared towards meaningful and rigorous adaptive management of natural habitats. The Forest Service must be directed and enabled through appropriations to link data collection, analysis, planning, and decision-making processes in meaningful and cost-efficient manners. The agency should be discouraged from promoting initiatives that do not contribute to effective and efficient planning and science-based decision-making.

Jumpstart a Restoration Vision

✓ Invest in forest planning to ensure science-based restoration and climatesmart actions on-theground The courts have held two sets of national forest planning regulations developed under the prior administration to be illegal (2005, 2008) and the Forest Service will be developing new regulations. The goal of both the 2005 and 2008 regulations was to create "decision-less" plans that sought to eliminate agency accountability at every turn. This included the complete elimination of the 1982 wildlife conservation (viability) standard and attempts to substitute NEPA categorical exclusions for the long-standing requirement that forest plan revisions be conducted using an Environmental Impact Statement. Now that the courts have rightly rejected efforts to make forest planning an empty process, the agency is returning to meaningful analysis and public participation in forest management plans. Moreover, Secretary Vilsack is committed to embarking on the development of legal planning regulations that will help aid the agency in tackling what in his view are its two largest challenges, climate and the protection of watersheds.

To support the development and implementation of an effective planning rule that will result in meaningful Land and Resource Management Plans and to perform planning duties related to the road system funding increases are critical. Between FY 03 and FY 10, Land Management Planning funding fell by \$26.3 million, more than one-third, as a consequence of the prior administration's efforts to weaken accountability and substance in forest planning. Adequate funding is needed to address the backlog of 37 plans currently undergoing revisions and the additional 33 plans due for revision, and meet the broad ecological challenges facing our national forests and grasslands. To maintain an effective planning program, \$75 million per year will be needed – this amount is still less than the FY 01 level. In addition, \$5 million will be needed for FY 11 to support the rulemaking process. Increasing funding for this program to an adequate level is a top priority in FY 11. A first step is to provide the total \$80 million that is simply needed for an effective overall planning program.

Programmatic Environmental Impact Statement for Wind Energy. The Forest Service's 192 million acres offer a broad array of services, including rich hunting and fishing opportunities, commercial energy development, and quiet recreation in wilderness areas to commercial energy development. In the past several years, the Service has begun to address the extent to which its lands will host wind energy development alongside these other uses. Due to the urgent need for a rapid transition to a sustainable energy economy, coupled with the public's strong support for land and wildlife conservation, a more systematic approach to the prospects of wind energy development on the National

Forest System (NFS) should be undertaken. As currently called for in pending legislation, the agency should complete a programmatic environmental impact statement (PEIS), pursuant to the National Environmental Policy Act, to evaluate whether, how, and where commercial wind development is suitable on NFS lands as a first step in empowering the agency to standardize its approach to wind energy development and associated decision-making. The PEIS should assess the ecological, cultural, and natural resources that would be impacted by the advancement of a commercial wind energy program; review policies and mitigation strategies that would be needed for such projects; and determine the most appropriate methods for permitting such a program. The PEIS should not be considered a directive to begin a commercial wind energy leasing program, but instead should determine the costs, benefits, and consequences of such a program.

FY 11 Recommendation:

Land Management Planning Program - \$80.0 million (\$3.0 million for Wind Energy PEIS) *An increase of \$34.1 million over the FY 10 enacted level of \$45.9 million*

Inventory and Monitoring Program

Consistent implementation of science-based planning, analysis, and decision-making requires dedicated funding for monitoring and science-based adaptive management processes. The Forest Service Inventory and Monitoring program funds the collection and analysis of data to be used in land management planning. Monitoring of fish and wildlife populations, along with habitat assessment and monitoring, is fundamental for effective planning and high-quality decision-making under a sound National Forest Management Act regulatory framework. The Inventory and Monitoring program should make targeted investments in key objectives that support policy relevant, science-based planning, including "enhancing scientific understanding of ecosystems" and "providing data, information, and analyses to decision makers in response to current management needs and emerging issues, including climate change." Strategic investments in planning must be matched with comparable investments in species and ecosystem assessment, analysis, and monitoring – indeed, the hallmark of intelligent land management is the use of comprehensive biological monitoring information to inform adaptive shifts in agency decisions and actions. To help maintain sustainable populations of fish and wildlife on our national forests and grasslands, it is especially important that the Inventory and Monitoring program provide robust support to the Watershed, Fish, Wildlife, Air and Rare Plants program. While an increase of \$20-30 million would meet the full needs of the program, a \$10 million increase would be a good first step.

FY 11 Recommendation:

Inventory and Monitoring - \$180.5 million

An increase of \$10.0 million over the FY 10 enacted level of \$170.5 million

Recreation, Heritage & Wilderness Program

The Recreation, Heritage & Wilderness program is responsible for providing recreation – from front-country to remote wilderness trails -- on our national forests and grasslands. Recreation is the most ubiquitous use of our forest lands, connecting with more people and occurring on more acres than any other use. This program has the heavy responsibility of ensuring that Americans have rewarding outdoor experiences, while protecting the places they are visiting, including places that preserve our rich cultural history, such as ancient Native American ruins, and our majestic natural heritage including such iconic locations as the Maroon Bells in Colorado and Mt. Whitney in California. The Forest Service, therefore, must make it a priority to ensure quality recreational opportunities for visitors with a variety of skill levels, backgrounds, and means, while ensuring that the ecological integrity of the

⁵ FY2010 USDA Forest Service Budget Justification, p. 7-10.

forests and grasslands is maintained. This is not an easy balance to strike, and requires science-based planning, vigilant management and monitoring, development of partnerships with recreation groups and communities, and integration of resource management, engineering, and recreation program staff. Furthermore, with the imminent threat of climate change, actions will be necessary to not only ensure that our forests and grasslands can adapt but also that Americans help by reducing their recreation climate footprint.

Travel Management, the process of planning and managing dispersed outdoor recreation, is a major priority for the Forest Service. In 2005, the Forest Service promulgated the "travel management rule" and will have completed travel plans for virtually all units by December 2010. The designations, however, are only the first step in a long process to institute the newly-designated motorized system and manage it on an on-going basis – both to ensure adequate environmental protection and rewarding visits. Without an initial push to implement the plans (e.g., signage, road closures, map publication) and a strong level of continued on-the-ground management, damage to the environment from off-road vehicles will continue and conflict between users will grow. An estimate of \$79 million annually is necessary to manage the newly designated motorized recreation systems with an additional start-up cost for FY 11 of \$9 million, for new signs and trailheads. These estimates account for map publication, visitor education, route signage, on-the-ground visitor assistance and monitoring, and do not include recommendations for the funding required to enforce, maintain, manage, and decommission motorized road and trail networks designated under the travel management rule. These are addressed respectively in separate sections. These estimates also do not include recommendations for funding required to plan, improve, and manage non-motorized trails and areas, which, are generally suffering from an absence of maintenance and management.

Sustainable Recreation Planning and Management Pilot - The vast majority of national forest visitors partake in non-motorized recreation pursuits such as hiking, cross-country skiing, horseback riding, wildlife watching, and biking. Yet, the Forest Service has virtually no comprehensive recreation plans that systematically plan and provide for quality and sustainable recreation to those seeking it. Nor does the Forest Service have sufficient resources to improve trail access because of a shortage of both landscape designers and engineers to perform trail planning and design. The Forest Service began to develop a framework for sustainable recreation management. Funding five pilot projects at \$1 million each annually for three years, will serve to demonstrate and test the Forest Service's new framework, specifically showing how to work with partners and communities to develop an environmentally sound recreation system in popular recreation destinations and treasured places, and would serve to inform the final sustainable recreation framework.

FY 11 Recommendation:

Recreation, Heritage & Wilderness Program - \$408.1 million (\$88.0 million for motorized travel management implementation, \$5.0 million for comprehensive recreation planning pilots, and \$30.0 million Wilderness and Wild & Scenic Rivers)

An increase of \$123.0 million over the FY 10 enacted level of \$285.1 million

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⁶ For additional costs associated with travel management planning and implementation, see sections titled Law Enforcement Operations Program, Roads Maintenance Program, Deferred Maintenance Program, Legacy Roads and Trails Remediation Program and Trails Program.

Wildlife and Fisheries Habitat Management Program

National forests and grasslands play an essential role in the conservation of the nation's wildlife and habitat. More than 420 animals and plants listed under the Endangered Species Act and an additional 3,500 at-risk plants and animals are found on Forest Service lands. These lands encompass an amazing array of habitats, from alpine tundra to tropical rainforest, deciduous and evergreen forests, native grasslands, wetlands and various size streams, lakes, and marshes. National forests often contain significant headwaters and stream reaches important to freshwater creatures like fish, mussels and crayfish, a higher percentage of which are considered at-risk than other species. Many of the larger animals in the U.S. such as grizzly bear, wolverine, elk, Canada lynx, and bighorn sheep persist because of National Forest System (NFS) lands. Since national forests often represent intact connected habitat, they become obvious places for recovery and reintroduction of rare creatures and form the backbone of many large-scale conservation plans. Fish and wildlife on our national forests are important to people all across the nation— about 40 million visits per year are primarily for hunting, fishing or wildlife viewing. The Forest Service Wildlife and Fisheries Habitat Management program works with partners to inventory and monitor, manage, and restore habitat on national forests and grasslands in four program areas: 1) Threatened, Endangered, and Sensitive Species; 2) Wildlife; 3) Fisheries; and 4) NatureWatch (wildlife viewing and education).

Despite the broad array of fish and wildlife and habitat on NFS lands that require stewardship efforts and restoration, the budget for this program has substantially eroded and currently is nearly \$15 million below the FY 01 inflation-adjusted level. Since FY 03 the program has lost 15 percent of its total botanists and fisheries and wildlife biologists and is declining in a number of areas including recovery work for threatened and endangered plants and animals; habitat restoration in riparian areas, wetlands, prairies and grasslands; corridors and connectivity for large carnivores; habitat conservation and inventory and monitoring for climate susceptible species and habitats; and partnerships and involvement with implementation of plans such as State Wildlife Action Plans and Bird Conservation Joint Ventures. The program also has little ability to respond to emerging issues such as the spread of white-nosed syndrome that is ravaging bat populations and the move to greatly expand renewable energy and energy corridors. As biologists retire, erosion of funding results in regions not filling positions, consolidating them, or maintaining them only at the regional office rather than at the forest level, which significantly hinders active programs at the forest level. In addition, any work done by biologists and botanists on projects for program areas outside the Wildlife and Fish Habitat Management program ought to be charged to the benefiting function, e.g. grazing, forest products, and energy, rather than the Wildlife and Fish program, but this is not always the case. The extent of this accountability problem is not known.

With current staff levels, the program could effectively use an additional \$97 million, a total budget of \$240 million to carry out more on-the-ground projects, while full funding would add additional staff and total \$300 million. The budget for this program should gradually increase to meet this level. Accounting practices also should be reviewed to ensure that the program is not being charged for projects under other program areas.

FY 11 Recommendation:

Wildlife and Fisheries Habitat Management - \$163.0 million An increase of \$20.0 million over the FY 10 enacted level of \$143.0 million

Vegetation & Watershed Management Program

The Forest Service was established, in part, to help secure the nation's water supply, protecting watersheds that supply drinking water to millions of Americans and numerous cities and communities. Eighteen percent of the nation's water supply originates from national forests, and 124 million Americans rely on our national forests for their drinking water. Healthy watersheds are crucial, vibrant components of the healthy ecosystems needed to support both people and wildlife, yet the Forest Service does not have a complete inventory and national database for watershed

conditions. It is estimated that watershed improvements are needed in approximately two-thirds of watersheds on National Forest System lands. Two examples of needed improvements include projects that connect stream channels, floodplains, and shallow ground water in valley bottoms, and restoring aquatic and terrestrial conditions and processes to support beneficial uses of aquatic ecosystems.

According to the Forest Service, the purposes of the Vegetation and Watershed Management program are forest and rangeland restoration and enhancement activities on the National Forest System; however it is unclear to what extent the program truly supports restoration activities since its resources also support the Forest Products program. This program should be re-evaluated with the intention of transforming it so that its resources are used for restoration. In particular, the watershed program, which is currently skeletal, should be enhanced significantly in order to create a multi-disciplinary, multi-level, and robust program that drives and is accountable for achieving the stated priority of watershed restoration and road decommissioning. Without this restructuring, it is hard to envision how the Forest Service will achieve this priority or expend effectively the funds allocated for this purpose. To this end, we recommend increasing the funding for this line item by \$20 million over FY 10 levels, and specifying clearly that the increase is for beginning the process of enhancing the capacity of the watershed program in all levels of the agency.

FY 11 Recommendation:

Vegetation and Watershed Management Program - \$208.0 million

An increase of \$20.0 million over the FY 10 enacted level of \$188.0 million – existing resources should be fully devoted to restoration needs, and new resources should be expended on enhancing the capacity of the watershed

Law Enforcement Operations Program

program in all levels of the agency.

In July 2004, former Forest Service Chief Dale Bosworth identified unmanaged recreation – especially unmanaged motorized recreation – as one of the top four threats to America's forests and proposed a rule change governing off-road vehicle (ORV) use on National Forest System land. The rule, adopted in November 2005, requires all national forests to designate travel routes for ORVs. Previously, use in the 155 national forests and 21 grasslands was managed at the discretion of the unit and cross-country travel was permitted. Once travel plans have been completed in 2010, most ORV use must take place on a road or motorized trail. While designated ORV routes are a major step forward, there is little evidence to indicate the Forest Service will have the capacity to enforce the travel plans once they are completed, leading to a continuation of current resource damage and conflicts with other land users. Most Forest Service units do not have a law enforcement strategy for travel plan enforcement. In 2009, 73 percent of Forest Service field units reported that they lack sufficient resources for enforcement. According to the Forest Service, there were over 12,400 ORV-related offenses in National Forests in 2007, accounting for roughly 13 percent of all crime. Law Enforcement Officers (LEOs) logged 44,000 hours addressing ORV issues during the same period. We recommend an increase of \$27 million in the law enforcement program specifically allocated to hiring additional officers to enforce the just completed off-road vehicle plans, which equates to an additional officer for every half million acres.

FY 11 Recommendation:

Law Enforcement Program - \$172.0 million (\$27.0 million for Travel Planning enforcement) *An increase of \$27.0 million over the FY 10 enacted level of \$145.0 million*

⁷ United States Government Accountability, GAO-09-509, Enhanced Planning Could Assist Agencies in Managing Increased Use of Off-Highway Vehicles (June 2009).

CAPITAL IMPROVEMENT AND MAINTENANCE

The Forest Service manages approximately 375,000 miles of system roads, 47,000 miles of motorized trails, and has another 60,000 miles of illegally created unauthorized routes (often created by off-road vehicle use). The official road system alone has resulted in a \$8.1 billion maintenance backlog, highlighting that the collective cost of this motorized network far outstrips the Forest Service's financial capacity under current and projected budgets. Compounding this problem, roads are considered by ecologists to be one of the most significant stressors on watersheds and ecosystems. The Forest Service's massively oversized road system degrades water quality, leads to increased risk of fire and vandalism, and delivers millions of tons of sediments into streams, killing fisheries and clogging municipal water supplies. Bringing the road system down to size by decommissioning unneeded roads would significantly improve watershed health and fish habitat, assist in climate adaptation, reduce wildlife habitat fragmentation, aid in restoring stability and resilience to large

Jumpstart a Restoration Vision

✓ Create a signature watershed restoration initiative to "right-size" the road system.

tracts of forests, and decrease the incidence of illegal off-road vehicle driving damage.

Further underlining this point, the Forest Service is required by its own travel management regulations (36 C.F.R. 212.5(a)) to identify the minimum necessary road system for each national forest, along with a list of roads that should be decommissioned or converted to trails to protect land and water resources and reduce the fiscal burden of road maintenance. However, the agency has barely begun to comply with these requirements to "right-size" its road system, despite Congressional direction in the FY 09 and FY 10 appropriations acts. Urgent, bold actions are required to rectify these problems, and we believe that a major initiative to "right-size" the road system provides the answer.

The Forest Service should create a signature watershed restoration initiative, the keystone element of which is to 'right-size' the road system. This will result in the restoration of priority watersheds through the decommissioning of at least 100,000 miles of unneeded and environmentally harmful roads. The first step in this initiative is to conduct a forest-scale science-based roads analyses in priority watershed to identify priority roads for decommissioning and emergency repair along with a cost analysis of the work. The second step is to carry out on-the-ground work to reclaim unneeded roads and repair needed roads starting in priority watersheds. This proposal is not only supported by the Forest Service's own regulations and Congressional direction, there are several existing budget areas that can be used support this work, including:

- Roads Maintenance Program
- Deferred Maintenance
- Legacy Roads and Trails Remediation Program
- Vegetation and Watershed Management Program

Roads Maintenance Program

The Forest Service needs to transform its oversized, decaying, and obsolete road system to a streamlined system that will meet 21st century needs in a fiscally responsible way. The Forest Service reports that it can only maintain about 20 percent of its roads to standard, and currently requires at least \$649 million to meet its annual road maintenance needs. Reducing the size of the road system will decrease this unnecessary and burdensome cost and cut overall maintenance costs while allowing for improved maintenance on critically important roads. Over several years, Forest Service funding should gradually increase to help meet annual maintenance needs for necessary roads, and to assist in implementation of a road system right-sizing initiative to eliminate unnecessary roads. This budget adjustment began in FY 09 and FY 10, and should continue in FY 11.

\$250 million should be allocated to maintain needed roads in forests that have completed a roads analysis for *all* roads (maintenance levels 1-5, as required by regulation), and thereby identifyied the unnecessary and problematic roads that should be decommissioned. In addition, \$30 million annually for four years is required in order to comply with the regulatory duty to identify the minimum road system. This planning step is a necessary pre-requisite to carrying out the watershed restoration and road decommissioning that was identified by Secretary Vilsack as one of the three restoration priorities for the Forest Service, and is the first step to implementing the long-term transportation policy that was rolled out in 2001 but never acted on. It is also a critical element of and first step for creating our recommended signature watershed restoration initiative to "right-size" the road system. Finally, no taxpayer subsidies should be allocated to build new logging roads.

FY 11 Recommendation:

Roads Maintenance Program - \$250.0 million (\$30.0 million for identifying the minimum road system pursuant to 36 C.F.R. 212.5(a)

An increase of \$83.1 million over the FY 10 enacted level of \$166.9 million

No taxpayer subsidies should be allocated for the roads construction program to build new logging roads.

Trails Program

The Forest Service trails system serves Americans with over 50 million visitor days of cross-country skiing, hiking, horseback riding, mountain biking, and off-road vehicle use each year. The National Forest System is responsible for all 153,000 miles of trails, but only 27 percent are currently maintained to standard. The trails maintenance backlog has reached \$234 million as of FY 07, and the backlog continues to grow despite the fact that the trails program leverages thousands of hours of trail work from volunteers and youth organizations each year. For the last several years the trails program has been focused on motorized trails due to the travel management planning process, but this is now coming to a close. In FY 11, the Forest Service should focus on maintaining and improving trails for non-motorized users, who represent the overwhelming majority of users on forest service trails.

⁸ FY2008 USDA Forest Service Budget Justification, p. 17-24.

⁹ Most forests have completed a roads analysis as required in regulation, but because of fiscal constraints they only looked at roads accommodating passenger vehicles (maintenance level 3-5 roads). In many cases, it is the high clearance backcountry roads (maintenance level 1 and 2 roads) that are most problematic in terms of management and environmental impact, and hence should be prioritized for decommissioning.

FY 11 Recommendation:

Trails Program - \$131.0 million (Priority focus on non-motorized trails) *An increase of \$45.6 million over the FY 10 enacted level of \$85.4 million*

Deferred Maintenance Program

The Forest Service should address its enormous road maintenance backlog—which is the Forest Service has estimated to be \$8.1 billion¹⁰ —by decommissioning unneeded roads and repairing roads that are most immediately in need of attention, and assisting in the implementation of a road system right-sizing initiative. In all cases, the Forest Service should prioritize roads where the water quality and climate benefits will be greatest. An increase of \$15.9 million over the FY 10 enacted level, while barely beginning to address the backlog, would help the Forest Service make progress towards its watershed protection and climate adaptation goals.

FY 11 Recommendation:

Deferred Maintenance Program - \$25.0 million

An increase of \$15.9 million over the FY 10 enacted level of \$9.1 million

Legacy Roads and Trails Remediation Program

In 2007, Congress created the Legacy Roads and Trails Remediation (Legacy Roads) Fund to provide annual funding to the Forest Service to decommission unneeded and environmentally problematic roads and trails, and undertake repairs on needed roads and trails. Since creating Legacy Roads three years ago, Congress has appropriated \$179.4 million to the fund. Expenditures have been hugely successful, resulting in the improvement of over 120,000 acres of watersheds, decommissioning almost 2,200 miles of system and unauthorized roads, improving 5,304 miles of roads, and maintaining to standard 3,170 miles of trails. The Legacy Roads program is a critical component of a road system right-sizing initiative, since it can be used to perform decommissioning and urgent repair work on National Forest System roads and trails and non-system routes. The Forest Service should use minimum road system analyses performed pursuant to 36 C.F.R. 212.5(a) (see 'Roads Maintenance' section, above, for more details) as a guide to ensure that Legacy Roads dollars are spent as efficiently and effectively as possible, and are not spent on maintaining roads ultimately slated for decommissioning or vice versa. Because right-sizing the Forest Service's 380,000-mile road system will require a sustained and well-funded effort over many years, we recommend that the Legacy Roads program be permanently authorized, and that it receive a substantial increase in funding to \$150 million.

FY 11 Recommendation:

Legacy Roads and Trail Remediation Program - \$150.0 million

An increase of \$60.0 million over the FY 10 enacted level of \$90.0 million

Legislative Language - Provide for permanent authorization of appropriations for road decommissioning and the Legacy Roads and Trails Remediation program.

 $^{^{10}}$ 2007-2006 USDA Forest Service Financial Statement p C-3 – \$8.4 billion was a new roads maintenance backlog estimate by the agency based on, according to the agency, improved modeling and accounting measures. Thereafter, the agency decided to no longer use the method and instead has reverted to a prior method of determining its backlog.

WILDLAND FIRE MANAGEMENT

Preparedness Program – Wildland Fire Decision Support System (WFDSS) Training

The Forest Service requires and is already committed to managing fire for resource benefit, which permits fire managers to take on a certain level of risk and allow wildfires to run their natural courses for landscape restoration where it is safe, and to suppress wildfires or portions of wildfires in areas that have the potential to adversely affects nearby communities and structures. This new system called the Wildland Fire Decision Support System (WFDSS) is an approach to firefighting that treats each fire individually, accounting for threats to lives and property first, but also weighing factors like ecology and landscape and then applying the appropriate response – which can include the full range of tactical responses from monitoring to aggressive attack. This change will lead to healthier landscapes and less costly fire seasons in the future. However, the agency must train fire managers so that they are armed with this new system. This means investing in a 21st century fire management force – an investment on par with the one made in hazardous fuels reduction. A key aspect of this investment must be funding designated for training and staffing to equip Incident Management Teams to implement the full range of management responses from suppression to capturing resource benefits of wildland fire.

FY 11 Recommendation:

Preparedness Program - \$681.75 million (this reflects a 1% increase to the Preparedness program for WFDSS training)

An increase of \$6.75 million over the FY 10 enacted level of \$675.0 million

Cohesive Wildfire Management Strategy

In response to a Government Accountability Office report, Congress added to the FLAME Act (discussed below) 43 USC 1748b which requires the Forest Service to develop a cohesive wildfire management strategy that identifies the most cost-effective means for allocating fire management budget resources, reinvests in non-fire programs, employs the appropriate management response to wildfires, assesses the level of risk to communities, prioritizes hazardous fuels reduction, assesses the impacts of climate change on wildfire, and studies the effects of invasive species on wildfire risk. The legislation requires the agency complete this strategy by the end of FY 10, and then to revise it at least once every five years. The agency would develop a more comprehensive strategy if provided with an additional year for completion. Should congress provide an additional year for the agency to complete the cohesive strategy, the agency could convene a panel of scientists that develops a set of science-based policy scenarios in FY 10. The recommended funding level would apply to the public process that reviews science panel outputs and comes to an agreement on a method for addressing wildfire.

FY 11 Recommendation:

Cohesive Strategy - \$2.0 million to undergo a public process in developing a cohesive strategy in FY 11. An increase of \$2.0 million over the FY 10 enacted level of \$2.18 billion for the Wildland Fire Management (WFM) budget (this level does not include recommended increases to other programs that fall under WFM)

Legislative Language – The Forest Service will not be in violation of 43 USC 1748b by not completing the cohesive wildfire management strategy by the end of FY 10; provided that the agency completes the strategy by the end of FY 11.

RESTORATION¹¹

Collaborative Forest Landscape Restoration (CFLR) Program

The Collaborative Forest Landscape Restoration (CFLR) Program (established through the Forest Landscape Restoration Act or FLRA, title IV of Public Law 111-11) encourages the collaborative and science-based ecosystem restoration of priority national forest landscapes while benefiting local communities. The best method to ensure that projects achieve the goals of this important legislation is by fully funding the Forest Landscape and Restoration Act line item at \$40 million for FY 11. At full funding, the one-year-old CFLR Program will allow the agency to implement restoration projects without drawing from other important programs. Full funding for the State & Private Forestry, National Forest System and Research programs that support on-the-ground work and key research programs is also critical for addressing landscape level restoration needs.

Jumpstart a Restoration Vision

✓ Establish restoration programs and plans to transition national forests to a restoration focus and economy.

The Collaborative Forest Landscape Restoration Program is the first national restoration program for the Forest Service. As this program matures, communities will benefit from improved watershed function, restored fish and wildlife habitat, and ecosystem health in the forests they enjoy and depend on. Communities will also be better protected from uncharacteristic wildfires. In turn, the activities under the CFLR Program are expected to reduce future wildfire suppression and restoration treatment costs, while improving the health, safety, and productivity of our nation's forests, including helping forests adapt to climate change. As wildfire suppression costs continue to rise, the Forest Service must be provided tools to restore the forests to a system that is able to tolerate wildfire. Currently, the CFLR fund is processed through the hazardous fuels line item under Wildfire Management. However, for this initiative to be most effective, it will have to be established as a program, that is the CFLR program, and funded separately. Additionally, the CFLR program will be best housed under the National Forest System.

FY 11 Recommendation:

Collaborative Forest Landscape Restoration (CFLR) Program - \$40.0 million (full authorized funding level under P.L. 111-11)

An increase of \$30.0 million over the FY 10 enacted level of \$10.0 million

This program should receive funding separately and be moved to the National Forest System

Tongass National Forest Watershed Restoration Program

The Tongass is one of the world's largest remaining tracts of old-growth temperate rainforest. Not only is it important to a wide range of old-growth dependent species, such as brown bears and Sitka black tailed deer, it also provides critically important spawning and nursery habitat to commercially vital runs of Pacific Salmon in the region. Moreover, many of the residents in Southeast Alaska are particularly dependent on the fish and game provided by the Tongass to meet their annual subsistence needs. For decades the Tongass timber program has been built on road construction and old-growth clear-cutting in the very roadless watersheds of the forest that are important to fish and wildlife.

¹¹ Other Forest Service programs serve to restore landscapes including ones featured in this section, such as the Legacy Roads and Trails Remediation Program and Vegetation and Watershed Management.

Moreover, the Tongass has been the largest money loser in the entire National Forest System for decades. Between 1982 and 2005 the Tongass timber program lost over \$850 million. The Tongass continues to lose approximately \$40 million annually on a program that from FY 01 through FY 09 sold and harvested, on average, less than 40 million board feet of timber each year. Road construction costs alone often far outstrip the payments received for timber. On the subset of timber sales where pre-roading contracts were issued between 2002 and 2008, the Forest Service spent \$29.9 million on those road construction contracts for timber sales that returned \$2.2 million for the taxpayer. It is not surprising the House of Representatives has three times passed a measure to prohibit the use of taxpayers' funds to pay for road construction for Tongass timber sales.

The U.S. Department of Agriculture and the Forest Service have recently stated that they would like to help transition the timber program on the Tongass away from old-growth and into second-growth. They have also indicated a desire to create sustainable jobs in the Tongass focused on watershed restoration that requires the same skills provided by traditional timber workers. The conservation community strongly supports remedial watershed work and an end to old-growth logging and therefore recommends the creation of a Tongass National Forest Watershed Restoration Fund. A funding level of \$15 million in FY 11 would pay for restoration work in previously logged and roaded riparian zones and other important wildlife and fish habitats in the Tongass. In addition, the \$2.5 million Tongass timber pipeline fund in the FY 10 Interior appropriations bill should be redirected to a Tongass watershed restoration pipeline fund whose sole purpose would be to provide the planning and staffing resources necessary to ensure that an adequate supply of approved watershed and habitat restoration projects is ready for implementation in FY 12 and beyond.

FY 11 Recommendation:

Tongass Watershed Restoration Program - \$15.0 million A \$15.0 million shift from the forest products program to a new restoration program

FEDERAL LAND ASSISTANCE MANAGEMENT AND ENHANCEMENT (FLAME) FUND

Jumpstart a Restoration Vision

✓ Protect Forest Service funding from "fire raids" by standing by the commitment embodied in the FLAME ACT.

There has been overwhelming support for addressing the effects that increasing costs of wildlife suppression has had on the Forest Service's budget, resulting in the passage of the USDA Federal Land Assistance Management and Enhancement (FLAME) Fund. The FLAME fund is established to reduce the need to transfer funds from non-fire accounts when suppression funds run out. Congress passed the legislation with guidance stating that allocations to this fund should not be at the expense of other agency programs. Additionally, the fund requires the agency to report to Congress quarterly on the status of the fund to ensure the agency is appropriately funded for emergency wildfires and to avoid the need to transfer. In FY 10, Congress stated that the funded level for FY 10 is intended to provide the agency flexibility as it develops a new method for calculating funding estimates for emergency wildfires. Congress further expects the agency to use an improved method resulting in a more accurate funding request in FY 11.

FY 11 Recommendation:

USDA FLAME Fund - \$500.0 million (funding must reflect an estimate based on more accurate predictive modeling) *An increase of \$87.0 million over the FY 10 enacted level of \$413.0 million*

LAND AND WATER CONSERVATION FUND

In 1964, Congress established the Land and Water Conservation Fund (LWCF) to preserve natural areas and wildlife and ensure that all Americans have access to quality outdoor recreation. It was a simple idea and an elegant one and remains so today: use revenues from offshore oil and gas drilling to support the conservation of America's lands and waters. The creation of the LWCF demonstrated Congress' bipartisan recognition of the importance of safeguarding open spaces and natural areas and providing outdoor recreation opportunities for all Americans. Conservation of our natural resources, whether private or public, is critical to maintaining the health of our public lands, our quality of life, our recreational opportunities and our economic well-being.

LWCF is the premier federal program to conserve irreplaceable lands throughout the nation. It is a critical tool to acquire inholdings, expansions of public lands, and new federal designations throughout the national parks, national wildlife refuges, national forests, wild and scenic river corridors, national scenic and historic trails, the Bureau of Land Management lands and other federal areas. The companion LWCF state grants program provides crucial support for state and local park acquisitions, recreational facilities, and trail corridors. The Stateside program is the government's primary investment tool for ensuring that children and families have access to close-to-home recreation. The LWCF stateside program has funded over 41,000 projects including sports fields, outdoor recreation facilities and trails.

The US Forest Service land acquisition program, funded through the Land and Water Conservation Fund, is critical to the Department of Agriculture's focus on restoration and climate change. Land acquisitions in and adjacent to national forests also improve public access to wilderness and other recreation lands, protect water supplies for millions of Americans, and reduce fire hazards from encroaching development. The program has also been chronically underfunded in recent years, with \$0 requested by the Bush Administration as recently as FY 08. As this Administration moves forward on initiatives to identify priority land conservation needs, address climate change and restore critical ecosystems, the USFS land acquisition program must play a critical role.

In FY 10, the Forest Service budget request for land acquisition was entirely at odds with the Department of the Interior's request for Federal land acquisition. In fact, the Federal land acquisition activity was reduced by almost half, and the request provided no funding for inholdings and wilderness protection. The Forest Service is a major manager of conservation lands in the United States, especially in the contiguous 48 States, with many sensitive inholdings and vital protection opportunities. It is inappropriate for this agency to be excluded from a major policy initiative, like funding for acquisition of sensitive Federal lands.

LWCF budget needs are discussed in the DOI section (see pg 5-21 & 5-22) and therefore will not be restated here; however, it is strongly recommended that the USFS allocation from the LWCF be adequate and on a par with the USFWS and NPS, in order to address the backlog of need.

NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act (NEPA) applies to major federal agency actions that may significantly affect the environment. To comply with NEPA, the Forest Service must assess and disclose the potential environmental effects of its actions in an Environmental Assessment or Environmental Impact Statement. In preparing these documents, the Forest Service must consider and summarize the environmental impacts of each proposed action and reasonable alternatives, as well as their interrelated economic, health, or social effects. This process provides citizens an opportunity to learn about the actions that federal agencies are proposing and offers the Forest Service an opportunity to receive informed input from the public, state and local governments, other agencies, and other

stakeholders. The information and alternatives that NEPA generates are essential to meaningful collaboration, to mitigation of adverse impacts, and to sound long-range stewardship of public lands. NEPA plays a major role in the Forest Service's management of National Forests and National Grasslands; as part of its planning process, the Forest Service prepares, on average, 150 environmental impact statements per year.

The Forest Service has faced tight budget constraints over the past several years, constraints that have directly limited the funds available for NEPA implementation. Due to this lack of adequate funding, the Forest Service has historically faced many challenges when conducting NEPA reviews. First, the Forest Service cannot always fully staff its NEPA interdisciplinary teams that are tasked with integrated resource planning for the National Forests and the concurrent environmental analysis. Second, NEPA Project Managers have reported losing key individuals at inopportune times as people are assigned to perform both NEPA related activities and other unrelated tasks, including all-hazard detail. Finally, further compounding these staffing problems is a lack of NEPA training opportunities for Forest Service employees. These problems all lead to delays in all aspects of NEPA implementation, including delays in the finalization of NEPA documents.

It is important that the Forest Service perform valuable NEPA analysis and continue to meet its NEPA requirements. One challenge the Forest Service will face is how to respond to climate change, which as Chief Tidwell has stated will dramatically reshape how the Forest Service will meet its mission of sustaining the health, diversity, and productivity of the Nation's forests and grasslands. The Forest Service will need additional resources to ensure that it effectively and appropriately considers climate change in its NEPA analysis and documentation. Another responsibility the Forest Service has it to ensure that Forest Service Projects funded by the American Recovery and Reinvestment Act comply with NEPA while still ensuring expeditious implementation.

In order to address the challenges outlined above, the Forest Service needs significant additional resources to dedicate to NEPA implementation including funding for additional staff. Moreover, in order to ensure that such funds are in fact allocated to NEPA implementation, the Forest Service should include NEPA compliance as a separate line item in future budgets to allow the public and other agencies to track what the Forest Service spends on NEPA related activities.

FY 11 Recommendation:

National Environmental Policy Act - \$4.4 million (to hire/replace lost personnel in the Washington and regional offices: for an additional 24 FTEs: 6 in Washington Office and 18 in Regional Offices)

(NEPA resources are combined with resources for the programs that they affect so it is not possible to disaggregate baseline numbers)

¹² U.S. Forest Service, Responding to Climate Change: Developing Integrated Plans for Landscape Conservation (November 20, 2009).

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COUNCIL ON ENVIRONMENTAL QUALITY DEPARTMENT OF HOMELAND SECURITY DEPARTMENT OF STATE

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT

EXECUTIVE OFFICE OF THE PRESIDENT COUNCIL ON ENVIRONMENTAL QUALITY

The Council on Environmental Quality (CEQ) was established by Congress within the Executive Office of the President through the National Environmental Policy Act of 1969 (NEPA). The Chair of the Council, supported by a small staff, serves as the principal environmental policy advisor to the President. CEQ has broad statutory responsibilities for advising and assisting the President in the development of environmental policies and proposed legislation; identifying, assessing, and reporting on trends in environmental quality and recommending appropriate response strategies; and overseeing federal agency implementation of the environmental impact assessment process under NEPA. CEQ coordinates federal environmental efforts, and acts as a referee for interagency disputes regarding environmental issues.

CEQ thus plays a critical role in the development and implementation of environmental policy within the Executive Office of the President. Its leadership and coordinating role within the federal Executive Branch is of increasing importance, given the urgency and cross-cutting nature of global warming and other current environmental challenges.

Unfortunately, CEQ has been severely underfunded and understaffed in recent years. Although CEQ's staff ranged from 50-70 during the 1970s and 80s in both Republican and Democratic Administrations, it is currently staffed by only 24 FTEs, making it increasingly difficult for the office to carry out its responsibilities to advise the President, assist in the development of environmental policies, coordinate federal environmental programs among other federal agencies, and oversee federal NEPA compliance.

Funding increases are needed for:

• CEQ to Assume a Lead Role on Climate Change and Energy Strategy. In FY 11, CEQ will exercise its coordination function to address the long term challenges of climate change for federal agencies by helping develop national strategies for climate change and energy. This effort builds on CEQ's statutory responsibility for and expertise in reviewing, assessing, and developing policies that bridge environmental and socioeconomic factors, and its experience coordinating federal environmental policies across regulatory and management agencies. CEQ was also directed in the House Conference Report for the Department of the Interior, Environment, and Related Agencies Appropriations Act, 2010 to work with the Department of the Interior to develop a national, government-wide strategy to address climate impacts on fish, wildlife, plants, and associated ecological processes.

CEQ is charged with taking a lead role in the implementation of Executive Order, *Federal Leadership in Environmental, Energy, and Economic Performance* signed by President Obama on October 5th, 2009. The Executive Order sets sustainability goals for federal agencies and requires federal agencies to set a 2020 greenhouse gas emissions reduction target, increase energy efficiency, reduce fleet petroleum consumption, conserve water, and reduce waste. Among CEQ's responsibilities are issuing guidance for greenhouse gas accounting and reporting; reviewing and approving each agency's targets, and reviewing and evaluating each agency's multi-year Strategic Sustainability Performance Plan.

CEQ will also directly be involved in the Administration's effort to retrofit buildings for energy efficiency. In 2009, CEQ convened an interagency Energy Retrofit Working Group to track the progress meeting the recommendations made in the *Recovery Through Retrofit Report* issued in October 2009. This Report, put together as a joint initiative with Vice President Biden's Middle Class Task Force, contains policy recommendations on how to build the market for home energy retrofits, which creates jobs and reduces household energy bills and greenhouse gas emissions. The Working Group, which is co-chaired by the Department of Energy, the Environmental Protection Agency, the Department of Housing and Urban

EXECUTIVE OFFICE OF THE PRESIDENT COUNCIL ON ENVIRONMENTAL QUALITY

Development, the Department of Labor, and the Department of Agriculture, will continue to develop and implement strategies to support expansion of the retrofit market.

- CEQ to Strengthen the Appropriate Use of the National Environmental Policy Act. Since 1970, the National Environmental Policy Act (NEPA) has provided the framework for public involvement in and substantive analysis of the environmental and related social and economic effects of federal agencies' proposed actions. The proper application of NEPA ensures that agencies make well-informed decisions. The law ensures that agencies consider the environmental effects of a proposed action and alternatives to that action, the cumulative effects of the proposed action and its alternatives, and concerns raised by the public. CEQ is charged with overseeing more than 85 federal agencies' implementation of the environmental impact assessment process under NEPA. Moreover, CEQ has assumed the primary responsibility in ensuring that agencies comply with NEPA for projects that were funded in the American Recovery and Reinvestment Act of 2009.
- CEQ Role in the National Ocean Policy: President Obama's Interagency Ocean Policy Task Force, led by CEQ, recommended a national policy that strives to ensure protection, maintenance, and restoration for the oceans, coasts and Great Lakes of our nation. While the Interagency Ocean Policy Task Force will cease to exist in FY10, CEQ will continue to play a primary role in the implementation of the National Policy. This role will include advising the President on the National Policy, as well as coordinating and facilitating the implementation of the National Policy with the different agencies involved.
- CEQ Role as Environmental Advisor Restored: One of the major duties of CEQ is to coordinate Federal environmental efforts and work closely with agencies and other White House offices in the development of a wide range of environmental policies and initiatives. For example, in FY 11 CEQ will continue its leadership of the Louisiana and Mississippi coastal restoration interagency working group announced by President Obama on the fourth anniversary of Hurricane Katrina. The working group will coordinate the efforts of the federal government and make recommendations on policies to move restoration efforts forward. Lastly, CEQ needs adequate funding to continue its leadership role in revising principles and guidelines that govern America's water resource planning. This effort began in December 2009 with a release of a proposal and draft Principles and Guidelines for water resources.

FY 11 Recommendation:

Council on Environmental Quality - \$5.0 million for 45 FTEs An increase of \$1.841 million over the FY 10 enacted level of \$3.159 million

DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

Flood Mitigation Assistance Program

Although few real reforms to flood plain management were implemented after the Great Midwest Flood of 1993, one positive change was the creation of the Flood Mitigation Assistance Program (FMA). Enacted as part of the 1994 Flood Insurance Reform Act, this program aims to reduce or eliminate insurance claims under the National Flood Insurance Program (NFIP). Funding through this program is targeted at nonstructural pre-disaster flood reduction solutions that save lives and taxpayer money, including elevation, acquisition, and relocation of NFIP-insured structures. The program can also assist communities through technical assistance and aiding them in the updating of Flood Mitigation Plans. Funding is provided at a 75% federal cost share; participating communities must be NFIP-participating communities.

FY 11 Recommendation:

Flood Mitigation Assistance Program - \$40.0 million Same as the FY 10 enacted level

Hazard Mitigation Grant Program

The Hazard Mitigation Grant Program (HMGP) provides grants to state and local governments, or communities on behalf of individuals, after a presidential disaster declaration in the wake of a significant disaster to implement long-term hazard mitigation measures. The HMGP enables mitigation measures to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. Projects are required to provide long-term and cost-effective solutions to a problem. Funding is provided at a 75% federal cost share. Funds under this program are a primary source of financing for voluntary buy-outs of flood-prone properties—particularly repetitive loss properties—and relocations out of the floodplain to higher ground. To date the program has provided more than \$1.1 billion in mitigation funding for projects including acquisition and relocation of structures from hazard-prone areas, drainage improvement projects, and elevation of flood-prone structures.

FY 11 Recommendation:

Hazard Mitigation Grant Program - 15% of funding should be dedicated to relocating families and communities out of hazardous locations

National Dam Safety Program

There are more than 78,000 dams in the United States, many of which were built more than 50 years ago and are reaching the end of their expected lifespan. The National Dam Safety Program was established to improve safety and security around dams. About 95% of the nation's dams are monitored and inspected by state dam safety officials, including over 10,000 high hazard dams (meaning that failure will likely result in loss of life) and over 3,000 dams that are considered "unsafe." The national program provides funding to states to run their regulatory program, research funding to enhance technical expertise, and training sessions for dam safety inspectors. Often the costs of maintaining safe dams outweigh the benefits the dams provide and communities will choose to remove their obsolete dams. Additionally, the National Dam Safety Program is charged with educating the public, including dam owners, about their responsibility to maintain safe dams and therefore keep their communities out of harm's way.

FY 11 Recommendation:

National Dam Safety Program - \$11.7 million An increase of \$1.4 million over the FY 10 enacted level of \$10.3 million

DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

Repetitive Flood Claims & Severe Repetitive Loss Program

The Repetitive Flood Claims (RFC) grant program and the Severe Repetitive Loss Program (SRL) were established in 2004 to reduce or eliminate recurring flood insurance claims from NFIP-insured structures. The Repetitive Flood Claims program serves as a backstop for communities that cannot raise the non-Federal cost-share requirement of the Flood Mitigation Assistance program. Properties qualifying for the SRL program are structures with: four or more flood insurance claims payments that each exceeded \$5,000, with at least two of those payments occurring in a 10-year period, and with the total claims paid exceeding \$20,000 or two or more flood insurance claims payments that together exceeded the value of the property. Under these programs, priority has been given to cost-saving approaches such as relocating flood-prone structures and deed-restricting vacated land for open space uses in perpetuity.

FY 11 Recommendation:

Repetitive Flood Claims - \$20.0 million

An increase of \$10.0 million over the FY 10 enacted level of \$10.0 million

Severe Repetitive Loss Program - \$80.0 million

An increase of \$10.0 million over the FY 10 enacted level of \$70.0 million

National Pre-Disaster Mitigation Fund

Poorly planned floodplain development has put countless people in danger and eroded natural flood protections. The Pre-Disaster Mitigation Program (PDM), run by FEMA and administered by each state, helps communities dramatically reduce disruption and loss caused by floods and other natural disasters. The goal of the program is to reduce risks to people and structures, thereby minimizing reliance on federal relief in the event of a catastrophe. Under the program, priority should be given to those projects that provide funding for relocation and acquisition of flood-prone properties to move communities out of harm's way. Communities applying for PDM funding for the purpose of flood damage mitigation must be participating members of the National Flood Insurance Program (NFIP).

FY 11 Recommendation:

National Pre-Disaster Mitigation Fund & Grant Programs - \$150.0 million *An increase of \$50.0 million over the FY 10 enacted level of \$100.0 million*

Flood Hazard Identification Map Modernization

Obsolete, almost antiquated, maps pose one of the greatest challenges to protecting communities from repeated flooding and maintaining solvency of the National Flood Insurance Program. Recently, FEMA has been engaged in a multiyear initiative to modernize the Nation's flood hazard identification maps in cooperation with local, regional, or State agencies. These maps are critical as they are used to assign flood insurance rates. They are also now widely recognized as an essential tool for keeping people out of harms way and management of natural resources.

FY 11 Recommendation:

Map Modernization - \$220.0 million Same as the FY 10 enacted level of 220.0 million

DEPARTMENT OF HOMELAND SECURITY COAST GUARD

Coast Guard Marine Debris

Marine debris causes tremendous harm to the planet's oceans and waterways by contributing to the endangerment of marine and coastal wildlife and the destruction of coral and benthic habitats. The prevention, reduction and removal of marine debris from our oceans are essential to mitigate current and future impacts that marine debris will cause. The United States Coast Guard is an integral player in implementing the Marine Debris Research, Prevention and Reduction Act through its regulation of vessel solid waste disposal at sea and ports. Beyond the range of traditional missions, the Coast Guard also uses a modest amount of its resources to remove marine debris. Despite the \$2 million authorized by the Marine Debris Research, Prevention and Reduction Act, the Coast Guard has received no appropriations specifically for marine debris removal. Without more robust Coast Guard involvement, marine debris will continue causing navigational hazards and vessel damage, wildlife entanglement and ghost fishing, marine habitat damage, and coastal habitat fouling.

FY 11 Recommendation:

Coast Guard Marine Debris - \$2.0 million

An increase of \$2.0 million over the FY 10 enacted level of \$0.0 million

DEPARTMENT OF STATEINTERNATIONAL ORGANIZATIONS and PROGRAMS (IO&P)

United National Framework Convention on Climate Change (UNFCCC), Intergovernmental Panel on Climate Change (IPCC), Montreal Protocol

As the three leading bodies charged with directing global efforts to assess the risks and implications of greenhouse and ozone-depleting emissions and to develop and implement global cooperative frameworks to reduce key pollutants, maintaining current levels of US support for the UNFCCC, IPCC and the Montreal Protocol is crucial to affirm US commitment to addressing climate change and ozone depletion. The UNFCCC is and will continue to play a critical role in providing a platform for the development of a successor treaty to the Kyoto Protocol to address climate change and the IPCC's work to conduct ongoing scientific assessment of the risks and implications of climate change is fundamental to our understanding of the climate change problem. Similarly, the Montreal Protocol, as one of the most successful environmental agreements, should be supported to be able to continue control and enforcement of ozone-depleting substances. Support for these three bodies should be maintained at the current level of \$38.5 million.

FY 11 Recommendation:

UNFCCC, IPCC, Montreal Protocol - \$38.5 million Same as the FY 10 enacted level of \$38.5 million

International Conservation Programs within the International Organizations & Programs (IO&P) Account Through the State Department's International Conservation Programs, the U.S. supports cooperative approaches to conservation challenges and provides technical expertise to help developing countries build capacity for conservation and sustainable natural resource management. The programs also facilitate the exchange of information and new environmental technologies between countries. Modest U.S. contributions often leverage millions of dollars in project co-funding.

The IO&P account supports a number of important cooperative initiatives, including the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which monitors and regulates international trade in threatened and endangered species; IUCN-the World Conservation Union, a global alliance for the advancement of conservation and sustainable development objectives; the Ramsar Convention on Wetlands of International Importance, which acts as the global framework for efforts to conserve and sustainably manage wetland resources; the International Tropical Timber Organization (ITTO), which brings together producing and consuming countries of tropical timber to address all aspects of the tropical timber economy, including market transparency and sustainable management; and the United Nations Convention to Combat Desertification (UNCCD), which addresses the fundamental causes of famine and food insecurity by bringing government representatives, local communities and NGOs into more effective partnerships and encouraging the sharing of information and new technology. The IO&P account also includes funding for the UN Environment Programme and the World Heritage Convention, both of which support nature conservation in developing countries.

FY 11 Recommendation:

International Conservation Programs - \$10.0 million An increase of \$3.0 million from the FY 10 enacted level of \$7.0 million

U.S. AGENCY for INTERNATIONAL DEVELOPMENT (USAID)

Biodiversity Conservation Programs

The lion's share of U.S. foreign assistance for on-the-ground conservation is delivered through USAID and its Biodiversity Conservation Programs. These programs help protect some of the largest and most at-risk natural landscapes, including South America's Amazon Basin, Africa's Congo Basin, Nepal's Terai Arc, Southern Sudan in the African Sahel, and the Coral Triangle of Southeast Asia and the Pacific. These landscapes are home to important biodiversity and endangered wildlife populations as well as millions of people who directly depend on natural resources for their survival. USAID assistance for conservation serves the needs of local inhabitants while addressing larger foreign policy objectives – ensuring clean water, promoting global health, combating global warming, building democracies, securing environmental resources, and reducing poverty. It is more important than ever that foreign assistance dollars work to accomplish several objectives at once. U.S. investments in global conservation have a strong track record of delivering results on multiple levels and strategically leveraging support from other donors around the world. USAID's Global Conservation Program (GCP) is a case in point – a decadelong effort in partnership with six NGOs to support new, landscape-level approaches to conservation of 29 landscapes in 27 countries, across park and political boundaries, managed by local stakeholders. A newly launched USAID program – Sustainable Conservation Approaches in Priority Ecosystems (SCAPES) – is continuing this trans-boundary, sustainable approach to protecting biodiversity at the landscape/seascape level. Growing populations and intensifying economic pressures are increasing the risks to our planet's natural resources. U.S. commitments must rise accordingly to meet the needs of natural resource managers and conservationists overseas, who are often the rapid responders and first line of defense when international crises unfold. Partnerships forged by USAID professionals, foreign governments, the private sector, local peoples and conservation organizations continue to drive the success of the USAID Biodiversity Program. Expanded foreign assistance programs directed toward global conservation can build on this success, helping developing countries meet their future needs while protecting the natural resources upon which their citizens depend and the rest of the world relies. http://www.usaid.gov/our_work/environment/biodiversity/

FY 11 Recommendation:

Biodiversity Conservation Programs - \$350.0 million

An increase of \$145.0 million over the FY 10 enacted level of \$205.0 million

Population Assistance Program

Since 1995, U.S. aid for family planning in the developing world has been cut by nearly 35 percent when adjusted for inflation. The number of women in these countries has grown by 300 million in the same time period. More than 200 million women in the most impoverished parts of the world want to delay or end childbearing but do not have access to modern contraceptives. If the U.S. were to provide its appropriate share of the total financial resources necessary to meet the unmet need for contraception, this sum would total \$1 billion. The lack of access to modern family planning is a key driver of the more than 60 million annual unintended pregnancies worldwide and the resulting yearly net increase in global population of 80 million people. Population growth in the developing world remains a contributor to deforestation, desertification, the degradation of oceans and waterways.

Moreover, family planning and reproductive health should be part of larger strategies for climate change mitigation and adaptation. Slower population growth will make reductions in global greenhouse gas emissions easier to achieve, and reduce the scale of human vulnerability to the effects of climate change. Further, USAID's successful experience in implementing integrated population, health and environment activities (PHE) can be applied to climate change adaptation and offer lessons on how effective community engagement, country-level coordination and cross-sectoral project design can help increase resilience of local communities to climate change. Investment

U.S. AGENCY for INTERNATIONAL DEVELOPMENT (USAID)

in family planning is critical to the protection of the global environment and comprehensive efforts to address climate change.

FY 11 Recommendation:

Population Assistance Program - \$1.0 billion An increase of \$351.5 million over the FY 10 House-passed level of \$648.5 million

U.S. AGENCY for INTERNATIONAL DEVELOPMENT BILATERAL INTERNATIONAL CLIMATE PROGRAM FUNDING

Adaptation

With emissions accelerating at a rate faster than predicted, scientists are finding that the effects of greenhouse gases are more powerful and happening sooner than expected. These negative impacts – including more severe, intense, and hazardous weather patterns, decreased agricultural productivity, and increased water scarcity – present severe threats to international development progress and national security. This funding will allow USAID to mainstream climate resilience and adaptation priorities into its development activities worldwide. By helping to manage climate instability and avoid damage to human activities and communities, particularly for the most vulnerable ecosystems and communities, adaptation programs can help prevent climate-driven migration and natural resource disputes, as well as demonstrate much-needed US leadership.

FY 11 Recommendation:

Adaptation Program - \$300.0 million

An increase of \$177.25 million over the FY 10 enacted level of \$122.75 million for adaptation

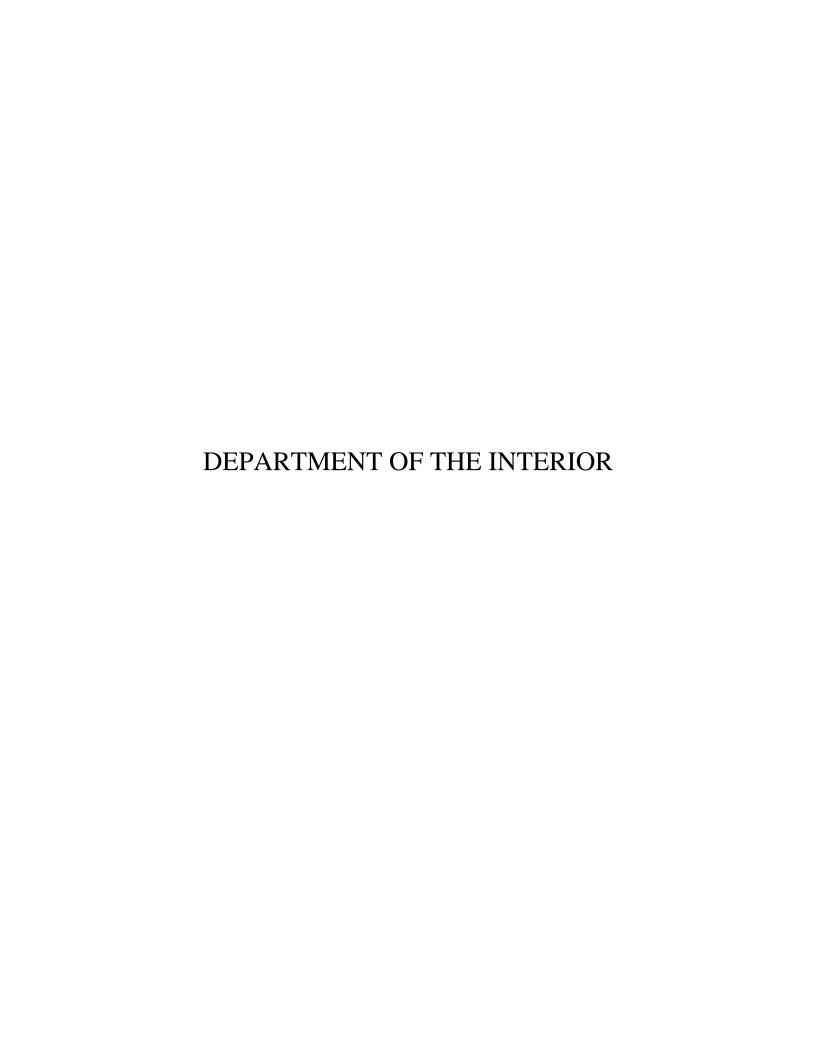
Forests and Land-Use

These emissions must be addressed to be able to avoid the worst impacts of climate change. At least \$300 million in FY 11 should be prioritized to fund development of programs that reduce emissions from tropical forest destruction and degradation (commonly called REDD) in developing countries. REDD is a cost-effective tool to deliver emissions reductions quickly. The recommendation includes funding to assist developing countries to build their institutional and governance capacity to manage their forest resources and develop national REDD programs that will produce measurable, reportable and verifiable emissions reductions as well as funding for programs to develop strong forest governance laws and improve law enforcement against illegal logging. Programs must emphasize the importance of transparency and respect for the rights of indigenous and forest dependent people. This funding will also be important to support potential bilateral agreements on REDD.

FY 11 Recommendation:

REDD - \$300.0 million

An increase of \$225.55 million over the FY 10 enacted level of \$74.45 million for climate forest and land-use



National Landscape Conservation System

The Bureau of Land Management's (BLM) 27 million acres of congressionally and presidentially designated lands and waters, including National Monuments and Wilderness areas, contains some of the last places where one can experience the history and wild beauty of the West. The BLM's Conservation System provides critical wildlife habitat, clean water, innumerable recreational opportunities and open space near fast-growing cities. It also provides countless research opportunities because of its astounding cultural, historic, and paleontological resources, the largest and most important collection managed by any federal land agency. Since the Conservation System's inception in 2000, insufficient funding has undermined the BLM's ability to steward these lands effectively, and resources are suffering from neglect and abuse. Pressures include growing numbers of visitors, looting of archaeological sites and reckless off-road vehicle use. The BLM struggles to complete essential resource protection work, such as signing trails, closing illegal and unnecessary routes, and inventorying and protecting cultural sites. Since the Conservation System's inception, funding has averaged only \$58.8 million—a scant \$2.25 per acre, before adjusting for inflation. The System has grown and pressures have increased while the System's budget has failed to even keep up with inflation and uncontrollable cost increases.

Funding of \$100 million in FY 11 would help prevent additional damage to the System's resources and ensure visitor safety. This funding level, though insufficient to allow BLM to meet all its resource protection mandates, would provide critical resources for BLM to hire essential law enforcement rangers, monitor natural and recreational resources, expand volunteer programs to better take advantage of in-kind donations, educate visitors, and undertake needed habitat restoration projects. The Omnibus Public Land Management Act of 2009 added 1.2 million acres of National Conservation Areas, Wilderness and other conservation areas to the National Landscape Conservation System. Part of the overall request for operations and maintenance includes new staff to manage these areas, as well as funds for management planning for these new designations within the time frames directed by Congress.

In FY10, in addition to funding for day-to-day funding for management activities, BLM provided \$7.5 million in a separate account for climate change adaptation activities for the Conservation System. Continuation of this program is critical to ensuring that BLM's most outstanding landscapes can begin to adapt to a warming climate.

Budget Clarity for the Conservation System

In FY 08, the Bush administration recognized the overdue need for transparency and accountability in the System's budget by creating dedicated accounts for the System's National Monuments and National Conservation Areas. These new subactivities will allow the BLM to better plan for management of those designations and track how those monies are spent. The FY10 report accompanying the Interior appropriations bill directed BLM to create a dedicated account for the System's National Scenic and Historic Trails. BLM must finish the job of ensuring budget clarity for all Conservation System units by creating dedicated accounts for the System's National Scenic and Historic Trails and Wild and Scenic Rivers; this will ensure that the new National Landscape Conservation System budget activity will be a complete account providing clear funding for all areas in the System.

Land Acquisition Funding for the Conservation System

There are also several million dollars in additional opportunities for land acquisition projects through the Land and Water Conservation Fund for properties with outstanding resource values that are available for purchase from willing sellers.

FY 11 Recommendation:

National Landscape Conservation System – Full budget clarity and \$100.0 million for operations, maintenance and planning. Continuation of the president's climate change adaptation initiative in addition to these funds.

--An increase of \$32.9 million for operations and maintenance over the FY 10 enacted level of \$67.1 million, when not aggregating climate adaptation funding in a separate account.

Additionally, \$30.0 million for Land and Water Conservation Fund opportunities in the National Landscape Conservation System

--An increase of \$19.4 million over the FY 10 level of \$10.6 million

Wildlife and Fisheries and Threatened and Endangered Species Management

BLM manages more land, and more wildlife and fish habitat, than any other federal agency including half of the remaining habitat for the imperiled sage grouse and almost 15 million acres of prairie grasslands vital to many declining grassland dependent plants and animals. The diverse habitat managed by BLM supports over 3,000 species of fish and wildlife, more than 300 federally proposed or listed species, and more than 1,300 sensitive plant species. The Wildlife and Fisheries Management and the Threatened and Endangered Species Management programs fund inventory and monitoring, habitat restoration, endangered species recovery, and other proactive conservation activities vital to maintaining healthy, functioning ecosystems and fish, wildlife, and plant populations.

Inappropriately, the Wildlife and Fisheries and Threatened and Endangered Species management programs have been forced to pay for the compliance activities of BLM's energy, grazing and other non-wildlife related programs. Traditionally, funding for compliance work has come from benefiting programs, however in recent years, at least 30 percent of the resources of these two programs have been routinely diverted to other areas, eroding their ability to conduct proactive species and habitat conservation activities and efforts to recover listed plants and animals. While this practice has undergone increased scrutiny in the last several years, no information has emerged to suggest that the situation has been rectified. This diversion of funding must be stopped, or additional funding provided to these two programs to make up for the deficiency. Consideration should be given to directing the agency to contract with a reputable outside entity knowledgeable in natural resource management to review the problem and make recommendations to resolve it.

Even if the diversion were halted, however, the meager funding still would not be adequate to the task at hand. The BLM has only one biologist per 591,000 acres of land, tens of millions of dollars are needed for fish passage restoration, and estimated costs for recovery of threatened and endangered species on BLM lands is \$300 million annually. Moreover, the status of the wide-ranging declining sage grouse is of great concern throughout the West, and significant additional resources will be needed for its protection. In addition, given the greatly expanded effort to develop renewable energy on BLM lands, it is absolutely crucial that these two programs have the resources to ensure that development occurs in a balanced fashion so that sustainable fish and wildlife populations can be maintained. Finally, BLM already is seeing changes out on the ground from climate change and must have the ability to address its impacts on wildlife and habitat. Wildlife and Fisheries and Threatened and Endangered Species Management will need additional funding in future years to address these and other crucial needs.

Increases recommended for FY 11 should be directed to recovery of threatened and endangered species, additional staff, monitoring and habitat restoration for species at risk, restoration of fish passages, inventory and improvements for wetlands, lakes and streams, fixed costs, and other critical needs. In addition, in the FY 10 budget, an increase of \$15 million was provided through the Soil, Water and Air budget subactivity to support adaptation of native animal and plant communities to climate change (See "Tackling Climate Impacts" below). Consideration should be given to funding this initiative in FY 11 through Wildlife and Fisheries and Threatened and Endangered Species Management since these two programs focus on these resources.

FY 11 Recommendation:

Wildlife and Fisheries Management - \$65.4 million An increase of \$15.0 million over the FY 10 level of \$50.4 million

Threatened and Endangered Species Management - \$32.6 million *An increase of \$10.0 million over the FY 10 level of \$22.6 million*

Report language: Direct the agency to contract with a reputable outside entity to review and make recommendations to address the practice of diverting program resources.

Tackling Climate Impacts: Adapting to Climate Change

In the FY 10 budget, the administration included an important new BLM crosscutting initiative, "Tackling Climate Impacts," to begin (in an attempt) to focus the agency on addressing the impacts of climate change. Base funding from the Healthy Landscapes and Resource Management Planning programs was included as part of the initiative. An additional critical component of this initiative, "Adapting to Climate Change" was a \$15 million increase, funded through the Soil, Water and Air budget subactivity, "to develop and implement strategies to help native plant and animal communities adapt to climate change and related stressors. The focus will be on maintaining an environment that allows for adaptation, promoting habitat connectivity, protecting habitat, and remaining biodiversity." BLM funding for this crucial "Adapting to Climate Change" program to help fish and wildlife survive and adapt to the ravages of climate change should be maintained and increased, however consideration should be given to coordinating and funding it through the Wildlife and Fisheries Management program which focuses on fish, wildlife and habitat rather than through Soil, Water and Air. Further, maintaining and expanding the full BLM "Tackling Climate Impacts" initiative will be important in helping to implement the Interior Department's September Secretarial Order No. 3289, "Addressing the Impact of Climate Change on America's Water, Land and Other Natural and Cultural Resources."

FY 11 Recommendation:

Tackling Climate Impacts: Adapting to Climate Change - \$18.0 million *An increase of \$3.0 million over the FY10 enacted level of \$15.0 million*

Challenge Cost Share

The BLM's Challenge Cost Share program allows the BLM to partner with state and local governments, private individuals and companies and nongovernmental organizations to restore habitat, monitor species, maintain archeological sites, and repair trails, along with other activities. The program, which requires a dollar for dollar match, averages a two-to-one match-and for some projects, a three to one match or more-providing tremendous leverage of federal funds. Given the ongoing diversion of resources from the wildlife programs, much of the proactive conservation work being accomplished in field offices is through Challenge Cost Share partnerships. Annually, the agency turns away on average \$20 million of potential projects that could be leveraged into \$60 million for the total program. Several years ago, when the various individual BLM challenge cost share programs were combined to establish the single current program that serves multiple BLM needs, 70 percent of the funding came from the wildlife challenge cost share. Increasing the CCS program by \$10 million and directing the increase to wildlife would result in at least an additional \$30 million on the ground investment for wildlife and address

¹ FY 10 DOI Bureau of Land Management Budget Justifications, p. III-27

gaping needs for projects relating to sage grouse conservation, off-highway vehicle management, invasive species control, and for addressing impacts from climate change.

FY 11 Recommendation:

Challenge Cost Share - \$19.5 million

An increase of \$10.0 million over the FY 10 enacted level of \$9.5 million

Plant Conservation

BLM lands are crucial to the conservation of more than 1300 sensitive plant species, yet the agency currently has no specific appropriation for plants that are rare but not listed under the Endangered Species Act. Some funding from the Wildlife and Fisheries account currently is used for this purpose. In addition, as part of the Burned Area Rehabilitation account, the BLM has been designating \$4-5 million annually to the Native Plant Materials Development program. Providing native seeds and seedlings for restoration projects after wildfires and other disturbances is vital to preventing the colonization of invasive plant species that degrade habitat and ecosystem functioning, and ultimately cost more to control than preventive measures. The large-scale development of native seed stock is still in its infancy, and often federal agencies are not able to acquire enough plant materials to meet their demands. Moreover, the ability to collect and store native seed stock in the face of the looming climate change threat is more important than ever before-these precious resources will be a crucial tool in ecosystem restoration.

Given the importance of these plant related programs, it has become increasingly apparent that a specific new budget activity or subactivity is needed for plant conservation in the Management of Lands and Resources account that would encompass both its ongoing efforts to conserve rare plants on BLM lands as well as a comprehensive Native Plants Materials Development program. The FY 09 Interior, Environment, and Related Agencies appropriations bill took a good first step when it transferred the Native Plant Materials Development funding out of Burned Area Rehabilitation into the wildlife account. It is estimated that the annual funding need for the Native Plant Materials Development program would be \$25 million over the next 10-15 years, along with one time construction funding of \$6 million for seed storage facilities, and for an ongoing rare plant program, approximately \$15 million annually. The FY 11 recommendation is a first step in reaching these levels.

FY 11 Recommendation:

Plant Conservation - \$5.0 million

A new program that would increase the overall Department of Interior budget by \$5.0 million over the FY 10 enacted level

Native Plant Materials Development - \$15.0 million for programmatic needs plus one time construction funding of \$6.0 million

An increase of \$16.0 million over the FY 10 enacted level of \$5.0 million for Native Plant Materials Development

Resource Management Planning

Given the enormous land management challenges of the coming decades across 256 million acres of BLM lands—including the complex natural resource dilemmas associated with climate change (i.e. species adaptation, extreme variability in natural processes)—it is imperative to support science-based planning, analysis and decision-making processes for the BLM. Well constructed BLM Resource Management Plans and assurances for Plan

implementation, including inventory, monitoring and evaluation, support high-quality, legitimate, effective and efficient resource management decisions.

BLM Resource Management Plans need to be funded at sufficient levels such that impacts associated with multiple-use activities as well as climate change can be fully assessed. This needs to occur at relevant spatial scales, including landscapes, to assess linkages between habitats and analyze cumulative effects across agency boundaries, and on multiple levels of biological organization (e.g. ecosystems and wildlife populations).

Consistent implementation of science-based analysis and decision-making also requires dedicated funding for monitoring and science-based adaptive management processes. The BLM Resource Management Planning program must increase its capacity to respond to changing conditions, by utilizing key inventory, monitoring, evaluation, maintenance and amendment processes, which take on increasing importance given the increasing diversity of values associated with BLM management processes, and critical biophysical changes associated with climate change.

In particular, development of the Assessment, Inventory and Monitoring (AIM) strategy is critical given the significant socio-ecological challenges of 21st century land management. According to the BLM, the intent of the AIM strategy is to create efficiencies in collection, analysis and reporting of resource conditions on BLM lands. As a cross-cutting program, the AIM strategy is designed to improve interaction between Resource Management Plan development and implementation and the BLM Wildlife and Fisheries Program. If done right, and provided with sufficient direction and resources, the AIM program has the potential to ensure a "proactive and effective wildlife program" that, through efficient operation, can "preclude the need to list species under the Endangered Species Act."

Finally, also important in FY 11 is funding for BLM to update and complete wilderness character inventories during the RMP and other planning processes. Throughout the West, millions of acres are awaiting assessment for their wilderness characteristics and it is expected that new guidance for identifying lands with wilderness characteristics will be issued in FY 10. The identification of wilderness characteristics will provide for better management of the wilderness resource until such time as Congressional action is taken.

FY 11 Recommendation:

Resource Management Planning - \$55.0 million

An increase of \$5.0 million over the FY 10 enacted level of \$50.0 million

Healthy Landscapes

Begun in 2007 as a crosscutting BLM initiative to mitigate the disastrous impacts of the prior administration's massive energy development, Healthy Landscapes has since become an innovative and praiseworthy effort to address landscape level challenges. The BLM, and potentially all of the federal land management agencies, can significantly benefit from larger, institutionalized cross-cutting programs that give the agencies the capability to address large-scale regional planning and conservation efforts at the landscape level. For example, ecoregional assessments examining such disturbances as energy development, urban growth, fire, invasives, and climate change have been conducted through the Healthy Landscapes program, providing BLM land managers and decision-makers with key biological information that can be meaningfully applied to the current expanded effort to develop renewable energy on BLM lands. In FY 11, the program will be using the results of the assessments to work with BLM field offices to make informed decisions on land use allocations and best management practices.

This type of proactive, strategic and forward looking initiative will be crucial to support the agency in properly managing the unique sagebrush, grassland and other ecosystems it administers; conserving wide ranging species such as the sage grouse; and preparing to meet the threat of global warming which already is a major cause in the spread of noxious exotic weeds, catastrophic wildfires, severe drought, and desertification on BLM lands. A crosscutting effort that encompasses all of the federal land management agencies can provide the mechanism to help address the significant ecological changes that are occurring across whole landscapes.

FY 11 Recommendation:

Landscape Scale Habitat Conservation - \$30.0 million

An increase of \$22.2 million over the FY 10 enacted level of \$7.8 million

Land and Realty Management: Renewable Energy Coordination Offices

The nation's growing addictions to fossil fuels coupled with the unprecedented threats brought about by global warming imperil the integrity of natural resource conservation. Development of renewable energy resources provides important benefits; it will ensure energy security and help us shift away from the consumption of climate-damaging fossil fuels. Unfortunately, the intensive effort to promote wide scale development of renewable energy sources and related transmission facilities on federal and private lands could have serious and widespread impacts on wildlife, habitat and ecosystems.

As our nation transitions toward a clean energy future, it is imperative for our future and the future of our wild places and wildlife that we strike a balance between addressing the near-term impact of renewables development with the long-term impacts of climate change on our biological diversity, fish and wildlife habitat, and natural landscapes, including habitat connectivity, carbon sequestration and other ecosystem services upon which we depend. To ensure that the proper balance is achieved, we need smart planning for renewable power that avoids and minimizes adverse impacts on wildlife and wild lands.

The final FY 10 Interior, Environment, and Related Agencies appropriations bill directed the Interior Department and the Forest Service to submit within 180 days a report on the criteria for siting renewable energy projects. The report must include a detailed strategic plan on agency coordination, an analysis of renewable energy sites and how infrastructure will be removed when no longer operational. Given the importance of protecting sensitive resources on lands managed by the Bureau of Land Management (BLM), the Administration should work expeditiously to submit a thorough report and work with Congress to guarantee appropriate siting of renewable energy projects and ensure that sensitive landscapes, sustainable populations of fish and wildlife, and magnificent views on public lands and coastlines are protected.

Aiding in our nation's transition to a clean energy future, the BLM Renewable Energy Program is tasked with permitting renewable energy development on our public lands as well as complying with the agency's multiple-use mandate and protecting the nation's richest ecological and cultural areas. Partially in response to the backlog of renewable energy permits that built up over the course of the Bush Administration, BLM has opened new renewable energy offices across the West to both expedite the permitting process and to ensure that proposed projects meet all applicable environmental laws and regulations.

In an effort to expeditiously develop renewable energy resources on BLM lands, the BLM has completed a Programmatic Environmental Impact Statement for both wind and geothermal energy. In 2009, 24 Solar Energy Study Areas were made public for consideration and analysis in a joint programmatic environmental impact

statement with the Department of Energy and BLM for solar development on public lands, and environmental impact statements for individual projects will also be completed over the coming fiscal year. In an effort to accelerate site permitting for renewable energy and transmission facilities on the BLM lands, the agency has fast-tracked 32 renewable energy projects-including 13 solar, nine wind and three geothermal energy projects and is considering more.

FY 11 Recommendation:

Land and Realty Management: Renewable Energy Coordination Offices - \$16.1 million *Same as the FY 10 enacted level of 16.1 million*

National Environmental Policy Act Implementation

The National Environmental Policy Act (NEPA) applies to all major federal actions that may significantly affect the environment. To comply with NEPA, the Bureau of Land Management (BLM) must assess and disclose the potential environmental effects of their actions in an Environmental Assessment or Environmental Impact Statement. In preparing these documents, the BLM must summarize the environmental impacts of their proposed action and alternatives, as well as the interrelated economic, health, or social effects. This process provides citizens an opportunity to learn about the actions that federal agencies are proposing and offers the BLM an opportunity to receive valuable input from the public, state and local governments, other agencies, and other stakeholders.

The BLM is responsible for carrying out a variety of programs for the management and conservation of resources on approximately 258 million surface acres, as well as 700 million acres of subsurface mineral estate. Although BLM suffers from budget constraints that detrimentally impact the agency's ability to implement NEPA throughout these programs, two components of BLM's responsibilities are in particular need of increased funding: BLM's management of livestock grazing practices and the oversight of renewable energy development on BLM lands.

First, BLM continues to face a backlog of expired grazing permits; currently there are over 3,600 permits that need to be processed. For the past several years, Congress has allowed BLM to renew grazing permits without environmental review in order to expedite the renewal process. Unfortunately, this practice has allowed harmful grazing practices to continue unabated, without eliminating the backlog. Overgrazing can lead to disastrous results, including the disappearance of vegetative species, an increase in erosion, and decline in water quality. As has been the case year after year, BLM's annual performance analysis reveals that nearly half of the agency's rangelands – 123 million acres – failed to meet the Department of the Interior's standard for desired conditions. In order to prevent further destruction and degradation of public resources, increased funding is needed to allow BLM staff to finally eliminate the backlog ensuring that proper NEPA analysis for these grazing permits is resumed.

Second, BLM is facing new challenges in regulating access to public land energy resources, in particular with respect to its role in development of renewable energy. On March 11, 2009 Secretary Ken Salazar issued Secretarial Order No. 3285 that made the production, development, and delivery of renewable energy top priorities for the Department of the Interior. The order created the policy goal of identifying and prioritizing specific locations best suited for solar, wind, geothermal, and biomass energy. BLM has been inundated with proposals for the development of renewable energy resources on public lands and is currently processing numerous applications for such projects. These proposed projects, if developed, will have significant environmental impacts that BLM will need to analyze pursuant to NEPA. NEPA will ensure that the best alternatives are considered, all potential impacts are fully known, and the public can have confidence that its government is proceeding in a manner that is transparent.

In addition to processing pending solar energy applications BLM, in partnership with the Department of Energy, is continuing to prepare a Programmatic Environmental Impact Statement (PEIS) to assess environmental impacts associated with the development and implementation of agency-specific solar programs. BLM needs additional funding to continue in these important efforts that will open public lands to an increasing amount of renewable energy production.

FY 11 Recommendation:

National Environmental Policy Act Implementation \$4.0 million for an additional 10 FTEs

(NEPA resources are combined with resources for the programs that they affect so it is not possible to disaggregate baseline numbers)

DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION

Water Conservation Field Services Program

The Water Conservation Field Services Program partners with water users, States, and other interested parties to improve water resource management and the efficiency of water use in the western United States. The early projects of the Bureau converted desert and arid western lands into some of the most intensely used agricultural areas and urban centers in the world. In order to continue to serve those purposes, more efficient water use is becoming a key component of the water resource management strategy. The programs efforts to implement efficiency not only increase water supply for future use and ecological protection but reduces costs of water supply, improves reliability of existing water supplies, increases the resilience to droughts, improves and protects water quality by reducing waste water, and reduces energy consumption.

FY 11 Recommendation:

Water Conservation Field Services Program - \$7.5 million

An increase of \$1.3 million over the FY 10 enacted level of \$6.2 million

Yakima River Basin Enhancement Project

The Yakima River Basin is home to Washington's largest Native American tribe and contains one of the largest Bureau of Reclamation projects in the West. The various Reclamation projects in the basin have depleted and polluted river flows, and water rights conflicts in this basin are legendary. Partly as a result, Yakima River bull trout and steelhead are now listed under the Endangered Species Act. Phase II of The Yakima River Basin Water Enhancement Project, authorized by Congress in 1994, was designed to ameliorate these conditions for both fish and farmers. It aims to restore the river and make better use of the existing water supplies. This legislation was a compromise agreed to by the basin's disparate stakeholders, and the program it created is a model for water conservation and water rights acquisition.

FY 11 Recommendation:

Yakima River Enhancement Project - \$10.0 million An increase of \$300,000 over the FY 10 enacted level of \$9.7 million

Deschutes Resources Conservancy

The Deschutes River Conservancy (DRC) is focused on restoring streamflow and improving water quality in the Deschutes Basin of Central Oregon. The DRC accomplishes these goals through water conservation projects, water leasing projects, water purchases, and habitat restoration projects. Projects are done in close collaboration with numerous stakeholders, including farmers, recreation enthusiasts, ranchers, conservationists, tribal communities. The DRC brings together groups working to restore the Deschutes River through its restoration grants program, enterprise programs creating markets for environmental services, and community development work aimed at developing a shared vision for basinwide restoration. Past federal funds appropriated for the Deschutes Ecosystem Restoration Project have been leveraged more than three-to-one with non-federal and in-kind contributions by the DRC.

FY 11 Recommendation:

Deschutes Resources Conservancy - \$750,000 An increase of \$750,000 over the FY 10 enacted level of \$0.0

DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION

California-Federal Bay Delta Program

The California-Federal Bay Delta Program (CalFed) is a partnership between federal and California agencies to provide a balanced, collaborative approach to the water resource demands on the San Francisco Bay and San Pablo Bay watersheds. The Ecosystem Restoration and Watershed program within CalFed works to restore and improve wildlife habitat throughout the watershed, improve fish passage, integrate flood control and ecosystem restoration, and implement specific watershed restoration projects in conjunction with watershed plans. The Ecosystem Restoration program has funded over 460 projects restoring 100,000 acres of fish habitat, screening 68 water intake points and initiating 23 comprehensive watershed programs. The Watersheds Program has awarded 116 grants totaling about \$50 million to community-based organizations for projects addressing watershed health, drinking water quality, non-point sources of pollution and watershed protection.

FY 11 Recommendation:

CalFed Ecosystem Restoration and Watershed Program - \$42.0 million *An increase of \$2.0 million over the FY 10 enacted level of \$40.0 million*

Climate Change Adaptive Science Capacity

In September, 2009, the Fish and Wildlife Service (FWS or Service) released for public review and comment "Rising to the Challenge: Strategic Plan for Responding to Accelerating Climate Change." In general, this bold Strategic Plan calls for a strong, coordinated response, including a national natural resources climate change adaptation strategy; landscape-scale coordination to deal with the large and complex conservation issues associated with climate change and shifting species range; and increased scientific capacity to understand the ecological impacts of climate change, to forecast future impacts for planning, and to develop and implement comprehensive monitoring systems to provide ongoing information necessary for adaptive management. Implementation of the Strategic Plan to assist our nation's wildlife in coping with the impacts of climate change will require continued investment in FWS climate change programs.

Building on the investments in FY 10, the Service intends to continue building Landscape Conservation Cooperatives (LCCs). The Service hopes to build over 20 of these conservation partnerships to provide geographic coverage of the entire country. LCCs will provide technical capacity to the conservation partners in each region to effectively deal with the impacts of climate change. In FY 10 FWS is building eight LCCs, and in FY 11 plans to build an additional eight. Collaborative landscape conservation is a cornerstone of any national climate change adaptation strategy, and the LCCs, which have been elevated to a Department of the Interior-wide initiative, are an important initiative to increase the effectiveness of landscape-level conservation and will play a central role in implementing the Interior Department's September Secretarial Order No. 3289, "Addressing the Impact of Climate Change on America's Water, Land and Other Natural and Cultural Resources."

Inventory and monitoring is another essential tool in understanding the impacts of climate change and for measuring the effectiveness of conservation actions. In FY 10, the Service is building the backbone data infrastructure to coordinate a national inventory and monitoring program, and is staffing each LCC being developed in FY 10 with biologists to implement inventory and monitoring programs. In FY 11, the Service needs additional resources to build this capacity within additional LCCs. The Service is strategically building their inventory and monitoring programs to be consistent and complementary to other agency programs, such as the Forest Service Forest Inventory and Assessment program and the National Park Service Vital Signs program.

FY 11 Recommendation:

Landscape Conservation Cooperatives - \$40.0 million

An increase of \$20.0 million over the FY 10 enacted level of \$20.0 million

National Wildlife Refuge Inventory and Monitoring - \$20.0 million

An increase of \$8.0 million over the FY 10 enacted level of \$12.0 million, included also under the overall National Wildlife Refuge System operations and maintenance recommendation

Endangered Species Program

For more than 35 years, the Endangered Species Act has helped to prevent the extinction of our nation's wildlife treasures including beloved symbols of America such as the bald eagle, the Florida manatee and the California condor. Only nine of the more than 1900 plants and animals currently protected by the act worldwide have been declared extinct, an astonishing success rate. The Endangered Species Act provides added benefits to people by maintaining healthy natural systems that provide us with clean air and water, food, medicines and other products

that we all need to live healthy lives. We owe it to our children and grandchildren to be good stewards of the environment and leave behind a legacy of protecting endangered species and the special places they call home.

The U.S. Fish and Wildlife Service (the Service or FWS) is responsible for managing the Endangered Species program through four main accounts: Candidate Conservation, Listing, Consultation, and Recovery. The Endangered Species Act's outstanding successes have been achieved despite severe and chronic funding shortfalls that plague the Service's program. FWS resources fall far below what is needed to properly implement the program.

- As of the end of 2009, the Listing account, which supports the protection of new plants and animals under the Endangered Species Act and designation of their critical habitat, has a backlog of approximately \$200 million, far in excess of available funding, with 249 domestic and 20 foreign candidates awaiting proposal for protection. Addressing the listing backlog will require increasing funding well over current levels, as well as more efficient use of funds, given that the Service currently lists far fewer species per dollar today than in 2000.
- Staff levels in the recovery program have decreased by 16 percent since 2002 and resources also are needed to implement recovery actions on the ground.
- A May 2009 Government Accountability Office analysis, "ENDANGERED SPECIES ACT: The U.S. Fish and Wildlife Service Has Incomplete Information about Effects on Listed Species for Section 7

 Consultations (GAO-09-550)" found that the FWS lacks systematic measures for tracking monitoring reports required by biological opinions and for tracking cumulative take of listed species at least in part due to staffing and budgetary shortfalls. In fact, the Service was unable to account for all required monitoring reports in 63 percent of the consultation files examined. FWS is currently developing the Integrated Planning and Consultation system that will address this need full scale deployment of the System will cost about \$20 million per year for five years, however the agency was able to allocate only \$1 million to it in FY 10.
- The development and implementation of Habitat Conservation Plans (HCPs), intended to allow non-federal activities to proceed while still protecting listed plants and animals, continues to grow, with funding critically needed to help ensure timely and effective development and monitoring of 739 existing and nearly 40 HCPs under development.
- The Candidate Conservation program saw a loss of 15 percent of staff from 2002-2009, yet pending petitions to list several hundred additional species may significantly increase the number of candidates well above 249.
- The Service must begin to take into account the staggering impacts of climate change in all aspects of the Endangered Species program and also must be able to ensure that greatly expanded renewable energy development both on federal and private lands is carried out in compliance with the ESA.

To adequately implement the endangered species program funding must gradually increase for the four main accounts to at least \$305 million, an increase of \$125.5 million over FY 10.

FY 11 Recommendation:

Endangered Species program - \$217.1 million

\$15.0 million for Candidate Conservation

\$32.1 million for Listing

\$75.0 million for Consultation

\$95.0 million for Recovery

An increase of \$37.6 million over the FY 10 enacted level of \$179.5 million

National Wildlife Refuge System

The National Wildlife Refuge System is our nation's only public lands system dedicated to wildlife conservation. The Refuge System, with more than 550 refuges on more than 150 million acres across the country, is the key to protecting America's wildlife and ensuring that there are lands where wildlife protection is a priority. In the coming years, the Refuge System will become increasingly important in the fight to help wildlife survive the ravages of climate change. There is a refuge in every state and within an hour's drive of most major American cities. Our national wildlife refuges serve as economic engines for many local communities, visited by more than 40 million people each year. The Fish and Wildlife Service estimates that, in 2006 alone, visitors generated nearly \$1.7 billion for local economies, supporting almost 27,000 private sector jobs and producing about \$543 million in employment income.

In 2009, the Refuge System was given significant new responsibilities with designation of FWS as the primary manager for three new marine national monuments – Pacific Remote Islands, Rose Atoll and Marianas Trench Marine National Monuments. This adds to the responsibilities already held by FWS as a co-manager of Papahānaumokuākea Marine National Monument established in 2006. Collectively, these monuments constitute one-third of the area of the Refuge System and are the most unspoiled tropical ecosystems under U.S. trust.

Despite its crucial role in conserving our nation's wildlife heritage, the Refuge System has been plagued for years by severe funding shortfalls. The most recent information indicates that the operations and maintenance backlog totals \$3.5 billion. For a number of years, annual appropriations failed to keep pace with the more than \$15 million increase per year needed to address fixed costs, forcing the Refuge System to a crisis point and necessitating plans for a massive downsizing that would have required a 20 percent staff reduction, and left roads and visitor centers closed, viewing platforms and trails in disrepair, increased crime due to scarcity of law enforcement officers, and biological, education, hunting and fishing programs eliminated. Fortunately, Congress has stepped in to rescue the Refuge System and provided a desperately needed infusion of funding over the past three years that thus far has provided the FWS with breathing room to avert the most damaging of the restructuring measures for the time being. However, significant funding increases are needed in the coming years to eliminate the need for restructuring and to ensure that the Refuge System envisioned in the landmark bipartisan 1997 National Wildlife Refuge System Improvement Act will be realized.

The Cooperative Alliance for Refuge Enhancement (CARE), a diverse coalition of 22 conservation, recreation and scientific organizations representing a national constituency of more than 14 million Americans, in a carefully researched yearly analysis, "Restoring America's Wildlife Refuges 2009: A Plan to Solve the Refuge System Funding Crisis," found that the annual operations and maintenance budget for refuges should total at least \$808 million, a conservative request that provides funding for operations and routine maintenance but still does not address the full backlog. The analysis will be updated in early 2010. CARE believes that this amount will address the crisis facing the Refuge System and provide it with the resources it needs to meet its mission in the coming years. Some of the annual needs identified in the report include: more than \$355 million in "Mission Critical" projects; an additional 241 law enforcement officers at a cost of \$36 million; more than 2,700 additional refuge managers, biologists, visitor service and other staff at a cost of \$247 million; \$25 million to just partially address the 2.3 million acres overrun with invasive plants and the more than 4,400 invasive animal populations; and at least \$8 million for management of the marine monuments. Increases also are needed for the Service's national inventory and monitoring program that is being developed to address the impacts of climate change.

FY 11 Recommendation:

National Wildlife Refuge System Operations and Maintenance - \$578.3 million *An increase of \$75.0 million over the FY 10 enacted level of \$503.3 million*

Migratory Bird Management

Migratory birds are integral to healthy natural systems in many ways, including as predators, prey, seed dispersers, and pollinators, and are actively appreciated and enjoyed by millions of people across the country. Wildlife watching contributes \$122 billion to the U.S. economy every year, and one in three American adults is a bird watcher. More than 800 species of birds occupy an array of habitats across the U.S. – of these, 67 are listed under the Endangered Species Act and an additional 184 are species of conservation concern. According to "The State of the Birds 2009," declines include nearly all native Hawaiian birds that have plummeted to the verge of extinction, 39 percent of ocean birds, half of coastal shorebirds, 30 percent of aridland birds, and 40 percent of grassland birds. As the global warming crisis worsens, increasing numbers of bird species, along with their habitats, will become vulnerable.

The FWS Migratory Bird Management program is multi-faceted and encompasses survey and monitoring, "Urban Treaty" partnerships with cities to conserve birds, management of permits and hunting regulations, efforts on international treaties, habitat restoration, coordination of work to reduce direct bird mortalities, and implementation of the North American Waterfowl Management Plan as well as other efforts to conserve bird habitat through the Joint Ventures and Federal Duck Stamp programs. In an effort to make more demonstrable progress in on-the-ground conservation to restore bird species to healthy levels, the FWS has developed a list of 139 focal species to receive greater attention in the coming years through development and implementation of specific action plans on each species. Twelve action plans have either been completed or are near completion and the program is committed to completion of a total of 30-40 plans by the end of FY 10 and hopes to complete 10-15 additional plans each year. In addition, given the declining status of so many bird species, inventory and monitoring is more important than ever yet little is known about the population trends of birds in many habitats. FY 11 increases should be directed toward: 1) implementation of completed focal species plans and continued development of plans; 2) inventory and monitoring, including expanding current survey capabilities into areas not already covered; 3) Urban Treaties; 4) the Joint Ventures program; and 5) full funding of fixed costs.

FY 11 Recommendation:

Migratory Bird Management - \$68.5 million

An increase of \$14.0 million over the FY 10 enacted level of \$54.5 million

International Affairs

Conservation of the Earth's wildlife and habitat is a global priority and requires nations to work together cooperatively-wildlife recognizes no political borders. The relative wealth of our country in comparison to desperate situations around the globe means that modest investments of U.S. conservation dollars can reap significant returns when invested in the developing world, in recent years leveraging three dollars for every dollar invested by the U.S. government. The FWS is mandated through numerous statutes and international treaties to support U.S. involvement in the North American Free Trade Agreement (NAFTA), the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, and the Ramsar Convention on Wetlands of International Importance. FWS provides scientific justification and implementation of permitting for international endangered species, participates in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and supports the Western Hemisphere Migratory Species Initiative (WHMSI), which strengthens international communication and cooperation to raise awareness of the ecological, economic and cultural importance of migratory species and encourage measures to conserve them. International Affairs works to meet its responsibilities through its International Conservation and International Wildlife Trade programs.

Through its Wildlife Without Borders (WWB) regional programs, International Conservation supports the preservation of endangered and migratory species and habitat through capacity building, environmental outreach, education, and training. At present, WWB regional programs are focused on Africa, Latin America and the Caribbean, China, India, Mexico and Russia and act as an important complement to the project-level efforts funded through the Multinational Species Conservation Funds. Efforts are being considered to broaden the scope and reach of these highly effective programs, including expanding them to more fully address cross-cutting, global threats to wildlife, such as climate change and disease. At the same time, new regional and bilateral partnerships are being explored in West Africa and with countries such as Mongolia, Paraguay and Tanzania.

Funding levels for International Affairs have been meager and are not proportionate to its importance in conserving wildlife around the globe. In the face of emerging and intensifying global threats to wildlife and habitat such as human-wildlife conflict, wildlife disease, and global warming, its funding should be significantly increased. The FY 09 Interior, Environment, and Related Agencies appropriations bill moved the program out of General Operations and established it as its own budget activity on par with Migratory Bird and Law Enforcement, a needed step to elevate its status. FY 11 funding increases should be focused on: 1) boosts to the regional Wildlife Without Borders programs; 2) implementation of treaties and agreements such as the Convention for the Conservation of Wetlands of International Importance (Ramsar) and the Western Hemisphere Migratory Species Initiative for which the Service currently gets almost no funding; 3) efforts to address cross-cutting problems emerging at the global level such as human-wildlife conflict, wildlife disease and invasive species; 4) the growing permitting, research, and monitoring workload including efforts FWS is undertaking on species native to the U.S.; 5) grants for recovery of foreign species listed under the Endangered Species Act for which there is currently no funding; 6) first time funding for the Exotic Bird Conservation Fund, established under the Wild Bird Conservation Act to provide grants for conservation of exotic birds subject to trade but never funded; 7) replacing key Service personnel; and 8) full funding of fixed costs.

FY 11 Recommendation:

International Affairs program - \$22.0 million

An increase of \$7.6 million over the FY 10 enacted level of \$14.4 million

Office of Law Enforcement

As our world grows increasingly complex, the protection of wildlife faces escalating criminal threats, including illicit trade, unlawful commercial exploitation, illegal destruction of habitat, and environmental hazards. Growing populations and accompanying development pressure; expansion of international communication, shipping and travel; rising global commerce; and broadly proliferating access to computer technology along with the evolution of the internet and "e-commerce" all combine to create mounting challenges to enforcement of U.S. and international wildlife laws. The U.S. supports one of the largest markets for both legal and illegal wildlife and wildlife products, and intercepted contraband includes caviar, coral, elephant ivory, sea turtle eggs and live birds.

The Office of Law Enforcement (OLE) investigates wildlife crimes, enforces regulation of wildlife trade, helps citizens comply with the law and works with other international and U.S. government entities to carry out its mission. OLE's wildlife inspectors and special agents, supported by the National Fish and Wildlife Forensics Laboratory and a new wildlife law enforcement data system, have achieved important successes in many arenas, including reduction of illegal harvest and trade in caviar and cases involving wolves, manatees, and endangered migratory birds. Despite these successes, the program is severely understaffed to meet the rapidly proliferating threats and in recent years has been starved of needed personnel and resources, slashing its effectiveness in

enforcing both federal wildlife laws and international treaties. Numbers of all-important special agents which should total 261 plunged from a high of 238 in 2002 to 184 in 2008, a 30 year low. While funding increases have brought the agent force up to about 200 in early FY 10, it still falls 23 percent below authorized numbers, and, on average, 14 are lost each year through attrition. The vital port inspection function is far overstretched and the Forensics Laboratory needs 12 new pathologists but has not had the funding to hire any. Also, Congress recently passed a groundbreaking law, (P.L.110-246), amending the Lacey Act, to ban international imports of illegally sourced plants and plant products – including illegally logged timber and wood products. This requires a system of electronic declarations for plant product imports, a database system to monitor these imports, and more staff, including port inspectors.

Increases for FY 11 should be focused on: 1) the hiring, training and equipping of 24 special agents; 2) 10 of 40 additional needed port inspectors; 3) 4 of 12 critically needed scientists for the forensics laboratory; and 4) full funding of fixed costs. In addition, the administration should be developing a plan to bring the agent force up to its authorized level of 261 and to ensure its maintenance at that level given the yearly loss of 14 through attrition. The OLE also should initiate efforts to develop another new fee structure to cover the escalating costs of the program.

FY 11 Recommendation:

Office of Law Enforcement - \$77.0 million

An increase of \$11.2 million over the FY 10 enacted level of \$65.8 million

Report language: Direct the agency to develop a plan to increase the special agent force to, and maintain it at, the authorized level

National Fish Passage Program

The National Fish Passage Program currently benefits 16 federally endangered and threatened fish species and is helping to prevent numerous other species from being listed as endangered. Since its inception in 1999, working with local, state, tribal, and federal partners, the Fish Passage Program has leveraged federal dollars nearly three-to-one. Through this work, the program has opened more than 3,750 miles of river and restored 69,000 acres of wetlands for fish spawning and rearing habitat. Restoring fish migration enhances entire watersheds and benefits birds and mammals, such as eagles, ospreys, herons, kingfishers, brown bears, otters, and mink. In FY 08, the Open Rivers Initiative was expanded to supplement the work of the Fish Passage Program by adding \$6 million to its base funding specifically for small barrier removal.

FY 11 Recommendation:

National Fish Passage program - \$6.5 million An increase of \$1.6 million over the FY 10 enacted level of \$4.9 million

Coastal Program

The Coastal Program is an effective partnership that brings together scientists, biologists, coastal communities, and other conservation partners to protect and restore habitat in coastal regions and coastal rivers. Since 1994, the Coastal Program has restored 251,000 acres of coastal habitat and 1,600 stream miles, while helping to protect over 1.7 million acres of coastal habitat. These efforts are critical to improving the health of the nation's coasts and estuaries, which has declined drastically due to increasing levels of stress from commercial and residential development, polluted runoff and waste disposal, shoreline modification, and over-harvesting of resources. As shown through the American Recovery and Reinvestment Act, a backlog of 814 shovel-ready restoration projects

totaling more than \$3 billion await action where the Coastal Program could be instrumental. Coastal Program efforts are helping to provide vital habitat for fish and wildlife, protect inland areas from erosion, and filter sediment and polluted runoff from watersheds, while cost-effectively leveraging more than double the federal investment for on-the-ground work. In addition, these activities are improving economies in coastal communities by supporting industries that contribute to restoration projects, as well as recreation, tourism, and fishing industries that benefit from healthy coasts.

FY 11 Recommendation:

Coastal program - \$25.0 million

An increase of \$9.1 million over the FY 10 enacted level of \$15.9 million

National Fish Habitat Initiative

The goal of the National Fish Habitat Initiative is to harness the expertise of existing efforts to create a coordinated approach to improving fishery habitat. The FWS has been the lead federal agency in the initiative, but it is a public/private partnership that includes other federal agencies (NOAA, U.S. Army Corps of Engineers, USDA, and other DOI agencies), state and local governments, and conservation groups. This combined force will leverage federal dollars with both private and non-profit resources in order to maximize funding for fish habitat conservation projects across the nation. The initiative partners have created an 'action plan' in 2006 that will foster geographically focused, locally driven, and scientifically based partnerships to protect, restore, and enhance aquatic habitats. The plan is non-regulatory and will succeed only through its collaborative nature.

FY 11 Recommendation:

National Fish Habitat Initiative - \$6.0 million

An increase of \$0.8 million over the FY 10 enacted level of \$5.2 million

State and Tribal Wildlife Grants Program

The State and Tribal Wildlife Grants Program is the principal program supporting implementation of comprehensive wildlife conservation strategies (State Wildlife Action Plans) and the only federal program to states that focuses on preventing wildlife from becoming endangered. These plans were congressionally required and are in place in every state and territory. The plans identified over 10,000 species in greatest conservation need and propose voluntary conservation actions needed to aid in the recovery of and the prevention of endangered species. Conservation actions include land protection, invasive species management, terrestrial and aquatic ecosystem restoration, private landowner incentives, research and survey work, and more. These actions are labor intensive, creating or sustaining thousands of jobs that will ensure lands important to hunters, anglers and other wildlife enthusiasts are sustained.

Many states are undergoing revisions of their plans to take advantage of new science to improve the plans to better address climate change. Increased funding in the FY10 bill is being used by many states to revise their plans and implement natural resources adaptation strategies. However for states to be successful at safeguarding their wildlife from the dire consequences of climate change increased funds are desperately needed and should be focused on climate change planning and implementation. The State Wildlife Action Plans serve as the framework for many other conservation interests in each state and will guide the work of many of the conservation partners including other state agencies, federal agencies and conservation groups. It is imperative states incorporate climate change information quickly into their plans and not wait for other planning efforts to be complete.

The State and Tribal Wildlife Grants Program also includes two competitive grants programs that encourage states to collaborate at landscape-levels and for tribes to conserve at-risk wildlife on tribal lands. Increased funding for the State and Tribal Wildlife Grants program is supported by the 6,200 member Teaming With Wildlife coalition made up of conservation organizations and businesses that endorse increased funding for state-based wildlife conservation.

FY 11 Recommendation:

State and Tribal Wildlife Grants program - \$115.0 million, including \$7.0 million for tribal grants and \$5.0 million for state competitive grants

An increase of \$25.0 million over the FY 10 enacted level of \$90.0 million

Cooperative Endangered Species Fund

Non-federal lands are crucial to the conservation of rare species. At least 65 percent of federally listed plants and animals are found on non-federal lands, with many absolutely dependent upon these lands for their survival. The Cooperative Endangered Species Fund provides grants to states for wildlife and habitat conservation activities on non-federal lands for listed and candidate species. Without the proposed increases, states will fall further behind in their ability to independently work to protect imperiled species. Crucial conservation activities funded by these grants include: research, species status surveys, habitat restoration, captive propagation and reintroduction, planning assistance, and land acquisition by states for Habitat Conservation Plans and recovery. Requests for the Habitat Conservation Plan and Recovery Land Acquisition programs generally total two to three times the available funding. Twenty-seven states received funding under the Cooperative Endangered Species Fund in FY 09 to benefit species ranging from the desert tortoise to the Indiana bat. To adequately fund state endangered species conservation activities, it is critical to gradually increase funding to at least \$170 million annually, which includes an annual level of \$30 million for conservation grants to states.

FY 11 Recommendation:

Cooperative Endangered Species Fund - \$100.0 million, including \$20.0 million for conservation grants to states *An increase of \$15.0 million over the FY 10 enacted level of \$85.0 million*

Partners for Fish and Wildlife Program

With two-thirds of America's land privately owned, private landowners play an important role in maintaining diverse ecosystems and wildlife for future generations. Through the voluntary Partners for Fish and Wildlife program, the Fish and Wildlife Service provides financial and technical assistance to landowners to restore degraded habitat on their property. The need for Partners for Fish and Wildlife is great. Our nation has lost approximately 70 percent of the nation's streamside habitat, 53 percent of wetlands in the continental United States, and 90 percent of the tallgrass prairie in the Midwest and Great Plains. Not only has important habitat for fish and wildlife been lost, but so has the multitude of other essential functions these habitats provide – reduced floods, decreased sediment and nutrient loads, and protection and improvement of water quality.

FY 11 Recommendation:

Partners for Fish and Wildlife program - \$62.0 million An increase of \$2.0 million over the FY 10 enacted level of \$60.0 million

Multinational Species Conservation Fund (MSCF)

The Multinational Species Conservation Fund has consistently enjoyed strong and broad-based support that far exceeds its very modest resources, described by the Congressional Research Service as "a relatively small program that has generated enormous constituent interest, chiefly concerning the funding levels." Since the African Elephant Conservation Fund was established by Congress in 1990, additional funds to help conserve Asian elephants, rhinoceros and tigers, great apes, and marine turtles have been authorized. Collectively, they comprise the MSCF, supporting conservation of charismatic mega-fauna in their natural surroundings through law enforcement, capacity building, mitigation of human-animal conflicts, habitat conservation, surveys and monitoring of populations, and public outreach and education programs. Over the past 18 years, the Funds have had a consistently successful track record in providing conservation assistance and leveraging partner contributions. From 2004-2008 alone, a little more than \$30 million in grant funding has leveraged more than \$60 million in additional support.

However, there is an urgent need for additional funding. Estimates are that more than 500 tigers are killed yearly. Asian elephants face ongoing difficulties in South and Southeast Asia from reduced habitat and human-animal conflicts. African elephants face similar threats and in East Africa populations have declined by 65 percent. Rhinos continue to be killed for their horns and only about 300 Sumatran rhinos remain. Orangutans face numerous threats including illegal logging, road construction, conversion of forests to plantations, draining of peat lands and poaching. Africa's gorillas, chimps and bonobos are increasingly hunted for food and subject to disease. Sea turtles are jeopardized by threats such as depredation of eggs, light pollution, hard coastal infrastructure, accidental capture in fisheries, and habitat loss. In addition, two new multinational species bills are awaiting passage by Congress – the Great Cats and Rare Canids Act and the Crane Conservation Act. Should those two bills be passed and signed into law, it is recommended that an additional \$1.25 million be provided for each to initiate these new programs.

FY 11 Recommendation:

Multinational Species Conservation Fund - \$18.0 million An increase of \$6.5 million over the FY 10 enacted level of \$11.5 million

North American Wetlands Conservation Fund

More than half of the original wetlands in the U.S. have been lost. This has contributed to the steady decline of migratory birds as well as other fish and wildlife species dependent on wetlands. With fewer wetlands, millions have been spent on erosion control, water treatment, and flood protection that natural wetlands used to provide for free. Restoring and protecting wetlands is vital to conserving fish and wildlife species dependent upon such habitat and maintaining healthy watersheds. These areas protect our safety and welfare without having to invest in costly projects, and provide innumerable opportunities for outdoor recreation for people across the nation. Through FY 09, this grant program has helped to fund more than 1,900 wetland conservation projects supported by 4,000 partners in all 50 U.S. states, Puerto Rico, the U.S. Virgin Islands, 13 Canadian provinces and more than 30 Mexican states and leveraged some \$2 billion in matching funds to conserve approximately 25 million acres of wetlands and associated uplands. The program continues to play a major role in conserving North American wetlands, migratory birds, and other species of fish and wildlife that depend upon such ecosystems.

FY 11 Recommendation:

North American Wetlands Conservation Fund - \$52.6 million An increase of \$5.0 million over the FY 10 enacted level of \$47.6 million

Neotropical Migratory Bird Conservation Fund (NMBCA)

Since 2002, the NMBCA has functioned as a matching grant program to fund projects that conserve neotropical migratory birds-those that breed in or migrate through the United States and Canada and spend the non-breeding season in Latin America and the Caribbean. Monies support partnership programs to conserve birds in the U.S., Latin America and the Caribbean, where approximately 5 billion birds representing over 500 species spend their winters, including some of the most endangered birds in North America. These funds provide an upland complement to the wetland bird conservation work accomplished under the North American Wetlands Conservation Act. Projects may include bird habitat conservation, research and monitoring, law enforcement, and outreach and education. All grant requests must be matched by non-federal funds at least 3 to 1. By law, 75 percent of the funds must be spent internationally. Between 2002 and 2008, partners in 48 U.S. states and more than 30 other countries have been involved in 295 NMBCA-supported projects. More than \$30 million in grants has leveraged some \$134 million in matching contributions to support activities that bring long-term benefits to neotropical migratory birds including songbirds, raptors, shorebirds and waterfowl and conserving about 2 million acres of bird habitat. While more than 100 worthy proposals are received each year, with the current funding provided, only about 40 can be funded.

FY 11 Recommendation:

Neotropical Migratory Bird Conservation Fund - \$6.5 million An increase of \$1.5 million over the FY 10 enacted level of \$5.0 million

Estuary Restoration Program

The Department of the Interior's (DOI) Estuary Restoration Program is a comprehensive program for the restoration of our nation's estuaries, authorized through the Estuary Restoration Act. Among the most productive ecosystems on earth, estuaries provide vital habitat to fish and wildlife species, and important environmental, cultural, and recreational benefits to human populations. The Act encourages coordination among all levels of government, and engages the unique strengths of the public, non-profit, and private sectors. The Act ensures a strong federal commitment and resources to restore estuary habitat by authorizing \$2.5 million for the DOI (newly authorized under the Water Resources Development Act of 2007), acting through the U.S. Fish and Wildlife Service, for implementation of on-the-ground restoration projects.

FY 11 Recommendation:

Estuary Restoration Program - \$2.5 million

Fully funded at its authorized level, which represents an increase of \$2.5 million over the FY 10 enacted level of \$0.0 million.

DEPARTMENT OF THE INTERIOR THE LAND AND WATER CONSERVATION FUND

The Land and Water Conservation Fund

In 1964, Congress established the Land and Water Conservation Fund (LWCF) to preserve natural areas and wildlife and ensure that all Americans have access to quality outdoor recreation. It was a simple idea and an elegant one and remains so today: use revenues from offshore oil and gas drilling to support the conservation of America's lands and waters. The creation of the LWCF demonstrated Congress' bipartisan recognition of the importance of safeguarding open spaces and natural areas and providing outdoor recreation opportunities for all Americans. Conservation of our natural resources, whether private or public, is critical to maintaining the health of our public lands, our quality of life, our recreational opportunities and our economic well-being.

LWCF is the premier federal program to conserve irreplaceable lands throughout the nation. It is a critical tool to acquire inholdings, expansions of public lands, and new federal designations throughout the national parks, national wildlife refuges, national forests, wild and scenic river corridors, national scenic and historic trails, the Bureau of Land Management lands and other federal areas. The companion LWCF state grants program provides crucial support for state and local park acquisitions, recreational facilities, and trail corridors. The Stateside program is the government's primary investment tool for ensuring that children and families have access to close-to-home recreation. The LWCF stateside program has funded over 41,000 projects including sports fields, outdoor recreation facilities and trails.

The success of the LWCF has helped create parks for people to enjoy in 98 percent of counties in the U.S. and has provided protection for more than five million acres of land and water areas across the country. From Denali National Park to the Grand Canyon and from the Everglades to the Appalachian Trail, the LWCF has been the critical source of funding available to federal agencies for protecting our most treasured lands.

Despite this strong record of success, our nation's need to protect critical habitat and to provide recreational opportunities continues to grow. In its 2009 Annual Report on the LWCF state assistance program, the National Park Service reported that states estimated their unmet need for outdoor recreation facilities and parkland acquisition at \$27 billion. Additionally, forty-two of fifty states meet less than 20 percent of their total estimated need for local outdoor recreation facilities and parkland acquisition. On the federal side, the four federal land management agencies estimate the accumulated backlog of deferred federal acquisition needs to be nearly \$30 billion. Opportunities to protect fish and wildlife habitat, provide public access for recreation, preserve our nation's most notable historic and cultural sites, and protect scenic vistas are being lost every day.

During difficult economic times, LWCF can also be a driver for jobs and the revitalization of local communities. A recent report by Headwaters Economics states that "by protecting land, the LWCF also plays an important economic role for local communities. Visitation, tourism, and jobs related to nearby public lands annually contribute billions to regional economies while creating hundreds of thousands of private sector jobs." Beyond tourism, the protection of ecosystems enhances habitat for wildlife and contributes to clean air and clean water, providing much longer term and lasting economic growth. In addition, the Outdoor Industry Foundation estimates that outdoor recreation—hunting, fishing, hiking, skiing, and similar activities—contribute \$730 billion annually to the U.S. economy and supports 6.5 million jobs across the country. Funding for LWCF projects increases access to these recreational opportunities and provides new areas for people of all ages to enjoy the outdoors.

In addition, as global warming continues to imperil plant and animal species, the LWCF will be a critical program in mitigating for and adapting to the effects of climatic changes. To maintain healthy and vibrant ecosystems, plants and animals will need migration corridors and open space to adapt to the changes around them. LWCF provides that opportunity by giving land management agencies the ability to acquire land that connects ecosystems.

DEPARTMENT OF THE INTERIOR THE LAND AND WATER CONSERVATION FUND

Unfortunately, the LWCF has been seriously underfunded and lacked a consistent revenue stream for many years. These perpetual ups and downs have made it difficult for land management agencies to prioritize projects, manage backlog, and hire adequate numbers of realty staff - all during a time when land acquisition opportunities are very high. Recognizing this problem as an important issue, in 2009 the House and Senate have explored the possibility of providing a full and dedicated stream of funding to the LWCF in future years through Congressman Rahall's CLEAR Act (H.R. 3435) and S. 2747 co-sponsored by Senators Bingaman and Baucus. President Obama has also pledged to fully fund LWCF by 2014.

One of the main reasons for a full and dedicated stream of revenue is that LWCF dollars have often been used to fund other programs. The Bush Administration frequently promised "full funding" for LWCF in the annual budget process, but used other programs under the umbrella of LWCF to fulfill that promise. In recent years, important conservation funding programs such as the Forest Legacy Program and the Cooperative Endangered Species Fund have been funded using LWCF dollars. These are both critical conservation programs that deserve high levels of funding, but budget clarity should be returned to these programs and LWCF dollars should be solely spent on that program.

Congress has taken strong steps in the right direction in both the FY 09 and FY 10 appropriations bill to reverse the most recent downward funding trend. An incremental funding increase over three years, until full funding, would allow the federal land management agencies to address staffing shortages, train more staff in real estate, address backlog lists, and conduct land surveys to identify all potentially available land purchases. Congress must continue this process in FY 11 by providing \$425 million to the LWCF federal program and \$175 million for the LWCF stateside program. Restoring funding to the LWCF program will help preserve the U.S.'s natural places and create valuable public recreation areas and facilities for all Americans.

FY 11 Recommendation:

Land and Water Conservation Fund - \$600.0 million (\$425.0 million for federal and \$175.0 million for stateside) *An increase of \$293.7 million over the FY 10 enacted level of \$306.3 million*

The national parks are among the most visible, most beloved and most visited public lands in the country. Nearly 300 million people visit the parks every year to learn, recreate and connect with the natural world and our historic and cultural heritage. Yet the Park Service struggles with a legacy of funding shortfalls so severe that the backlog of buildings, roads, bridges, wastewater systems and other infrastructure needing repair totals almost \$10 billion – quadruple the size of the agency's entire annual budget. It will take time and consistent attention to return the park lands and its resources and infrastructure to a position of stability and health, a challenge made more difficult by the emergence of climate change as a source of additional stress on natural ecosystems. As the Centennial of the National Park System approaches in 2016, public identification with the parks and their role in American society will grow. This year saw the release of the Ken Burns documentary film on the national parks as well as the release of recommendations from the National Parks Second Century Commission, a group of nearly 30 national leaders, experts and thinkers drawn from a broad range of backgrounds, including scientists, historians, conservationists, academics, business leaders, policy experts, and retired National Park Service executives, identifying the critical challenges facing the agency in its second century of existence.

Operations of the National Park System

The National Park Service (NPS) protects and preserves the nation's most treasured natural and cultural resources. Providing the NPS with a strong operating budget is critical to enabling the agency to protect these resources and provide visitor services and education at the 392 units of the National Park System. Congress has responded with consistent increases in the ONPS account of \$100 million above inflation. The result is that the operations shortfall has decreased from \$800 million to less than \$600 million over the period. This trend must be maintained in order to extinguish the operations shortfall by 2016.

FY 11 Recommendation:

Operations of the National Park System - \$2.402 billion An increase of \$140.0 million over the FY 10 enacted level of \$2.262 billion

Within the Operations account, funds should be allocated in FY 11 to the following vital programs:

Volunteer Management: The National Park Service benefits from nearly 200,000 volunteers per year, a figure that is likely to grow in the coming years with the emphasis on youth programs and the Youth Conservation Corps. Additional funds are needed to adequately equip and empower all parks with the personnel and training required to leverage and fully engage volunteers and other service opportunities that bring both dollars and workers to the parks. Enhanced volunteerism should play an important part in augmenting the Park Service's current resources. Already, however, the agency strains to provide the supervision and training for the millions of volunteer hours it currently receives. The FY 11 budget should include an additional \$5 million to enhance the supervisory resources needed to manage a broader volunteer base.

FY 11 Recommendation:

Volunteer Management: \$5.0 million

System-wide Strategic Vision for the Parks

The National Parks Second Century Commission called for "the preparation of a new plan for the national park system that provides a more representative picture of America, and makes the national parks cornerstones in a network of protected areas that safeguard biological diversity and the nation's evolving cultural heritage." The FY 11 budget should include at least \$2 million to begin developing such a plan, which should, as the commission recommended, "Be strategic in identifying places where additions to the system are needed, and where the Park

Service can best play the role of partner, assisting and advancing local conservation goals. Such a plan should update the criteria for new national parks to reflect changing environmental and civic needs."

FY 11 Recommendation:

System-wide Strategic Vision for the Parks - \$2.0 million

Deferred Maintenance Backlog

At the start of FY 09, the deferred maintenance backlog was an estimated \$9.2 billion. At current levels of investment, the backlog will continue to increase in perpetuity. Within this mammoth deferred maintenance backlog lies a core of projects that are vital to the continued function of parks across the country and the health and safety of park staff and the visiting public. These "critical systems" include building roofs, plumbing and piping, safety systems and the pavement that covers many park roads. Divided into road and non-road assets, the critical systems deferred maintenance backlog unrelated to roads (non-road CSDM backlog) — whose repair and rehabilitation is funded through the NPS budget — currently stands at approximately \$2.3 billion. It is this subset that is both vital to the return to a healthy National Park System, and presents an achievable goal by the Centennial year.

If no special effort is made to addressing the critical systems beyond annual cyclic maintenance and construction funds, the non-road CSDM backlog will balloon to more than \$3 billion by 2016 at the current rate of deterioration. Investing of \$390 million per year for the next five years eliminates the non-road CSDM backlog, placing the parks on a far healthier footing in 2016.

FY 11 Recommendation:

Deferred Maintenance Backlog - \$573.0 million

An increase of \$340.0 million over the FY 10 enacted level of \$233.0 million

Support for Public/Private Partnerships

Creative, productive partnerships greatly benefit the Park Service. The process of joining philanthropic resources with federal funds in a planned, system-wide program has proven challenging but no less valuable for NPS and for its many philanthropic partners. The program was originally conceived at \$100 million per year in philanthropic contributions matched against \$100 million in federal funds. Thanks to Congress, the first year of the program saw \$25 million in federal funds matched against another \$25 million in philanthropic contributions. One of the program's challenges has been matching the pace of the federal budget process with the pace of interested foundations and charities. Progress can be made on this if the budget authority for the program is expanded to \$50 million in 2011 with the expectation of outlays of \$25 million in 2011 and \$25 million in 2012. Such a change would allow for project fundraising that spans more than one year – especially needed for smaller "friends of the parks" groups partnering with the Park Service -- adding flexibility to the program without changing total outlays.

FY 11 Recommendation:

Public / Private Partnerships - \$50.0 million

An increase of \$35.0 million over the FY 10 enacted level of \$15.0 million

Climate Program

NPS has a critical responsibility both to park resources and to the general public in the area of climate change. The parks are uniquely positioned as a point of communication, as living classrooms, as models for climate and energy innovation, all creating a focus for the public on the impact of climate change upon cultural and natural resource environment. In addition, the Park Service is differentiated from USGS in that NPS is focused on monitoring changes and applying science on the ground, rather than providing research services. Funding is badly needed to provide the appropriate resources to the agency to continue building its climate change monitoring capacity, develop land, water and wildlife adaptation strategies and fund the agency's basic response capacity. In light of this, funding for the NPS climate program should be set at \$25 million this year.

FY 11 Recommendation:

Climate Program - \$25.0 million

An increase of \$15.0 million over the FY 10 enacted level of \$10.0 million

Partnerships and External Programs

The federal government, through the National Park Service, leverages enormous value through several underutilized and undervalued community assistance programs, such as Rivers and Trails Conservation Assistance (RTCA), National Historic Landmarks, National Natural Landmarks, and the National Register of Historic Places. The RTCA program has helped produce some of the best examples of conservation based on local/federal partnerships by helping communities to revitalize riverfronts, protect open space and build trails and greenways. By doubling the funding for RTCA from about \$9 million to \$18 million in 2011, the Park Service can, in the words of the Second Century Commission, "better support state and local governments, tribal, and private-sector conservation and preservation efforts" that foster important preservation ends without the necessity for adding certain resources to the National Park System.

FY 11 Recommendation:

Rivers Trails and Conservation Assistance - \$18.0 million

An increase of \$9.1 million over the FY 10 enacted level of \$8.9 million

Elwha River Restoration

The Glines Canyon and Elwha dams located inside Olympic National Park in Washington state have nearly wiped out once abundant salmon and steelhead trout populations in the Elwha River, fisheries to which the Elwha Klallam Tribe are guaranteed rights in perpetuity through an 1855 treaty agreement. In 1992, Congress approved federal purchase of the dams and directed the Department of the Interior to study how the river and native fisheries could be completely restored. DOI reported that only dam removal could fully restore the ecosystem. Removal of the two Elwha dams will restore salmon access to the Elwha River's wilderness heart in the Olympic National Park for the first time in 100 years.

This dam removal will produce a landmark in river restoration for our national parks and an unprecedented opportunity to study a large dam removal and its impact on the river and wild salmon populations. Work has started on the downstream improvements, but time is running critically thin for the ecosystem. The federal government must uphold its portion of the agreement by providing the bulk of money in the next two years. This will allow engineers and scientist to design and plan the implementation, which will allow the removal to start in 2010.

FY 11 Recommendation:

Elwha River Ecosystem Restoration - \$20.0 million The same as the FY 10 enacted level

International Park Affairs Program

The National Park Service has a long and proud legacy of international leadership and engagement. Even prior to the creation of the NPS in 1916, countries around the world looked to the U.S. as the leader in the global parks movement. Today, nearly every country on earth has created its own park system, many of them with direct assistance from the NPS. The NPS Office of International Affairs (OIA) facilitates technical assistance and exchange projects with counterpart agencies in every corner of the world.

The international work conducted by the NPS is not only about helping other countries protect their parks and heritage. It has become increasingly clear that international engagement is also critical to protecting many resources found in the American national park system. Numerous wildlife species move across park and international boundaries, and our parks are increasingly impacted by threats from beyond U.S. borders – invasive species, air and water pollution, climate change, and more. To deal with these threats effectively, the NPS needs to significantly increase its engagement with the world.

NPS experts in park and protected area management help to preserve cultural heritage, create conservation benefits for developing communities and protect some of the world's most spectacular places. Through the OIA, NPS generates goodwill toward the United States and learns from innovative practices developed by park agencies in other countries. Recent projects have involved Brazil, Cambodia, Chile, China, Gabon and Qatar.

NPS/OIA also serves as the staff office for the U.S. World Heritage program, manages the International Volunteers-in-Parks Program, coordinates "sister park" relationships between U.S. parks and counterpart sites abroad, and supports the Park Flight Migratory Bird Program, a public-private partnership to protect neo-tropical migratory birds and their habitats.

FY 11 Recommendation:

International Park Affairs Program - \$2.0 million

Dam Safety Program

Of the 541 dams in the Park System, more than 300 are in poor or fair condition. These dams have outlived their average life expectancy and now threaten the health of rivers inside the National Park System. Since its formation, the Dam Safety program has removed close to 200 hazardous dams. This has not only eliminated safety hazards but also restored rivers and streams. Unfortunately, many dams within the NPS still pose a risk and are in need of removal or repair.

FY 11 Recommendation:

Dam Safety Program - \$3.0 million

An increase of \$0.5 million over the FY 10 enacted level of \$2.5 million

DEPARTMENT OF THE **INTERIOR** U.S. GEOLOGICAL SURVEY

Water Resources Investigations

U.S. Geological Survey (USGS) water resource programs provide a strong and unbiased source of information for those making decisions that affect our water resources, including Congress; federal, state, and local agencies; conservation groups; and industry. The National Water Quality Assessment (NAWQA) program provides historical and current water quality conditions and identifies water quality trends in representative river basins and aquifers nationwide. The NAWQA program's unique design provides a consistent record of information on water resources in 42 important river basins and aquifer systems across the nation.

The Toxic Substances Hydrology Program carries out long-term research to improve scientific understanding of river and groundwater contamination. Toxic contamination, whether from radioactive waste, petroleum products, sewage, or other sources, can cause considerable damage to rivers, groundwater, people and wildlife. The program has led to improvements in the ability of the government and private sector to clean up existing toxic contamination and protect against future contamination.

Information regarding the quantity and timing of streamflow is of critical importance to protecting, restoring, and safely enjoying our nation's rivers. The nation's stream gauging network, primarily operated through the USGS National Streamflow Information Program (NSIP), provides essential data for habitat preservation, water quality, recreational safety and quality, agriculture, industry, municipal water supplies, navigation, and flood hazard identification. If stream gauging stations are discontinued, the consequences of inaccurate hydraulic data could result in a drastic loss of life during an unanticipated flood or bridge collapse. Stream gauges become more valuable as their data records become longer and those that also record sediment loads and water quality are especially valuable.

FY 11 Recommendation:

National Water Quality Assessment Program - \$70.0 million An increase of \$3.5 million over the FY 10 enacted level of \$66.5 million

Toxic Substances Hydrology Program - \$15.0 million

An increase of \$4.0 million over the FY 10 enacted level of \$11.0 million

National Streamflow Information Program - \$28.4 million An increase of \$0.7 million over the FY 10 enacted level of \$27.7 million

Biological Research and Monitoring Program

The core of scientific expertise regarding fish, wildlife and plants within the Department of the Interior is found within the Biological Research Discipline (BRD) of USGS. BRD scientists are responsible for research, development of analytical tools, and sharing of information needed to manage and conserve these biological resources. Demands to address declining or stressed biological resources have increased dramatically over the last decade and the work done by Research Grade Scientists is more critical than ever. In addition, BRD is a crucial partner in the development of the Landscape Conservation Cooperatives which are being established through the Fish and Wildlife Service as an integral part of the Department's climate change strategy. In FY 10, a \$5 million increase was provided to support the Cooperatives and a similar increase for this purpose is included in the request for the coming year. Biological Research and Monitoring funding and staff increases in FY 11 are needed to: (1) identify factors that contribute to or limit conservation and recovery efforts for terrestrial plant and wildlife speciesat-risk; (2) institute an adaptive science approach to support the management of terrestrial plants and wildlife; (3) provide technical assistance to natural resource managers; 4) support the Ecosystems Resources program, which is

DEPARTMENT OF THE **INTERIOR** U.S. GEOLOGICAL SURVEY

the focal point for research on the effects of wildland fire outside of forested areas and for restoration and rehabilitation of these fire-impacted, non-forest ecosystems and watersheds; 5) to support the development of Landscape Conservation Cooperatives; and 6) fund fixed costs.

FY 11 Recommendation:

Biological Research and Monitoring Program - \$170.0 million An increase of \$9.3 million over the FY 10 enacted level of \$160.7 million Includes \$5.0 million for Landscape Conservation Cooperatives

Biological Information Management and Delivery Program

The Biological Informatics program of the BRD makes data and information available for use by decision-makers from all levels of government, the education community, and other non-governmental entities. This program provides the backbone for communication of vital information on climate change and other significant impacts to biological resources.

FY 11 Recommendation:

Biological Information Management and Delivery Program - \$25.7 million *An increase of \$0.8 million over the FY 10 enacted level of \$24.9 million*

Cooperative Research Unit Program

The 40 Cooperative Fish and Wildlife Research Units located at universities in 38 states, which make up the USGS Cooperative Research Unit program, are crucial to successfully addressing the natural resource management challenges posed by global warming, energy development needs, imperiled species conservation, invasive species, infectious diseases, wildfire, and increased demand for limited water resources. Cooperative Units also will play a critical role in meeting the challenge natural resources management agencies face in replacing the unprecedented number of scientists and other professionals who will be retiring over the next 10 years. The program has established a record of educating new natural resource professionals who are management-oriented, well-versed in science, grounded in state and federal agency experience, and able to assist private landowners and other members of the public. Because each of the Units is a true federal-state-university-private partnership, this program is able to build on its partner contributions to leverage more than three dollars for every dollar appropriated to the program by Congress. In addition, a new competitive, matching fund program within the existing legislative authority should be established to eventually make available up to \$20 million annually in new funds beyond base operational costs. These new funds would support future cooperative high priority research efforts and essential training of new natural resource professionals.

FY 11 Recommendation:

Cooperative Research Unit Program (operational funding and scientist staffing) - \$22.5 million *An increase of \$3.2 million over the FY 10 enacted level of \$19.3 million*

Cooperative Research Unit High Priority Research - \$5.0 million *This is a new program*

DEPARTMENT OF THE **INTERIOR** U.S. GEOLOGICAL SURVEY

National Climate Change and Wildlife Science Center

Established in FY 08, the overall mission of the National Climate Change and Wildlife Science Center is to work with and provide natural resource managers and partners the tools and information they need to develop and execute strategies for successfully adapting to and mitigating the impacts of climate change. In the summer of 2009, the Center released a draft Strategic Plan based on a series of stakeholder meetings and the input of a steering committee of other agencies which outlined the following important priorities to guide the Center's work: create high resolution climate modeling information to produce key information that is needed to forecast ecological and population response at national, regional, and local levels; and assess the various approaches, tools, and methodologies for determining the vulnerability and risk of species and habitats to climate change.

The Center is establishing a total of eight regional centers to coordinate research at the appropriate scale for wildlife and land managers across the country. With funding from FY 10, the USGS will be establishing three of these regional centers. Additional funding is needed in FY 11 to establish three additional regional centers and to continue providing the essential research and modeling functions of the Center for resource managers. Importantly, the final FY 10 Interior, Environment, and Related Agencies appropriations bill stressed the significance of the National Climate Change and Wildlife Science Center and its approach as a foundation for implementing the Interior Department Secretarial Order on Climate Change.

FY 11 Recommendation:

National Climate Change and Wildlife Science Center - \$27.0 million An increase of \$12.0 million over the FY 10 enacted level of \$15.0 million

DEPARTMENT OF THE INTERIOR ENVIRONMENTAL EDUCATION

Youth and Careers in Nature Program

As part of Interior Secretary Ken Salazar's 21st Century Youth Conservation Corps budget initiative in FY 10, the Department of Interior requested \$20 million in funding for a new program called Youth and Careers in Nature (YCN). YCN aims to engage youth in programs that inspire them to consider and work towards careers in public service, particularly in natural resource fields. In FY 10 Congress provided \$20.5 million for these programs, including \$5 million at the Bureau of Land Management, \$2 million at the U.S. Geological Survey, \$8.5 million at U.S. Fish and Wildlife Service, and \$5 million at the National Park Service. While each agency has a different set of programs and initiatives, the ultimate goal is to connect youth with the outdoors and encourage them to seek careers in nature. The DOI Youth Office and this program in particular should grow rapidly in the coming years and we recommend \$41 million for the Youth and Careers in Nature Program in FY 11.

FY 11 Recommendation:

Youth and Careers in Nature Program - \$41.0 million An increase of \$20.5 million over the FY 10 enacted level of \$20.5 million

DEPARTMENT OF TRANSPORTATION DEPARTMENT OF THE TREASURY

DEPARTMENT OF TRANSPORTATIONOFFICE OF THE SECRETARY

Editor's note: The budget recommendations below pertain to programs currently included in the federal surface transportation program, last authorized in legislation known as SAFETEA-LU in 2005 (P.L. 109-59). Many noted transportation policy experts, federal commissions, non-governmental organizations, and lawmakers have called for a reformed program to replace SAFETEA-LU, which expired in September of 2009 and has been extended by several continuing resolutions in recent months. Congress continues to debate the schedule for considering a reformed transportation bill, which may result in merger, expansion, elimination, or alteration of any of the programs listed below.

As part of an effort to improve federal transportation policy, many of the organizations supporting these budget recommendations have endorsed broad reforms to the federal surface transportation program, or may do so at a future date. The budget recommendations in this document are made without consideration for any potential changes in the scope, intent, or structure of U.S. surface transportation policy.

Interagency Partnership for Sustainable Communities

The is a joint effort between the U.S. Department of Transportation, Department of Housing and Urban Development, and Environmental Protection Agency to promote livability and sustainability in communities across the U.S. This means helping American families gain better access to affordable housing, more transportation options, and lower transportation costs. In particular, DOT will play a key role in supporting environmental and energy goals through high-level interagency efforts to better coordinate federal transportation and housing investments and to enhance transportation planning and investment strategies.

FY 11 Recommendation:

Interagency Partnership for Sustainable Communities - \$140.0 million *An increase of \$140.0 million over the FY 10 enacted level of \$0.0*

Transportation Investments Generating Economic Recovery (TIGER)

The American Recovery and Reinvestment Act of 2009 (ARRA) set aside \$1.5 billion in discretionary grants for transportation projects. These grants to states, Indian tribes, local governments, and transit agencies must be awarded competitively for capital investments in transportation that will have a significant impact on the nation, a metropolitan area, or a region. In addition to preserving and creating jobs and promoting economic recovery, these grants are to be awarded based on criteria that include quality of life and sustainability improvements such as improving energy efficiency, reducing dependence on oil, reducing greenhouse gas emissions and benefitting the environment.

FY 11 Recommendation:

Transportation Investments Generating Economic Recovery (TIGER) - \$3.0 billion An increase of \$2.4 billion over the FY 10 enacted level of \$600.0 million

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION (FHWA)

Congestion Mitigation and Air Quality (CMAQ)

The highly-successful CMAQ program provides flexible funding to state and local governments for transportation projects and programs that help them to meet the requirements of the Clean Air Act. Funding is available for areas that are out of compliance with National Ambient Air Quality Standards, as well as areas that have reattained compliance.

FY 11 Recommendation:

Congestion Mitigation and Air Quality Improvement - \$3.5 billion *An increase of \$1.749 billion over the FY 10 enacted level of \$1.751 billion*

Safe Routes to School

This program is intended to enable and encourage children to walk and bicycle to school. Funding can be used for both infrastructure projects and outreach programs. The goal of the program is to support childhood wellness as well as to reduce traffic, fuel consumption, and air pollution in the areas around schools.

FY 11 Recommendation:

Safe Routes to School - \$600.0 million

An increase of \$417.0 million over the FY 10 enacted level of \$183.0 million

Transportation, Community, and System Preservation Program (TCSP)

State and local governments, metropolitan planning organizations (MPOs), and tribal governments are eligible for discretionary grants to integrate transportation, community development, and system preservation plans and activities. Additionally, the program is meant to identify private sector initiatives that can improve those relationships. A local funding match is required.

FY 11 Recommendation:

Transportation, Community, and System Preservation Program - \$75.0 million *An increase of \$13.7 million over the FY 10 enacted level of \$61.3 million*

Nonmotorized Transportation Pilot Program

The purpose of the nonmotorized transportation pilot program is to demonstrate the extent to which bicycling and walking can carry a significant part of the transportation load, and represent a major portion of the transportation solution, within four selected communities.

FY 11 Recommendation:

Nonmotorized Transportation Pilot Program - \$25.0 million Same as the FY 10 enacted level of 25.0 million

Recreational Trails Program (RTP)

The Recreational Trails Program (RTP), which was created in 1991 as part of the Intermodal Surface Transportation Efficiency Act, plays an essential role in funding state trail programs and projects all across the country. Funding for the RTP comes from the federal taxes paid on gasoline used in non-highway recreation and is distributed to the states based on a formula that recognizes the program's user-pay/user-benefit character. RTP-

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION (FHWA)

funded projects represent investments in vital infrastructure that promote healthy communities and more importantly, healthy people. In addition, the economic impact of these projects is magnified because they improve access to public lands and waters and support both local tourism and recreation businesses, as well as healthy lifestyles. Despite funding from RTP for thousands of projects nationwide, a backlog of good-quality, eligible projects exceed the currently available RTP funding by a ratio of at least three to one.

FY 11 Recommendation:

Recreational Trails Program - \$100.0 million An increase of \$15.0 million over the FY 10 enacted level of \$85.0 million

Transportation Enhancements (TE)

Transportation Enhancements is a critical green program that was not included in this section because it is a subset of a formula program and not subject to budget or appropriation variability. However, for budgeting and appropriations purposed in FY 11, TE should be included in any discretionary or short term spending bill that includes transportation at or above the rate used in the American Recovery and Revitalization Act, and any rescission of transportation funds should include a proportionality provision to protect TE from disproportionate rescissions.

DEPARTMENT OF TRANSPORTATIONFEDERAL TRANSIT ADMINISTRATION (FTA)

Fixed Guideway Modernization

This program is intended to offer public transit agencies and governments that run public transportation grants to help modernize or improve existing fixed guideway transit systems. Eligible projects include purchase and rehabilitation of rolling stock, track, line equipment, structures, signals and communications, power equipment and substations, passenger stations and terminals, security equipment and systems, maintenance facilities and equipment, operational support equipment including computer hardware and software, system extensions, and preventive maintenance. Fixed guideway systems include heavy rail, commuter rail, light rail, and trolleybus, in addition to others, as well as portions of motor bus service operated on exclusive or controlled rights-of-way, or in high-occupancy-vehicle lanes.

FY 11 Recommendation:

Fixed Guideway Modernization - \$3.8 billion An increase of \$2.04 billion over the FY 10 enacted level of \$1.76 billion

New Starts/Small Starts

The Federal New Starts program is the federal government's primary financial resource for supporting capital investments in locally new fixed guideway transit systems, or substantial expansion of existing systems. Eligible projects include heavy, light rail, commuter rail, and bus rapid transit. The FTA's New Starts program has helped to make possible hundreds of new or extended transit fixed guideway systems across the country. These rail and bus investments, in turn, have improved the mobility of millions of Americans; have reduced greenhouse gas emissions and oil consumption; have reduced transportation costs for working families; have helped to reduce congestion and improve air quality in the areas they serve; and have fostered the development of safer, more livable communities.

FY 11 Recommendation:

New Starts/Small Starts - \$3.8 billion An increase of \$1.8 billion over the FY 10 enacted level of \$2.0 billion

Bus and Bus Facility Program

The Bus and Bus-Related Facilities program provides capital assistance to states and municipal areas for new and replacement buses and related equipment and facilities.

FY 11 Recommendation:

Bus and Bus Facility Program - \$1.75 billion

An increase of \$886.0 million over the FY 10 enacted level of \$884.0 million

Clean Fuels Grants Program

The Clean Fuels Grant Program accelerates the deployment of advanced bus technologies by supporting the use of low-emission vehicles in transit fleets. The program assists transit agencies in purchasing low-emission buses and related equipment, constructing alternative fuel stations, modifying garage facilities to accommodate clean fuel vehicles, and assisting in the utilization of biodiesel.

FY 11 Recommendation:

Clean Fuels Grants Program - \$70.0 million

An increase of \$8.0 million over the FY 10 enacted level of \$62.0 million

DEPARTMENT OF TRANSPORTATIONFEDERAL TRANSIT ADMINISTRATION (FTA)

Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER)

The American Recovery and Reinvestment Act of 2009 appropriated \$100 million for a discretionary grant program for public transportation projects. These grants are awarded for projects that reduce a transit system's greenhouse gas emissions or result in a decrease in a transit system's energy use.

FY 11 Recommendation:

Transit Investments for Greenhouse Gas and Energy Reduction - \$100.0 million *An increase of \$25.0 million over the FY 10 enacted level of 75.0 million*

DEPARTMENT OF TRANSPORTATIONFEDERAL RAILWAY ADMINISTRATION

Amtrak

Amtrak provides intercity passenger train service in the United States. Amtrak operates service in forty-six states, and offers one of the most energy efficient forms of intercity travel. According to the Oak Ridge National Laboratory, Amtrak is almost 20 percent more efficient than domestic airline travel and 28 percent more efficient than auto travel on a per-passenger-mile basis. Amtrak carried Amtrak carried 27.2 million passengers in 2009. Though this number is lower than the record ridership of 2008, it is an increase of 5.1 percent over 2007. Legislation reauthorizing appropriations for Amtrak through 2013 was passed in 2008 by veto-proof margins in both houses of Congress, and was signed by President Bush on October 16th (P.L. 110-432).

FY 11 Recommendation:

Amtrak - \$2.04 billion

An increase of \$455.0 million over the FY 10 enacted level of \$1.565 billion

Federal Matching Grants for State Rail Corridor Investments and High Speed Rail

This program, created in the 2008 Amtrak reauthorization, was intended to encourage and assist states seeking to develop passenger rail infrastructure by providing federal matching funds for eligible capital investments. Responding to President Obama's focus on developing a high speed intercity passenger rail network in the U.S., Congress has expanded this program to support state implementation of high speed rail networks. High speed rail is essential to a cleaner, more efficient national transportation system. America is one of the only developed nations in the world without a modern high speed rail network.

FY 11 Recommendation:

Federal Matching Grants for State Rail Corridor Investments - \$4.0 billion *An increase of \$1.5 billion over the FY 10 enacted level of \$2.5 billion*

The Global Environment Facility (GEF)

The Global Environment Facility (GEF) is the designated financial mechanism or major implementer for international conventions and agreements on biodiversity, climate change, persistent organic pollutants, desertification, international waters and the ozone layer. The GEF channels funds provided by the U.S. and 31 other donor countries; for every U.S. dollar invested, about \$33 dollars have been leveraged from other sources. The GEF has established a strong track record, providing \$8.6 billion in grants and leveraging \$36.1 billion in co-financing for over 2,400 projects in over 165 countries. Through its Small Grants Program (SGP), the GEF has made more than 10,000 grants of up to \$50,000 each directly to NGOs and community organizations.

The GEF is the largest funder of projects to protect the global environment, and biodiversity conservation projects have received about one-third of total GEF funding. More than \$1.6 billion has been invested, leveraging an additional \$4.2 billion in co-financing to support the creation and effective management of 1600 protected areas that cover nearly 800 million acres. GEF funds have helped establish more than 26 conservation trust funds worldwide. In addition, the GEF supports the conservation and sustainable use of biodiversity in production sectors, landscapes and seascapes. Working with public and private sector partners, the GEF uses innovative market-based approaches, such as payments for ecosystem services (PES), to integrate environmental protection with local economic development. GEF's portfolio now includes more than 30 PES projects that compensate resource managers for off-site ecological benefits.

GEF donor countries pledge financial resources every four years. The approval of the 2010 federal budget will secure payment of the U.S.' fourth installment of \$80 million in the current replenishment and pays down some of the U.S.'s \$170 million of arrears from past pledges; however, the U.S. remains substantially in arrears. Until the U.S. pays, other major donors are freezing nearly \$251 million in contributions. The U.S. can free up those funds by fulfilling its current pledge and paying off remaining arrears. Counting additional local matches, this would generate more than \$1 billion for on-the-ground projects supporting the global environment. An ambitious replenishment, now pending, is expected at a much higher level in order to expand GEF activities. www.thegef.org

FY 11 Recommendation:

The Global Environment Facility - \$215.0 million (includes \$55.0 million toward arrears)

An increase of \$128.5 million over the FY 10 enacted level of \$86.5 million (including 6.5 million towards arrears)

Tropical Forest Conservation Act (TFCA)

The Tropical Forest Conservation Act (TFCA) was enacted in 1998 to give eligible developing countries the option to relieve official debt owed to the U.S. Treasury while generating funds in local currency for tropical forest conservation activities. Debt reduction occurs in exchange for the debtor government's commitment to make local currency payments for the protection of its forests. The TFCA also works to strengthen civil society by creating local foundations to provide small grants to NGOs and local communities.

The TFCA offers a unique opportunity for public-private partnerships. The majority of agreements have included funds raised by U.S.-based NGOs. As of October 2009, \$135 million of U.S. government appropriations has been used to complete 15 TFCA debt-for-nature agreements, generating more than \$218 million in long-term commitments for tropical forest conservation in Bangladesh, Belize, Botswana, Colombia, Costa Rica, El Salvador, Guatemala, Indonesia, Jamaica, Panama, Paraguay, Peru, and the Philippines. The Nature Conservancy, Conservation International, World Wildlife Fund, and an Indonesian Fund (KEHATI) have contributed a total of \$14 million to nine of these agreements.

A reauthorization of the TFCA is pending before Congress. We urge its approval. The reauthorized Act would extend the TFCA model to include coral reef ecosystems, making its application more flexible and encompassing a wider range of opportunities to support international conservation of large-scale terrestrial and marine ecosystems. www.treas.gov/offices/international-affairs/index.html
www.usaid.gov/our_work/environment/forestry/intro_tfca.html

FY 11 Recommendation:

Tropical Forest Conservation Act - \$20.0 million Same as the FY 10 enacted level of \$20.0 million

Multilateral Funds to Combat Climate Change

Investing in international efforts to deploy clean energy, reduce emissions from deforestation and forest degradation (REDD), and assist the most vulnerable in adapting to the impacts of climate change is smart and strategic U.S. policy. Solving climate change requires that we assist developing countries in decoupling development from greenhouse gas emissions through supporting efforts to deploy clean energy and REDD. The U.S. also needs to support the efforts of countries to address the impacts of climate change. Each of these is in the strategic interest of the U.S., including to:

- Support countries in their efforts to undertake meaningful actions on their own to cut their emissions;
- Build capacity and mobilize early actions to reduce deforestation and forest degradation emissions;
- Create opportunities for US companies to lead the way and partner with developing countries in advancing clean energy technologies and technologies and services to build resilience to climate impacts;
- Minimize the national and global security implications of destabilized countries and economies hard-hit by climate impacts;
- Protect valuable US investments in health, food and drinking water, as well as supply chains, in vulnerable developing countries; and
- Promote the foreign policy interests of the United States by working in partnership with developing countries to solve the shared global challenge of climate change.

A fair U.S. contribution to a UNFCCC climate funding mechanism is crucial to achieving a global climate change agreement and to building trust among nations. Contributions towards adaptation, REDD and clean technology are in keeping with U.S. government pledges made in Copenhagen to support both short- and long-term climate finance. We urge multilateral investments in the following activities to support those promises.

Multilateral Funding through the UNFCCC Copenhagen Green Climate Fund to Support International Climate Programs

Over the past year, international climate negotiations have settled on the need for "fast-start" financing to help countries build the institutional and technical capacity to reduce their emissions and prepare for climate impacts. In the process, these activities will also open up new opportunities for US markets in clean energy and climate resilient products and technologies. The Copenhagen Accord, produced at the United Nations Framework Convention on Climate Change (UNFCCC) summit in Copenhagen in December 2009, decided that a new multilateral funding mechanism called the Copenhagen Green Climate Fund (CGCF) will be established as an operating entity of the financial mechanism of the Convention. Providing funding through this mechanism, once the fund is operationalized through the UNFCCC, is consistent with US endorsement of the Accord and the decision within the Accord to create a new climate fund. In the event that the CGCF does not become operational under the

UNFCCC in FY 11, funding should flow through another UNFCCC funding mechanism. These funds must be additional to official development assistance (ODA) commitments.

Adaptation under the UNFCCC's CGCF

Even with strong global mitigation, past emissions will result in climate change impacts that are unavoidable; countries that have least contributed to climate change are the most vulnerable. This funding well help the most vulnerable adapt to the impacts of climate change.

Least Developed Countries Fund (LDCF) and Special Climate Change Fund (SCCF)

Developing countries are already struggling with the impacts of climate change, including fresh water scarcity, recurrent droughts, and desertification; the least developed countries will be the most severely affected. Support for these countries to develop national strategies to respond to climate-related risks and improve climate resilience is critical. Therefore, of the amount appropriated for international adaptation, a minimum of \$500 million should go to the UNFCCC's Least Developed Countries Fund, operated by the GEF. The LDCF provides resources to the least developed countries to address urgent adaptation needs through the preparation and implementation of National Adaptation Programs of Action (NAPAs). The SCCF was established to finance projects relating to adaptation; technology transfer and capacity building; energy, transport, industry, agriculture, forestry and waste management; and economic diversification.

FY 11 Recommendation:

UNFCCC fund for adaptation - \$1.2 billion (at least \$500.0 million for the LDCF/SCCF)

An increase of \$1.15 billion over the FY 10 enacted level of \$50.0 million for both the LDCF and SCCF. Note that in 2010 the contribution to these funds comes from State Department and not Treasury

Reducing Emissions from Tropical Deforestation and Degradation (REDD) under UNFCCC's CGCF

Tropical deforestation and forest degradation is responsible for approximately 15 percent of all global greenhouse gas emissions annually. Therefore, reducing emissions through REDD will be crucial to be able to meet global mitigation targets. Adequate multilateral funding for REDD is crucial to build the capacity of developing countries in tropical and subtropical regions to develop and scale-up the REDD programs which will be necessary to comprehensively address the drivers of deforestation and allow REDD to participate in global carbon markets. Supporting REDD can contribute to other benefits beyond reducing emissions by helping protect critical rainforest habitats and improving the livelihoods of the world's forest-dependent people.

FY 11 Recommendation:

UNFCCC fast-start fund for REDD - \$1.1 billion for REDD

An increase of \$ 1.025 billion over the FY 10 enacted level of \$75.0 million.

Clean Energy Technology Deployment under the UNFCCC's CGCF

This funding will enable clean technology cooperation and dissemination needed for developing countries to pursue new pathways that decouple carbon from economic development. Accelerating deployment of clean energy technologies, including renewable energy and energy efficiency technologies, will help developing countries to produce clean, efficient energy while also fighting energy poverty and improving public health.

FY 11 Recommendation:

UNFCCC fast-start fund for Clean Technology - \$600.0 million

An increase of \$300.0 million over the FY 10 enacted level of \$300.0 million for clean technology

Tax Incentives for Private Land Conservation

Making the Enhanced Tax Deduction for Conservation Easement Donations Permanent

Since 2006, an enhanced tax incentive has supported the conservation of private forest, farm and grasslands by encouraging farmers, ranchers and other modest income landowners to retire the development rights on their land. By allowing conservation easement donors to deduct a larger portion of their income over a longer period of time the enhanced incentive has helped America's land trusts increase the pace of conservation by about 250,000 acres a year. Preserving viable farms in our communities provides local access to diverse food products, reduces transportation costs and pollution, and provides a natural buffer against sprawling development. In addition, the carbon sink provided naturally by forests, grasslands, croplands and wetlands offsets 12.5% of our greenhouse gas emissions. Bills to make the incentive permanent (H.R. 1831 and S. 812) have 264 House and 40 Senate cosponsors from all 50 states – including majorities of Democrats and Republicans in the House.

FY 11 Recommendation:

Permanently extend increased limits on contributions of partial interests in real property for conservation purposes-\$761.0 million (ten-year score from the Joint Committee on Taxation for permanence in the 2008 Farm Bill) The one-year extension in President Obama's FY 10 budget request was scored at \$128.0 million by the Joint Committee on Taxation. That extension has not yet been enacted and the incentive expired at the end of 2009.

Providing Incentives for Private Land Conservation in Reforms of the Estate Tax

More than 70 percent of America's wildlife gets food and shelter from our working farm, ranch and forest lands, but we're losing these habitats to development at the alarming rate of 5,000 acres each day. The estate tax contributes to this trend by forcing many farmers and ranchers to sell parts of their property to pay the tax, bifurcating large properties that are so important to watershed health and wildlife conservation. Even at a \$3.5 million unified credit, USDA estimates that 10% of farm estates are likely to owe estate taxes in 2009. Even where the land remains intact, estate tax bills can force fire sales of timber, defeating recent gains we've made in encouraging sustainable forestry practices. H.R. 3050, introduced by Reps. Earl Blumenauer (D-OR) and Eric Cantor (R-VA), would increase the estate tax exemption for lands protected by a conservation easement up to \$5 million, ensuring that landowners who generously commit their land to conservation will not be forced to sell. Another proposal, H.R. 3524, introduced by Rep. Mike Thompson (D-CA), would defer estate taxes on family farms until the land is sold. These proposals would help keep important natural and historic resources intact, and would be valuable contributions to conservation.

FY 11 Recommendation:

Enact the American Family Farm and Ranchland Protection Act (H.R. 3050) - \$132.0 million (ten-year score from the Joint Committee on Taxation)

Enact the Family Farm Preservation and Conservation Estate Tax Act (H.R. 3524) - \$16.2 billion (ten-year score from the Joint Committee on Taxation, including the provisions of H.R. 3050)



ENVIRONMENTAL PROTECTION AGENCY SCIENCE AND TECHNOLOGY

Global Change Research Program

Good science is the key to proper regulatory standards and unfortunately, the research area of the Environmental Protection Agency took more than its share of cutbacks during the past administration. The Science Advisory Board (SAB) believes that EPA needs to increase research for Global Change research programs to provide important methodologies necessary to assist in decreasing global warming. There is an urgent need for research into Life Cycle Assessment methodologies for indirect land use and greenhouse gas emissions from agriculture necessary to achieve the Renewable Fuel Standards under EISA.

FY 11 Recommendation:

Global Change Research Program – \$21.0 million

An increase of \$1.0 million over the FY 10 enacted level of \$20.0 million

Human Health and Ecosystem Research

Healthy Communities and Ecosystems is the key research arm necessary for EPA's regulatory activities. The Science Advisory Board recently said that this area is critical because it "...provide[s] the scientific foundation for the Agency's actions to protect America's public health and the environment." EPA critics have argued that the Agency needs to use good science; however the FY 10 budget was the first increase for this area since 2004.

The lack of past funding has handicapped areas that are needed to provide the data necessary for risk assessment and risk management decisions to be efficient and effective. There is a need for research to understand key issues, identify knowledge gaps, and answer complex technical questions in order to develop an appropriate regulatory framework that is fully protective of human health and the environment. For example, research is needed in many areas including ensuring that underground sources of drinking water are not placed at risk and that populations are protected from toxic threats.

FY 11 Recommendation:

Healthy Communities and Ecosystems Program - \$263.0 million An increase \$13.0 million over the FY 10 enacted level of \$250.0 million

Integrated Risk Information System (IRIS) Database

Many of the EPA assessments of regulated chemicals are publicly available on its database, the Integrated Risk Information System (IRIS), which contains EPA scientific consensus positions on potential human health effects from environmental contaminants. IRIS information is used by regulators at the state, tribal and federal level and by the international community in combination with exposure data to set cleanup standards and various exposure standards for air, water, soil, and food). The database receives over a half-million visits monthly, from over fifty countries, underscoring its widespread use. With the possible amendments to the Toxic Substances Control Act, the need for a robust IRIS is clear.

FY 11 Recommendation:

IRIS Database - \$6.0 million

An increase of \$200,000 over the FY 10 enacted level of \$5.8 million

STAR Fellowship Program

EPA has mature scientific staff reaching retirement age, and the Agency will face significant staffing challenges in environmental sciences, engineering, economics, behavioral, and decision sciences in the next five to ten years.

ENVIRONMENTAL PROTECTION AGENCY SCIENCE AND TECHNOLOGY

FY 11 Recommendation:

Star Grants and Fellowship Program - \$64.0 million

An increase of \$1.3 million over the FY 10 enacted level of \$62.7 million

Drinking Water Research Program (Hydraulic Fracturing of Oil and Gas Wells)

Hydraulic fracturing involves the injection of fluids into oil or gas wells at very high pressure in order to crack open the underground formation and allow oil or gas to flow out more easily. These fluids often contain toxic chemicals, some of which remain underground. The pressure places stress on the oil or gas well and can lead to unpredictable consequences. Hydraulic fracturing currently occurs in over 30 states. Unfortunately, EPA is prohibited from regulating hydraulic fracturing under the Safe Drinking Water Act due to a loophole in the 2005 Energy Policy Act. Because more and more accounts of water contamination linked to natural gas drilling and hydraulic fracturing are being reported, Congress has urged the EPA to study the relationship between hydraulic fracturing and drinking water in the report accompanying the FY 10 Interior and Environment Appropriations bill. The agency must receive full funding to carry out such a study that is conducted under the highest possible scientific standard. This is best achieved under either the Drinking Water Research Program that conducts rigorous, scientific research with the goal of protecting human health by reducing contaminants in drinking water, or under Environmental Program Management for the Underground Injection Control Program.

FY 11 Recommendation:

Drinking Water Research Program (Hydraulic Fracturing of Oil and Gas Wells) - \$4.0 million *An increase of \$4.0 million over the FY 10 enacted level of \$0.0*

Regulatory Programs

Congress intended that EPA be a regulatory agency to establish the rules critical to implement the laws protecting our nation's environment. The former Administration's reviews of regulatory impacts were focused on the EPA and dominated by second guessing and stalling those regulations intended to protect public health and the environment. The Office of Management and Budget analyzed 93 regulations over the ten year period from October 1997 to September 2007, 40 of which came from EPA¹. This process unnecessarily weakened regulatory standards, slowed down regulatory implementation and discouraged the preparation regulations.

Instead of putting in place the rules required by the basic Congressional environmental statutes, the agency turned to questionable, unmeasured voluntary programs. Depending on the definition, the number of EPA voluntary programs grew to more than 400 according to the Office of Inspector General (OIG). Some were effective, most were not. Many experienced career Agency staff sought refuge in these voluntary programs rather than have their hard work stifled by internal and external barricades to promulgating strong regulatory standards. In one year, a new voluntary program was created weekly. The OIG determined that there is no evidence that these voluntary programs protected public health and the environment but instead gave industry a refuge from complying with upto-date standards.

Now, the Agency is facing the need to update regulations in every media. EPA's water office is years behind in complying with Court Orders requiring promulgating of industrial effluent limitations. In the office of solid waste the listing of which acute and chronic chemicals are hazardous has not been updated in 25 years so the list is now mostly made up of obsolete chemicals. The air office needs to gear up for implementing the endangerment finding that carbon dioxide is a pollutant under the Clean Air Act and must staff up to implement any new climate change statutory requirements. An amended Toxic Substances Control Act will undoubtedly require additional staff to get that program up and running.

The Agency must once again make its priority to meet its statutory requirements to implement the laws under its authority first, rather than to drain staff to voluntary non-statutory programs. Moving appropriate staff from voluntary to regulatory programs, particularly in headquarters would significantly reduce the additional funding needed by the Agency to meet its statutory responsibilities.

FY 11 Recommendation:

Environmental Programs and Management - \$3.4 billion

An increase of \$400.0 million over the FY 10 enacted level of \$3.0 billion, an amount that can be offset by the amount saved by discontinuing and reducing ineffective voluntary programs.

Enforcement Program

The Environmental Protection Agency's ability to enforce environmental laws is critical to our nation's efforts to fulfill objectives of protecting and enhancing the nation's public health and natural resources. Without a strong civil and criminal enforcement program by EPA and its state partners, polluters have incentives to save money by not complying with environmental laws giving them an economic advantage over responsible companies that are complying. A key to enforcement is going through the expensive but necessary step of sending inspectors on site at

¹ Office of Information and Regulatory Affairs, Office of Management and Budget, <u>2008 Report to Congress on the Benefits and Costs of Federal Regulations</u>, and <u>Unfunded Mandates on State</u>, <u>Local</u>, and <u>Tribal Entities</u>, 2008, p. 4 (hereafter the OMB 2008 report). These were analyses of major rules, or rules that generated costs or benefits of at least \$100 million. All amounts are stated in 2001 dollars.

industrial locations to review compliance. Although much of this is done by the EPA's state partners, budget cuts at the state level require EPA to fill in the gap despite its budget limitations.

Lack of enforcement cripples the nation's ability to meet its environmental goals. For instance, the Clean Air Act's new source review program requires installation of modern pollution control technology when industrial facilities undertake changes that increase air pollution by significant amounts. The EPA has uncovered widespread violations of this requirement that resulted in illegal air pollution releases totaling millions of tons from coal-fired power plants, oil refineries and other industrial sectors. In recent years, as a result of legal settlements and court decisions arising from NSR enforcement cases against power plants and oil refineries, EPA has achieved air pollution reductions that dwarf any other Clean Air Act enforcement activities undertaken by the agency. In the waste program, EPA's enforcement has stopped sham recycling encouraging the proper and safe disposal of hazardous waste. Meanwhile violations of the Clean Water Act have not been able to be pursued by the EPA putting both water quality and human health at risk across the country. A return to balanced enforcement of our environmental laws is critical.

After years of neglect, the FY10 budget finally gave priority to enforcement. This priority needs to continue. Addition funds are also needed to take up the deficits caused by cutbacks at the state level.

FY 11 Recommendation:

Enforcement Programs - \$300.0 million

An increase of \$104.0 million over the FY 10 enacted level of \$196.0 million

Environmental Justice

In 1992 President George H.W. Bush established the Office of Environmental Equity (now the Office of Environmental Justice) within the U.S. EPA to integrate environmental justice into the agency's programs. In 1994, President Clinton issued an Executive Order 12,898 requiring each federal agency "to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The EPA adopted commitments to environmental justice, yet today there continues to be many places where minority and low-income neighborhoods face disproportionately high levels of air and water pollution and exposure to toxic waste and other health hazards due to federal environmental laws not being evenly enforced. Data shows that black Americans are 79 percent more likely than whites to live in neighborhoods where industrial pollution poses the greatest health danger, and residents in neighborhoods with the highest pollution scores also tend to be poorer, less educated, and more often unemployed than residents of less-polluted neighborhoods. In 2005, the Government Accountability Office released a report finding that the EPA generally devoted little attention to environmental justice issues while drafting three significant clean air rules on gasoline, diesel, and ozone between fiscal years 2000 and 2004. Then in 2006, EPA's own Office of Inspector General issued yet another scathing report on EPA's failure to fully implement the Executive Order, and recommends that EPA review all its programs, policies, and activities to develop a plan to ensure compliance with the Order.

Funding for the Office of Environmental Justice must be sustained and Executive Order 12898 must be full implemented by the EPA to integrate environmental justice into their day to day operation.

FY 11 Recommendation:

Office of Environmental Justice - \$7.5 million

An increase of \$0.3 million over the FY 10 enacted level of \$7.2 million

Clean Water Act Safeguards

The Supreme Court's 2006 decision (*Rapanos v. U.S.*) interpreting the Clean Water Act and the interpretive "guidance" issued by the Corps and EPA have led the agencies to devote significant effort to examining whether innumerable water bodies are protected by the law. Under the Clean Water Act, EPA is the final arbiter of whether a water body is protected, and it also needs sufficient resources to review jurisdictional determinations made by the Corps' field personnel and resolve disputes over particular water bodies. A budget increase of \$4 million will help ensure that EPA has the capacity to manage the load of waterbody-by-waterbody analyses and enable EPA to better police the implementation of this aspect of the Clean Water Act.

FY 11 Recommendation:

Clean Water Act Safeguards - \$4.0 million

An increase of \$4.0 million over base funding

WaterSense

In 2006, the U.S. Environmental Protection Agency (EPA) launched a voluntary water efficient product certification and labeling program called "WaterSense." It is modeled after the highly successful, universally recognized and sought after EnergyStar program. Three quarters of states anticipate local, regional or statewide water shortages by 2013, even under non-drought conditions. Water efficiency is the most cost-effective way to help local markets manage existing water supplies. Maintaining our water supply infrastructure is a major cost across the United States, and improving our water efficiency can lessen the stress and extend the lifespan of both drinking water treatment and wastewater treatment systems. The EPA estimates that if all U.S. households installed water-efficient appliances, the country would save more than 3 trillion gallons of water and reduce Americans' water and sewer bills by one-third, a savings of more than \$18 billion dollars per year.

The EPA has only a handful of individuals dedicated to the national WaterSense program; they are working with local water utilities, product manufacturers and retailers to encourage the use of water-efficient products and practices among individuals and developers. Additional funding will enhance specification development for products and create efficient testing protocols for new products while enabling the agency and associated partners to create a brand identity so consumers can easily identify water-efficient products, and help local utilities and retailers develop marketing and incentive programs.

FY 11 Recommendation:

WaterSense - \$10.0 million

An increase of \$8.0 million over the FY 10 enacted level of \$2.0 million

Estuary Restoration Program

The Estuary Restoration Program is a comprehensive program for the restoration of our nation's estuaries, authorized through the Estuary Restoration Act. Among the most productive ecosystems on earth, estuaries provide vital habitat to fish and wildlife species, and important environmental, cultural, subsistence and recreational benefits to human populations. The Act encourages coordination among all levels of government, and engages the unique strengths of the public, non-profit, and private sectors. The Act ensures a strong federal commitment and resources to restore estuary habitat by authorizing \$2.5 million for the EPA (newly authorized under the Water Resources Development Act of 2007) for implementation of on-the-ground restoration projects.

FY 11 Recommendation:

Estuary Restoration Program - \$2.5 million Fully funded at its authorized level, an increase of \$2.5 million over the FY 10 enacted level of \$0.0

National Estuary Program

Estuaries are vibrant coastal zones where saltwater meets freshwater, creating some of the most biologically productive areas on Earth. Started in 1987 under amendments to the Clean Water Act, the National Estuary Program protects and restores the nation's estuaries by creating partnerships with local communities. The program focuses not only on improving water quality in an estuary, but also on maintaining the integrity of the whole system – its chemical, physical, and biological properties, as well as its economic, recreational, and aesthetic values. Since its inception, the program has grown to include twenty-eight programs across the country, but funding levels have stagnated.

FY 11 Recommendation:

National Estuary Program - \$33.0 million An increase of \$500,000 over the FY 10 enacted level of \$32.5 million

Diesel Emissions Reduction Act Implementation

In the Energy Act of 2005, Congress passed the Diesel Emissions Reduction Act (DERA), which authorized \$200 million in annual funding to clean up the nation's diesel trucks, buses, construction equipment, agricultural engines, and other diesel engines. Since then, tens of thousands of diesel engines have been replaced or retrofit with technologies that can reduce harmful particulate matter and/or nitrogen oxides emissions by more than 85 percent – and in some cases, by up to 99 percent. A November 2009 EPA Report to Congress estimated that EPA's FY 08 grants, which totaled approximately \$50 million, will cut 2,200 tons of particulate matter; conserve 3.2.million gallons of fuel annually; save operators \$8 million annually (under the SmartWay Clean Diesel Finance Program); and generate up to \$30 in health benefits for every \$1 of federal investment. In the American Recovery and Reinvestment Act of 2009, Congress appropriated \$300 million for diesel retrofits. EPA received \$2 billion in grant applications, demonstrating the broad support and demand for additional diesel clean-up funds.

FY 11 Recommendation:

Diesel Emission Reduction Act Implementation - \$200.0 million An increase of \$140.0 million over the FY 10 enacted level of \$60.0 million

ENVIRONMENTAL PROTECTION AGENCY SUPERFUND

Superfund

The Superfund program was created in 1980 to locate, investigate, and clean up the worst hazardous and toxic sites nationwide. As a mature program, most remaining sites are now in the construction phase of cleanup where steady and adequate funding is necessary. The EPA Inspector General (IG) and others have documented a significant and growing funding shortfall over the past several years. This shortfall is exacerbated by the bankruptcy of the Superfund Trust Fund. In 2003, the Superfund Trust ran out of polluter-contributed funds because Congress and the Administration have refused to renew the polluter pays tax on the oil and chemical industries that formerly funded cleanups. American taxpayers should not shoulder the costs of all Superfund-led cleanups.

FY 11 Recommendation:

Superfund - \$1.50 billion

An increase of \$200.0 million over the FY 10 enacted level of \$1.3 billion

ENVIRONMENTAL PROTECTION AGENCY LEAKING UNDERGROUND STORAGE TANK PROGRAM

Leaking Underground Storage Tank (LUST)

In 1986, Congress established the Leaking Underground Storage Tank (LUST) Trust Fund to help the EPA states, and Indian tribes pay the costs of cleaning up leaking petroleum tanks when owners fail to do so, and to oversee LUST cleanup activities. The Trust Fund is financed by a 0.1 cent tax on each gallon of motor fuel sold nationwide. Congress and the administration have repeatedly failed to appropriate sufficient funds from the LUST Trust Fund to pay for cleanups needed leaving a Trust Fund. Unappropriated funds in the trust exceed \$3 billion and over \$100 million of new money coming to the Fund each year. Despite initial strides in addressing leaking petroleum underground storage tanks in the 1990s, a new problem emerged as the gasoline additive MTBE was detected at thousands of LUST sites and in numerous drinking water supplies. Even small amounts of MTBE can render water undrinkable due to its strong taste and odor.

FY 11 Recommendation:

Leaking Underground Storage Tanks - \$120.0 million

An increase of \$6.1 million over the FY 10 enacted level of \$113.1 million

State Revolving Funds

With the passage of the Clean Water Act more than 30 years ago, Congress made a financial commitment to protecting and improving water quality first through a grant program and later in 1987 through the establishment of the "state revolving loan fund" (SRF), offering grants and low-interest revolving loans to municipalities for construction of wastewater treatment systems. In 1996 the Safe Drinking Water Act created another state revolving fund for drinking water treatment and protection of surface water and groundwater supply areas. There is also a 2 percent set-aside for Indian tribes under each SRF to conduct the same types of activities accorded to states.

The Green Reserve created in the American Recovery and Reinvestment Act and continued in the FY 10 Appropriations bill needs to be continued. This reserve fund allocates at least twenty percent of the funds appropriated for the SRFs for green projects such as green roofs, restoration of natural hydrology to a site, water efficiency and environmentally innovative projects that meet the goals of the Clean Water Act. These green solutions to water pollution and water scarcity reduce non-point source pollution, protect estuaries, prevent contamination of drinking source waters, and reduce polluted runoff by protecting natural areas and are often more cost-effective then traditional pipe and cement options.

The restoration in capitalization funding in FY10 by the federal government was a needed investment in efforts to clean up the nation's water sources and to upgrade our drinking water systems. Unfortunately, that funding is only a step in the right direction in order to rebuild our failing water infrastructure. Recent studies have shown that communities will need an estimated \$300 billion to \$1 trillion over the next 20 years just to repair, replace, or upgrade aging drinking water and wastewater facilities to modern standards. Meanwhile, the EPA projects that there will be a \$535 billion shortfall in financing these projects over that period which will lead to increased sewer failures, interruptions in the dependable water supply and increased health risks. Beyond that a new study by the National Association of Clean Water Agencies and the Association of Metropolitan Water Agencies estimates that an additional \$448-944 billion will be needed by water and wastewater utilities to adapt to the impacts of climate change.

Funding cuts in the Clean Water and Drinking Water State Revolving Funds also impact Indian tribes, which as noted above, rely upon a 2 percent set-aside under each of these funds. Under the EPA 2006-2011 Strategic Plan, a 2015 target was established for both achieving a 50 percent reduction in the number of tribal homes with inadequate wastewater, and a 50 percent reduction in the number of tribal homes without access to safe drinking water. To meet these goals, the annual amount of the set-asides through 2015 would need to be at least \$13.7 million and \$19.95 million respectively, with such amounts highly dependent upon the overall funding levels of the Clean Water and Drinking Water State Revolving Funds. Thus far, such funding levels have been too low to meet EPA's goals with respect to tribes.

Proper maintenance of the tens of thousands of public drinking water systems around the country is critical to protect the health and wellbeing of families and communities nationwide. A greater investment is needed in order to ensure that our waters are fishable, swimmable and drinkable.

FY 11 Recommendation:

Clean Water SRF - \$2.5 billion

An increase of \$400.0 million over the FY 10 enacted level of \$2.1 billion

Drinking Water SRF - \$2.0 billion

An increase of \$600.0 million over the FY 10 enacted level of \$1.4 billion

Of the amount budgeted for the SRF no less than 20% should be allocated to the Green Reserve for green infrastructure, water efficiency, and environmentally innovative projects.

Funding provided under these programs for water and wastewater utilities should be prioritized for repair and replacement of existing systems, rather than new construction, which can fuel overdevelopment.

Brownfield Program

The Brownfields Revitalization Act was signed into law in 2002, providing a framework to clean up lightly contaminated properties and restore them for more widespread use. The program has the potential to turn unusable areas into engines of prosperity and positive local development. Despite broad support from many stakeholders including the U.S. Conference of Mayors, the National Association of Development Organizations, and the National Association of Industrial and Office Properties, the program has continued to struggle with a lack of funding. Many highly contaminated Brownfield sites are cleaned up under the Leaking Underground Storage Trust Fund.

FY 11 Recommendation:

Brownfields - \$120.0 million

An increase of \$20.0 million over the FY 10 enacted level of \$100.0 million

Non-point Source Management Program, Clean Water Act Section 319

The damage caused by non-point source pollution includes degradation of wildlife habitat and aquatic life, contamination of drinking water, beach and swimming area closures, lost recreational opportunities, fish kills, aesthetic degradation of waterways, and many other severe environmental and human health problems. The Section 319 Non-point Source Management Program provides grant money that states, territories, and Indian tribes can use for a wide variety of non-point source pollution reduction activities including technical and financial assistance, education, training, technology transfer, demonstration projects, and monitoring.

FY 11 Recommendation:

Section 319 Non-point Source Management Program - \$220.0 million An increase of \$19.0 million over the FY 10 enacted level of \$201.0 million

Total Maximum Daily Loads - Pollution Control - Section 106

The establishment of Total Maximum Daily Loads (TMDLs) under section 303(d) of the Clean Water Act is a sensible and necessary step in accounting for the range of activities and sources that damage and threaten water quality. TMDLs allow states and the Environmental Protection Agency (EPA) to identify all sources of water quality impairment to rivers, streams and lakes that do not meet water quality standards, develop specific goals for improvement, and design plans to reduce pollutant loads into receiving water bodies. TMDLs must be developed in a way that is consistent with the Clean Water Act, is compatible with related water quality programs and regulatory processes, and leads to real improvements, rather than more paperwork and delay. The development of strong TMDLs by the states requires a commitment of adequate resources.

FY 11 Recommendation:

State Program Management Grants (CWA section 106) - \$230.0 million *An increase of \$700,000 over the FY 10 enacted level of \$229.3 million*

State and Local Air Quality Management

These grants, provided under Sections 103 and 105 of the Clean Air Act, are critical to state and local agency efforts to implement the many complex requirements of our nation's clean air program. These expenditures are authorized under the Clean Air Act and the funds would be awarded to state and local air pollution control agencies in all 50 states. Fine particulate matter (PM2.5) is very damaging to public health, even leading to thousands of premature deaths. The air quality monitoring program is the foundation of our efforts to understand the nature of the PM2.5 problem and address it. Dedicated funding under Section 103 has enabled states and localities to build a strong PM2.5 monitoring program. Section 105 of the Clean Air Act authorizes the federal government to provide grants for up to 60% of the cost of state and local air quality programs, while states and localities must provide a 40% match. In reality, the federal government provides only about 25% of the total (not including Title V permit fees, which state and local agencies collect from major sources and can use to fund only permit-related activities). The total amount needed to fund state and local efforts to implement the Clean Air Act is estimated at over \$1 billion each year. If the federal government were to provide 60% of that amount, as the Clean Air Act envisions, federal grants would equal approximately \$600 million annually. However, federal grants have been only about one-third of this total in recent years. To make matters worse, over the past 15 or 20 years, federal grants for state and local air pollution control agencies to operate their programs have decreased by approximately one-third in terms of purchasing power.

Dirty air poses a significant risk; tens of thousands of people die prematurely every year and many more suffer ill health as a result of air pollution. While we have made great progress under the Clean Air Act, millions of people in this country continue to breathe unhealthful air. Over 150 million people live in areas that violate at least one of the six health-based National Ambient Air Quality Standards (NAAQS). Exposure to these pollutants causes a host of problems including aggravation of existing respiratory and cardiovascular disease, damage to lung tissue, impaired breathing, irregular heartbeat, heart attacks, lung cancer and death. The pollutants covered by the NAAQS are not the only problems we face. EPA's own data on toxic air pollution estimate that more than 270 million people in this country live in census tracts where the combined upper-bound lifetime cancer risk exceeds 10 in one million (one in one million is generally considered "acceptable"). Further, over 92% of the population lives in areas with "hazard index" values for respiratory toxicity above 1.0 – the level above which adverse effects to the respiratory system occur.

The FY 10 budget for these grants was the first increase in almost a decade. This momentum needs to continue to meet Clean Air Act goals.

FY 11 Recommendation:

Section 103/105 Grants for State and Local Air Agencies - \$269.0 million *An increase of \$11.0 million over the FY 10 enacted level of \$258.0 million*

BEACH Act Grant Program

Our nation's public beaches are popular destination spots for recreation. The local economies of many coastal communities depend largely on clean and healthy beaches for use by residents and tourists alike. Unfortunately, many of our nation's public beach waters are polluted with bacteria and viruses that can make swimmers ill. Polluted urban stormwater, sewage spills and combined sewer overflows are the major sources of beach water pollution. There were more than 20,000 closings and swimming advisory days issued in 2007 at ocean, bay, and Great Lakes beaches for the third consecutive year. In 2000, Congress unanimously passed the Beaches Environmental Assessment and Coastal Health Act. The BEACH Act established a grant program for beach water testing and public notification programs. Regular information about beach water quality protects the health of

beach-goers and consequently the vitality of coastal, tourism-based economies. Unfortunately, perennial underfunding has prevented full state and tribal implementation, and has left public health at risk in many instances.

FY 11 Recommendation:

BEACH Act Grant Program - \$30.0 million

An increase of \$20.1 million over the FY 10 enacted level of \$9.9 million

Energy Star

Energy Star is a partnership program between government and industry that identifies and labels energy-efficient products, equipment and buildings. It helps businesses, consumers, and state and local governments save money, protects the environment, saves energy and yields multiple other private and public benefits. EPA works with the Department of Energy (DOE) on the ENERGY STAR program; DOE manages the specification process for approximately seven product categories and EPA manages the specification process for about 55 product categories, the new and existing homes programs, and the commercial and industrial programs. The ENERGY STAR program continues to yield significant results. By providing clear information on which products and practices are energy efficient, Energy Star builds awareness of energy-savings opportunities, and provides recognition and support for organizations that are committed to energy efficiency. The Energy Star Program could accomplish even more with greater funding. More money is needed to add products, increase public outreach, work with more businesses, and expand state and local programs such as the Home Performance with Energy Star Program.

FY 11 Recommendation:

Energy Star - \$60.0 million

An increase of \$9.7 million over the President's FY 10 request of \$50.7 million

Tribal Air Quality Management

Section 301(d) of the 1990 Amendments to the Clean Air Act (CAA) authorized the U.S. Environmental Protection Agency (EPA) to treat Indian tribes "as States" under the Act, and required the Agency to issue a rule specifying the provisions of the Act for which it was appropriate to treat tribes as states. The EPA complied with this requirement in February of 1998 by finalizing the Tribal Authority Rule (TAR) which provides that tribes may be treated in a manner similar to states for virtually all provisions of the CAA. Tribes are not only eligible for section 103 grant funding to conduct air quality monitoring, emissions inventories, and other studies and assessments, but they may also obtain section 105 grant funding to implement CAA regulatory programs.

In anticipation of the TAR, the EPA increased its tribal air grant funding during a time when few Indian tribes were conducting air-related activities. This funding, however, remained relatively flat during the next 10 years, specifically between a range of \$10.7 million and \$12.1 million, until the Obama Administration increased the funding to \$13.3 million for FY 09 and FY 10. At the same time, the number of tribes seeking 103 and 105 grant funding has substantially increased to the point that any carryover of tribal air funding from previous years has now been exhausted. The EPA and its regional offices are now being forced to turn away a number of tribes for 103 and 105 grant funding requests. Tribes, however, are facing many of the same air-related issues that neighboring state and local jurisdictions are facing, but are significantly underfunded to address such issues.

Tribal air grant funding must therefore be increased to more accurately reflect the air quality-related needs of Indian tribes. This funding is needed for core air quality management program development and operation important to tribes, such as for work on national ambient air quality standards, toxics, indoor air quality and regional haze. Funding is also needed for tribes to implement EPA's newer initiatives in climate change, renewable energy, energy efficiency, diesel retrofits, woodstove changeouts, carbon sequestration, human and ecosystem health-based research, and monitoring for critical loads.

FY 11 Recommendation:

Section 103/105 Grants for Indian tribes - \$22.0 million

An increase of \$8.7 million over the FY 10 enacted level of \$13.3 million

Tribal General Assistance Program

The Indian General Assistance Program (IGAP) authorizes the U.S. Environmental Protection Agency (EPA) to provide grants to federally-recognized Indian tribes to assist them in planning, developing and establishing environmental protection programs. These grants are especially critical to Alaska Native villages which tend to lack other sources of funding to address their basic environmental needs.

In FY 04, the enacted IGAP funding level was \$62.5 million, meaning that Indian tribes on an annual average received \$110,000 in grants, providing most tribes with a minimal level of environmental protection. Unfortunately, IGAP funding steadily decreased from that amount for several years until the Obama Administration restored it under the FY 10 budget to a level of \$62.9 million. While tribes are very appreciative regarding this restoration in funding, the cost of running a tribal environmental program has steadily increased over the past 15 years. In addition, some of these programs are now having to forego indirect cost allocations so as to dedicate enough funding to provide the aforementioned minimum level of environmental protection.

While the IGAP has been very successful in allowing Indian tribes to establish an environmental "presence," many of those involved with tribal programs have expressed a desire to be able to implement programs, not just research and educate their people about environmental issues. The purpose of the IGAP – i.e., help a tribe build capacity, define its needs, and then move onto other programs to create an overall sustainable environmental program – has simply not been met, either due to lack of funding for those other programs or other institutional barriers. As IGAP is the only environmental funding that many tribes have available to them, it is time to allow them to use the funding to address their needs beyond just building capacity and engage in program implementation.

Mindful of the cost of running tribal environmental programs, particularly based on the national economic situation, and the desire of Indian tribes to utilize IGAP funds for purposes beyond capacity building that include program implementation, the EPA should change its IGAP formula so as to provide each of the 564 federally-recognized tribes with \$175,000 annually.

FY 11 Recommendation:

Indian General Assistance Program - \$98.7 million

An increase of \$35.8 million over the FY 10 enacted level of \$62.9 million

Direct Implementation Tribal Cooperative Agreements

A means to help offset the limited dollars available to Indian tribes under the Indian General Assistance Program is the utilization of Direct Implementation Tribal Cooperative Agreements (DITCAs). These agreements allow tribes

and intertribal consortia to help the U.S. Environmental Protection Agency (EPA) implement federal environmental programs for tribes. DITCAs were initially authorized in the FY 01 Appropriations Act and must be approved on an annual basis by Congress. As such activities take place under federal authority, DITCAs do not trigger jurisdictional entanglements with other governmental bodies, sometimes a problem when tribes attempt to assert regulatory jurisdiction for their own programs. The DITCAs also provide environmental results and meet strategic targets prized by both tribes and the EPA.

Thus far, the EPA has awarded more than 20 DITCAs to Indian tribes to undertake such activities as Clean Air Act Title V permitting, development of smoke management plans, National Pollution Discharge Elimination System stormwater permitting compliance, water quality monitoring, public water system supervision, and the hiring of a tribal pesticide circuit rider. While there is a strong interest among tribes to enter into more DITCAs, they are constrained by the availability of resources to do so. Specifically, discretionary funding under the Environmental Program & Management account, and State and Tribal Assistance Grants has been the primary vehicle for DITCAs, meaning that such DITCAs must compete with a myriad of other Agency priorities. To assure a consistent level and source of funding for DITCAs, a separate budget set-aside should be established within the EPA.

FY 11 Recommendation:

Direct Implementation Tribal Cooperative Agreements - \$8.0 million

A new set-aside that would increase the overall Environmental Protection Agency Budget by \$8.0 million over the FY 10 enacted level

ENVIRONMENTAL PROTECTION AGENCY OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

RE-Powering America's Lands Initiative

The Environmental Protection Agency (EPA) and the National Renewable Energy Laboratory recently partnered to determine the renewable energy potential on the brownfields, Superfund sites, and other contaminated lands tracked by EPA. The analysis yielded over 9,000 sites with high solar, wind, or biomass energy potential. Most of the sites were formerly used for industrial purposes, and thus many have existing electrical transmission capacity and infrastructure in place. Using contaminated lands for siting renewable energy generation and transmission is a win-win situation, as development pressure on greenspaces is lessened while redevelopment of contaminated sites relieves local communities of blight. EPA is currently conducting stakeholder sessions throughout the nation on the RE-Powering America's Lands Initiative in order to identify barriers, opportunities, and action steps needed to encourage renewable energy generation on contaminated sites.

EPA's Office of Solid Waste and Emergency Response can play a key role in coordinating partnerships among federal, state, tribal and other government agencies, utilities, communities and the private sector that will result in many new clean and renewable energy facilities on these contaminated properties. As such, this work should be prioritized and funded as a formal initiative within EPA's FY 11 budget.

FY 11 Recommendation:

RE-Powering America's Lands Initiative - \$15.0 million An increase of \$15.0 million over the FY 10 enacted level of \$0.0

ENVIRONMENTAL PROTECTION AGENCY ENVIRONMENTAL EDUCATION

National Environmental Education Act Programs

The Environmental Protection Agency's (EPA) Office of Environmental Education implements highly-leveraged, successful nationwide environmental education programs authorized by the National Environmental Education Act (NEEA - PL 101-619), the nation's first environmental education legislation that is still the only federal law devoted solely to environmental education. NEEA supports life-long education and environmental stewardship, helping to ensure that our citizens are environmentally literate and competitive in increasingly important environmental fields. The EPA's Office of Environmental Education supports several highly-leveraged, but underresourced programs including the Environmental Education and Training Partnership, the National Environmental Education Foundation, an environmental education grant program, the Weather and the Environment program, the Health and the Environment program, National Public Lands Day, the Business and Environment program, Project Learning Tree, the National Audubon Society's education initiatives, and other efforts. The EPA's environmental education programs have a notable track record of success and provide indispensable tools for teachers, museum staff, business leaders, health care professionals, meteorologists, and others responsible for educating young people, employees, and the public about the environment. Environmental education is increasingly critical as our nation moves towards a clean energy economy and addresses the challenges of global climate change. For Americans to be competitive in the 21st Century workforce, they must have an understanding of the environmental challenges and opportunities that impact our economy, health, and national security. While the benefits of and bi-partisan support for environmental education are well documented and continue to grow, the overall level of federal support for environmental education is woefully inadequate. In addition, these programs and environmental education more broadly has overwhelming public support. Fully 95 percent of American adults and 96 percent of parents support environmental education being taught in the schools according to an environment survey conducted by Roper Starch Worldwide. EPA's environmental education programs meet the highest standards for educational rigor and scientific accuracy.

While funding has remained flat for NEEA at \$9.0 million for several years, Congress has increasingly recognized the benefits environmental education. In FY 10 the Administration included \$9.0 million in the President's budget for the first time in several years and the House FY 10 bill included \$10 million for the NEEA programs, while the Senate bill and final conference report kept the level at \$9.0 million. Congress has increasingly recognized the economic, educational, and environmental benefits of strong environmental education programs. Thus, Congress should fund NEEA programs at the authorized level of \$14 million.

FY 11 Recommendation:

National Environmental Education Act Programs - \$14.0 million An increase of \$5.0 million over the FY 10 enacted level of \$9.0 million

ENVIRONMENTAL PROTECTION AGENCY NATIONAL ENVIRONMENTAL POLICY ACT

National Environmental Policy Act

The National Environmental Policy Act (NEPA) applies to all major federal actions that may significantly affect the environment. To comply with NEPA, agencies must assess and disclose the potential environmental effects of their actions in an Environmental Assessment or Environmental Impact Statement (EIS). The Environmental Protection Agency's (EPA) Office of Federal Activities is responsible for coordinating EPA's review of all EISs prepared by other Federal agencies, maintaining a national EIS filing system, and assuring that EPA is complying with NEPA in its own actions.

On average, EPA reviews and comments on approximately 500-600 EISs and several hundred environmental assessments annually. EPA makes these comments available to the public and allows for public input as well. Also, a major focus of effort growing within the EPA is their role in helping other agencies develop their EISs, including scoping and following up with an agency if concerns arise over a proposed project. Lastly, a new focal point for EPA will be to implement its responsibilities with respect to projects funded under the American Recovery and Reinvestment Act.

EPA is in need of additional funds to ensure it can fully meet its unique NEPA responsibilities in an expeditious manner and achieve several important NEPA objectives. With the support of additional funding, EPA could increase collaboration efforts between itself and other Federal agencies in the beginning stages of NEPA implementation in order to addresses potential concerns and offer increased NEPA training for EPA employees.

FY 11 Recommendation:

National Environmental Policy Act Implementation - \$21.1 million

(NEPA resources are combined with resources for the programs that they affect so it is not possible to disaggregate baseline numbers)

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Marine Mammal Protection

Marine mammals are managed primarily by the National Marine Fisheries Service (NMFS) and all marine mammals are protected under the Marine Mammal Protection Act. There are 13 domestic species of marine mammals that are protected under the Endangered Species Act. NMFS's research and management programs carry out critical stock assessments to determine abundance of species, study the impacts of ocean noise and sonar on marine mammals, and work with the shipping industry, citizen groups, and others to reduce user conflicts with marine mammals.

In a recent GAO review of Take Reduction Teams for marine mammals, one clear theme was the lack of funding for NOAA to fully protect marine mammals. Increased funding is needed for updated stock assessments and research cruises, bycatch monitoring and reporting, research on avoidance and bycatch reduction techniques, the formation of take reduction teams, and implementation and enforcement of conservation measures for marine mammals. It is highly questionable whether NOAA can continue to meet legal requirements with continued budget cuts that jeopardize the survival of imperiled marine mammals.

FY 11 Recommendation:

Marine Mammal Protection - \$82.0 million (restored to FY 05 enacted level) *An increase of \$32.3 million over the FY 10 enacted level of \$49.7 million*

Hawaiian Monk Seal

Hawaiian monk seals are one of the most endangered marine mammals in the world. Additionally, the Hawaiian monk seal is the only marine mammal whose entire distribution range lies within the jurisdiction of the United States. Over the last 50 years, the Hawaiian monk seal population has declined by more than 60% and is now at its lowest level in recorded history, with less than 1,200 individuals. Human and environmental factors contributing to the decline include habitat loss, shark predation, entanglement in marine debris, reduction in food availability, injuries and deaths by aggressive adult male monk seals, and human disturbance. Appropriate and adequate management is needed to mitigate the above threats as outlined in NOAA's Hawaiian monk seal recovery plan (2007). The recovery plan identifies funding needs at \$36 million over the next five years.

FY 11 Recommendation:

Hawaiian Monk Seal - \$7.0 million An increase of \$2.7 million over the FY 10 enacted level of \$4.3 million

Sea Turtle Conservation

All sea turtles that swim in U.S. waters are listed as endangered or threatened under the Endangered Species Act, yet populations of sea turtles continue to decline. New information shows that loggerhead sea turtle nesting in Florida, making up approximately 90 percent of all U.S. loggerhead nesting, has declined by nearly 50 percent in the past decade. According to the recent loggerhead five-year status review conduction by NMFS and the U.S. Fish and Wildlife Service, "the most significant human-made factor affecting conservation and recovery of the loggerhead sis incidental capture in commercial and artisanal fisheries." However, NMFS is allowing tens of thousands of loggerhead sea turtles to be killed annually in the Atlantic Ocean and Gulf of Mexico by destructive fishing gear. The story is the same for many turtle species. Additional resources are needed to conduct enhanced sea turtles stock assessments, place fisheries observers who understand turtle bycatch in state and federal fisheries, develop and implement bycatch mitigation methods and protect important habitat.

FY 11 Recommendation:

Sea Turtle Conservation - \$26.4 million

An increase of \$11.8 million over the FY 10 enacted level of \$14.6 million

Expand Stock Assessments

The expanded mandates of the Magnuson Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA) for Annual Catch Limits (ACLs) in all U.S. fisheries require additional fisheries data and stock assessments. Quantitative stock assessments provide the scientific and technical basis for setting numerical catch limits that avoid overfishing and fishery managers have substantially greater confidence that catch limits will prevent overfishing when the ACLs are based on a stock assessment. Without a current knowledge base and more data, fishery managers will have to set ACLs lower to account for the high degree of uncertainty in estimates. Thus, funding to improve stock assessments may allow more fishing opportunities.

A funding level of at least \$60 million for expanded stock assessment development in FY 11 is needed to ramp up the capacity to provide stock assessments for all 230 major fish stocks in the Fish Stock Sustainability Index (FSSI). Based on analysis in the NOAA budget request, only 128 of the 230 major stocks in the FSSI were considered to have adequate assessments in 2007. Based on an estimated cost of approximately \$1 million per stock assessment, it will take approximately \$100 million in additional funding to develop assessments for all 230 FSSI stocks. NOAA has sought modest budget increases for expanding stock assessments in recent years, but its own analysis indicates that the number of major stocks with adequate assessments would increase only marginally over five years to 2014 and that less than 60% of the 230 stocks in the FSSI would have adequate assessments through FY 2014 if funding remained level at the requested amount.²

FY 11 Recommendation:

Expand stock assessments - \$60.0 million

An increase of \$9.0 million over the FY 10 enacted level of \$51.0 million

Regional Councils and Fisheries Commissions

Increased funding for the Regional Fishery Management Councils and Fisheries Commissions is essential to support fishery managers' efforts to amend the 45 federal fishery management plans to comply with the Annual Catch Limits (ACL) and Accountability Measures (AM) requirements of the MSRA. These funds will go to each of the eight regional fishery management councils and the state fisheries commissions to establish ACLs and AMs, as well as to support development of sector management in some regions. Funding for this program, in conjunction with full funding of the Implementation of ACLs and AMs budget line, is needed to provide managers with the necessary resources to meet the timelines for implementation of ACLs and AMs by 2011 in all U.S. fisheries.

FY 11 Recommendation:

Regional Councils and Fisheries Commissions - \$31.9 million Same as the FY 10 enacted level of \$31.9 million

¹ The 230 FSSI stocks represent less than half of the stocks reported to Congress annually but comprise a large (>90%) share of the total annual catch.

² NOAA FY 2010 Budget Request (Blue Book), Exhibit 13, pp. 215-217.

Fisheries Statistics-Marine Recreational Information Program

Marine recreational fishing is a significant cause of mortality for many marine species, yet little information is available to assess most of these fisheries. In the reauthorized Magnuson-Stevens Act of 2006 (MSRA), Congress called for improved management of saltwater recreational fisheries by mandating the creation of a national saltwater angler registry (a database of recreational fishermen) and an overhaul of the system of collecting and assessing recreational fishery information. The measures are based on the recommendations of a national panel of independent scientists, which concluded that the existing Marine Recreational Fishing Statistics Survey (MRFSS) program not sufficient. In the FY 09 budget request, NOAA sought a net increase of \$3 million for a total of \$6.5 million to complete the final phase of the development of a new registry system for recreational fisheries by January 1, 2009.

However, completion of a revamped recreational registry system program will not fully address the ongoing need for improved recreational fishery catch statistics in the fishery management process. According to NMFS, the Magnuson-Stevens Act's new requirements for annual catch limits and accountability measures in all U.S. fisheries will require dedicated funding estimated at about \$20 million per year to provide fishery managers with the more accurate and timely data needed to manage saltwater recreational fisheries and avoid overfishing.

While significant progress has been made in increasing the accuracy of data collection through the new Marine Recreational Information Program (MRIP), much more needs to be done to increase the timeliness in data collection, thereby enabling fisheries managers to make mid-season adjustments as necessary to avoid overfishing. An increase of \$20 million specifically appropriated to Marine Recreational Information Program within the Fisheries Statistics Line Item is needed to complete the establishment of the national registry program and support the collection of more timely survey information for the improved management of these fisheries.

FY 11 Recommendation:

Fisheries Statistics - Marine Recreational Information Program - \$41.06 million *An increase of \$19.99 million from the FY 10 enacted level of \$21.07 million*

Fisheries Information Networks

The Fisheries Information Networks needs additional funding to gather information needed to fully manage fisheries. This increase will support an improved and expanded recreational fisheries statistics survey program and other data-collection activities related to implementation of the new requirements of the MSRA. For instance, the setting of annual catch limits and accountability measures will require dedicated funding estimated at \$20 million per year to provide fishery managers the data they need to manage recreational fisheries effectively and address overfishing. Congress should appropriate at least \$10 million for FY 11, and a stepwise increase in funding beyond 2011 will be essential to meet the need for improved fishery data.

FY 11 Recommendation:

Fisheries Information Networks - \$22.0 million Same as the FY 10 enacted level of \$22.0 million

Survey and Monitoring Projects

Survey and monitoring projects are a critical component for updating and expanding stock assessments. Many regions continue to experience chronic underfunding of basic resource survey and fishery monitoring needs to support stock assessment development, thus funding for resource surveys and basic data collection activities must

increase to meet the increased need for stock assessments. FY 11 funding for this program should be increased to at least \$30 million to support increased collection of catch data for stock assessment development in all regions.

FY 11 Recommendation:

Survey and Monitoring Projects - \$30.0 million

An increase of \$6.0 million over the FY 10 enacted level of \$24.0 million

Illegal, Unreported and Unregulated (IUU) Fishing

IUU fishing and related activities remain a major threat to fisheries sustainability and value, marine habitat, and the lives and livelihoods of local communities, fishermen, and crew. According to the Marine Resources Assessment Group, in 2002, about 20% of global catch, valued between \$2.4 and \$9.5 billion US dollars, was caught through IUU practices. These numbers can be much higher when looking at individual, highly valued stocks. For instance, in 1999, roughly 80% of all Patagonia toothfish sold were caught illegally. An additional \$3 million is funding is needed to implement provisions to crack down on illegal, unreported, and unregulated (IUU) fishing, as provided by the 2006 Magnuson-Stevens Act reauthorization. This funding would be used by NOAA to identify nations — and take subsequent action with or against those nations pending a certification process — whose fishing vessels engage in illegal, unreported, and unregulated fishing or in activities or practices that result in bycatch of a protected living marine resource beyond any national jurisdiction or beyond the US EEZ for protected living marine resources shared by the US. In addition, this funding would significantly improve NOAA's ability to implement the requirements of Secs. 609 and 610 of the 2006 reauthorized High Seas Driftnet Fishing Moratorium Protection Act (16 U.S.C. 1826j-k).

FY 11 Recommendation:

IUU Fishing - \$5.4 million

An increase of \$3.0 million over the designated FY 10 Magnuson- Stevens Act funding level of \$2.4 million

Reduce Fishing Impacts on Essential Fish Habitat (EFH)

This critical element of sustainable fisheries management has been severely underfunded in recent years. The Magnuson-Stevens Act of 1996 gave fishery managers a clear mandate to identify and protect EFH, but the low level of funding for this line item speaks to the low priority currently given to this program area. A higher level of funding is necessary to identify and conserve vulnerable EFH. Healthy fish habitat is an essential precondition for rebuilding overfished stocks and sustaining fisheries over the long-term. Program funding should reflect that importance. Congress should appropriate no less than \$5 million in FY 11 for EFH conservation and management as part of a plan to ramp up program funding toward the \$15 million per year level recommended by the U.S. Commission on Ocean Policy (USCOP 2004: Table 30.1; Appendix G).

FY 11 Recommendation:

Essential Fish Habitat - \$5.0 million

An increase of \$4.5 million over the FY 10 enacted level of \$0.5 million

Bycatch Monitoring and Reduction

Bycatch, the incidental catch of non-target fish and other marine life is a continuing problem in fisheries management. Greater funding is needed to develop and test bycatch reduction technologies, to support cooperative research activities with fishermen, and to collect and process reliable fisheries bycatch information for use in stock

assessments and management decision-making. Congress should appropriate at least \$10 million in FY 11 for the Bycatch Reduction Initiative as part of a plan to ramp up program funding toward the \$30 million per year level recommended by the U.S. Commission on Ocean Policy (USCOP 2004: Table 30.1; Appendix G).

FY 11 Recommendation:

Bycatch Monitoring and Reduction - \$10.0 million

An increase of \$6.6 million over the FY 10 enacted level of \$3.4 million

Catch Share Fishery Management

Effective fisheries management is fundamental to protecting and restoring the health of the public's fishery resources. Catch share fishery management is one approach that can restore depleted fisheries. NOAA and the regional fisheries management councils are working with fishermen, communities, other stakeholders, and non-governmental organizations to develop and implement catch shares in many depleted fisheries around the country. Increased funding is needed to ensure catch shares are well-designed to ensure they achieve the multiple benefits healthy fisheries can provide.

FY 11 Recommendation:

Catch Share Fishery Management - \$50.0 million \$25.4 million over the FY 10 enacted level of \$24.6 million

Sustainable Tuna Management

An additional \$4 million is needed for science to support sustainable tuna management: Additional funding is necessary for the NMFS Science Centers for data collection and research, including regarding bycatch, necessary to promote sustainable tuna management. This research is intended to support US participation in the Pacific tuna RFMOs, specifically the Inter-American Tropical Tuna Commission (IATTC) and the Western and Central Pacific Fisheries Commission (WCPFC), including its Northern Committee.

FY 11 Recommendation:

Sustainable Tuna Management - \$4.0 million *This is a new program for FY 11*

Fisheries Enforcement

Compliance with fishery regulations is uncertain without funds supporting the deployment of enforcement personnel at sea and at ports. Enforcement of fisheries laws and management regulations is essential to the achievement of national objectives for sustainable fisheries as well as efforts to address Illegal, Unregulated and Unreported (IUU) fishing on the high seas as required in the reauthorized Magnuson Stevens Act. The enforcement program also provides money to support cooperative agreements with state enforcement officials.

Additional funding above current levels is needed to establish a high seas IUU enforcement and surveillance program within the existing NMFS fisheries enforcement program. Successful implementation of the new legal requirements for annual catch limits and accountability measures in all U.S. fisheries will also require a greater commitment of funding in order to improve catch accounting and monitor compliance with annual catch limits in all regions.

FY 11 Recommendation:

Enforcement - \$75.0 million

An increase of \$9.3 million over the FY 10 enacted level of \$65.7 million

Fishery Observer Program

Fishery observers are independent scientists who gather information about fishing practices by accompanying fishermen at sea. Observers collect data on the composition and amount of the actual catch brought on board during fishing operations. This is in contrast to landings data which only record what is brought to port, failing to account for "bycatch," or what is caught and discarded at sea. This data is especially important as it is the primary source for identifying and monitoring marine mammal, sea turtle, sea bird, and other wildlife bycatch.

According to the National Marine Fisheries Service, 85 fisheries require observer coverage and only 42 of those have any amount of coverage. Of those 42 fisheries with observers, less than half have adequate levels of coverage. For many of those fisheries that have observers, existing coverage levels are well below the levels needed for precise and accurate estimates of bycatch and total catch of fish and protected marine species. Considering the NMFS makes fishery management decisions based on this data, more observers at sea will lead to better fishery management. A budget increase of \$18 million will allow NMFS to increase observer coverage by roughly 50%. Even with this budget increase, substantially greater amounts of funding are still needed to meet the observer needs in our fisheries.

FY 11 Recommendation:

Fishery Observer Program - \$50.9 million

An increase of \$9.8 million over the FY 10 enacted level of \$41.1 million

OTHER ACTIVITIES SUPPORTING FISHERIES LINE ITEMS

Antarctic Research

An additional \$2.2 million in funding is needed to support data collection for implementation of comprehensive, marine spatial planning in the Antarctic: This funding will be used by the Antarctic Ecosystem Research Division to charter an Antarctic research vessel to extend the 30 year data set used for management in that region. This type of information is necessary to promote ecosystem and resource health and sustainability in the Antarctic and to meet the requirements of the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR).

FY 11 Recommendation:

Antarctic Research - \$4.8 million

An increase of \$2.1 million over the FY 10 enacted level of \$2.7 million.

Cooperative Research

The Cooperative Research program involves fishermen in the collection of fisheries data to improve stock assessments, estimates of bycatch, and other information. Cooperative Research funding will support additional fish assessments, and increase the amount of data collected on bycatch and mortality. It will also fund partnerships that involve key stakeholders and lead to more well-informed and supportive fishing communities. Substantial new

opportunities for cooperative research remain untapped and therefore we recommend a net increase of \$9 million for a total budget of \$20 million in FY 10.

FY 11 Recommendation:

Cooperative Research - \$20.0 million

An increase of \$2.4 million over the FY 10 enacted level of \$17.6 million

National Environmental Policy Act Implementation

The National Environmental Policy Act (NEPA) applies to all major federal actions that may significantly affect the environment. To comply with NEPA, NOAA must assess and disclose the potential environmental effects of their actions in an Environmental Assessment or Environmental Impact Statement. In preparing these documents, NOAA must summarize the environmental impacts of their proposed action and alternatives, as well as the interrelated economic, health, or social effects. This process provides citizens an opportunity to learn about the actions that federal agencies are proposing and offers NOAA an opportunity to receive valuable input from the public, state and local governments, other agencies, and other stakeholders.

NOAA's NEPA compliance is coordinated in the Office of Program Planning and Integration. The NOAA NEPA Coordinator and staff provide information, training, and advice to staff across the agency in order to ensure NOAA's compliance with NEPA. All agencies within NOAA are required to comply with NEPA when appropriate.

For example, over the last few years, NMFS has experienced a significant increase in NEPA-related workload, including environmental reviews for projects led by other agencies, such as the Minerals Management Service and Federal Energy Regulatory Commission. This workload is likely to further increase as the number of permits and projects for coastal and ocean energy projects requiring NEPA review increase. Further, a challenge NMFS will have to face is analyzing the repercussions climate change will have on the marine ecosystem. To ensure that NMFS can continue to provide quality NEPA review and consultation with other agencies, and to ensure that the public has opportunity to comment on the permits in a timely manner, NMFS must receive adequate funding for its NEPA activities.

FY 11 Recommendation:

National Environmental Policy Act - \$10.0 million for an additional 7 FTEs; 1 in Headquarters and 6 in Regional Offices

(NEPA resources are combined with resources for the programs that they affect so it is not possible to disaggregate baseline numbers)

Survey Technology

Funding for reconstruction of the previously evacuated Southwest Fisheries Science Center in La Jolla was included as part of the American Recovery and Reinvestment Act of 2009. We are hopeful that the \$102 million dollar appropriation provided by that legislation will be sufficient to move forward with construction of a unique, acoustic calibration tank to test and develop non-lethal, optically-assisted, acoustic survey technology. This technology will be able to be deployed without research vessels – and the associated cost of building and operating such vessels – and in sensitive, high relief areas, like corals reefs, where stock assessments conducted via nets could cause significant habitat damage. This technology will be useful to scientists and managers domestically and around the world, including in developing countries. Beyond construction of the calibration tank, an additional \$6

million is necessary to develop and test this technology and start deploying it in the many regions and situations where a new, less destructive and less expensive approach to stock assessments is needed. This funding is to be shared by each of the regional Fisheries Science Centers under the leadership of the Southwest.

FY 11 Recommendation:

Survey Technology - \$6.0 million *This is a new program for FY 11*

Pacific Coastal Salmon Recovery Fund

Wild Pacific salmon and steelhead are national treasures of tremendous environmental, economic, and cultural significance. These important species are in decline due to a variety of factors such as dams, unsustainable logging and agricultural practices, urban sprawl, and poor hatchery practices. Twenty-six of the 51 salmon and steelhead stocks along the West Coast from Washington to California are listed under the Endangered Species Act (ESA). The Pacific Coast Salmon Recovery Fund, funded through the National Oceanic and Atmospheric Administration (NOAA), is aimed at restoring and protecting habitat for these imperiled fish. This program provides much-needed assistance to state, local, and tribal governments in Washington, Alaska, Oregon, California, Idaho and Nevada. These funds are matched dollar-for-dollar at the state and local level, and can be used for habitat restoration, preservation, and acquisition, as well as for monitoring the health of salmon populations and watersheds.

Citizens, watershed groups, Native American tribes, and federal and state agencies from across the nation have been working to bring these species back from the brink of extinction and set them on the road to recovery. With dozens of new salmon recovery plans in effect or about to take effect, it is imperative to fund them at levels that will allow for their full implementation to successfully recover wild salmon and steelhead. The recommendation below of \$120 million is an excellent starting point; however, in order to provide an adequate federal contribution for the completion and implementation of remaining recovery plans from Southern California to Alaska to Idaho, funding of the PCSRF will need to increase to \$200 million per year by 2014.

FY 11 Recommendation:

PCSRF - \$120.0 million

An increase of \$40.0 million over the FY 10 enacted level of \$80.0 million

Fisheries Habitat Restoration Program

The Fisheries Habitat Restoration Program, funded through the National Oceanic and Atmospheric Administration's (NOAA) Restoration Center, reaches out to local constituencies to accomplish on-the-ground, community-based projects to restore estuaries and coastal habitats through its Community-based Restoration Program. Partnerships and local involvement are fundamental to the success of this program. By working collaboratively with more than 1,500 organizations, the program has funded more than 1,800 projects to restore over 60,000 acres of habitat, while leveraging more than double the federal investment. In addition, the success of the Restoration Center's work spawned the creation of the Open Rivers Initiative in FY 07, which has opened 1,400 stream miles for fish passage by supporting the removal of small, obsolete dams and fish passage barriers. Most recently, the Restoration Center received \$167 million in American Recovery and Reinvestment Act funds, which resulted in 814 project submissions totaling more than \$3 billion from 34 states, the District of Columbia, and five U.S. territories. Unfortunately, NOAA was forced to turn away the vast majority of these ecologically and economically significant habitat restoration projects, leaving a large backlog of work that needs to be done to improve the condition of our nation's coasts and economy.

NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION NATIONAL MARINE FISHERIES SERVICE

FY 11 Recommendation:

Fisheries Habitat Restoration Program - \$100.0 million An increase of \$72.1 million over the FY 10 enacted level of \$27.9 million

Deep Sea Coral Research and Technology Program

Corals are usually associated with shallow tropical waters, however coral ecosystems are also found on the deep sea floor. Unfortunately, these ecosystems are not well understood and are vulnerable to destructive fishing practices. Deep sea corals provide havens for economically and ecologically important fish species as well as a wide variety of other marine life. Scientists have begun to discover that deep water coral communities may contain valuable medicines that may one day lead to treatments for cancer and HIV.

The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA) directed National Oceanic and Atmospheric Administration (NOAA) to establish a Deep Sea Coral Research and Technology Program. This program was established to locate and map deep sea coral habitats, as well as help scientists understand deep sea coral biology and ecology. Program activities, such as mapping and research cruises, are intrinsically linked to other MSRA activities, such as helping the Regional Fishery Management Councils protect and conserve deep sea coral habitats for their own merit as valuable and vulnerable marine ecosystems. Additionally, the Deep Sea Coral Research and Technology Program is an important step in achieving NOAA's goal of ecosystem-based management.

FY 11 Recommendation:

Deep Sea Coral Research and Technology Program - \$7.0 million An increase of \$4.5 million over the FY 10 enacted level of \$2.5 million

Coral Reef Conservation Program

Tropical coral reefs are often called the "rainforests of the sea" because of the rich biodiversity they contain. Coral reef ecosystems provide essential habitat for other marine animals enabling these species to hide from predators, and to feed, spawn and develop. Coral reefs also play important roles in the protection of coastlines from storms and support coastal economies through recreation and tourism. Tropical corals face many threats including damaging fishing practices, harmful land-based pollution, vessel groundings and anchor damage, overuse of reef resources, and climate change impacts such as ocean acidification and sea level rise. Recent science regarding the threat of ocean acidification to corals, extended episodes of coral bleaching, and the listing of coral species as threatened under the Endangered Species Act, illustrate a dire need for managers to better understand and protect these resources.

NOAA's Coral Reef Conservation Program with the U.S. Coral Reef Task Force, focuses on improving the understanding of tropical coral reef ecosystems and minimizing the threats to their health and viability.

FY 11 Recommendation:

Coral Reef Conservation Program - \$50.0 million An increase of \$21.0 million over the FY 10 enacted level of \$29.0 million

Response and Restoration

Renewed interest in oil drilling in the ocean, spurred by a period of high gasoline prices, threatens marine life and ocean ecosystems. Thousands of incidents occur each year in which oil or chemicals are released into the coastal environment. Spills into our coastal waters, whether accidental or intentional, can harm people and the environment, oil and poison wildlife, and can have severe economic impacts. The risks are especially grave in the Arctic, a unique and fragile ecosystem, where oil development is already underway and where unpredictable ice

conditions, moving ice floes, as well as unsettled weather and wave patterns make oil spill response extremely difficult. Even small spills could be impossible to clean up.

NOAA's National Ocean Service (NOS) performs response, assessment, and restoration activities for oil and chemical spills through the Office of Response and Restoration (OR&R). OR&R provides scientific expertise for successful incident response and restoration, helping to reduce harm to people, the environment, and the economy. OR&R scientists determine the nature and extent of injuries to natural resources from spills, and the restoration actions needed to reverse these losses. Regional NOAA scientific support coordinators organize NOAA resources in support of federal and state response efforts and work with scientists from other public agencies, academia, and the private sector to support operations when an oil or chemical spill occurs. OR&R funds are used to develop tools and techniques related to response and natural resource damage assessment with a focus on building models to predict contaminant movement in the environment 24 hours a day, 7 days a week. NOAA's response activities deliver payoffs in many areas including reduced environmental harm, reduced impact from shipping and fisheries closures, and lowering costs of cleanup by finding the most cost-effective approaches.

Starting in FY 04 OR&R saw a steady decrease in its funding levels calling into question its ability to respond to two major events simultaneously. Increased funding levels are essential if OR&R is to return to its historic funding levels and for OR&R to complete its designated mandates.

FY 11 Recommendation:

Response and Restoration - \$29.2 million

An increase of \$18.4 million over the FY 10 enacted level of \$10.8 million

Marine Debris

Marine debris has become one of the most widespread pollution problems facing the world's oceans and waterways. Research has proven that debris has serious effects on the marine environment, marine wildlife, the economy and human health and safety. Marine debris causes wildlife entanglement (including the breaking and smothering of corals), precipitates ghost fishing, and is often ingested by wildlife. In addition it presents navigational hazards and causes vessel damage, as well as pollutes coastal and marine areas. Reports of death by marine debris to endangered and threatened seals, sea turtles, and seabirds continue to grow and bring to light the urgency of immediate action to control these devastatingly destructive occurrences.

In accordance with the Marine Debris Research, Prevention and Reduction Act, NOAA developed and is implementing a Marine Debris Program, a national and international effort focused on identifying, reducing and preventing debris in the marine environment. Additional resources are needed to enhance the ability of NOAA to assess the amount, sources, and impacts of marine debris; maintain support to current removal projects; develop management practices; reduce derelict fishing gear; and conduct education and outreach measures to prevent future occurrences.

FY 11 Recommendation:

Marine Debris Program - \$10.0 million

An increase of \$6.0 million over the FY 10 enacted level of \$4.0 million

National Estuarine Research Reserve System

The National Estuarine Research Reserve System (NERRS) is a network of protected areas established for long term research, education, training, and stewardship. Through an effective partnership between NOAA and coastal states, the NERRS plays a critical role in sustaining the nation's estuaries and coasts. There are currently 27 reserves throughout the country that conduct research, monitoring, restoration, education, and training designed to improve our understanding and management of estuaries. Additional funding is essential to support local research, education, and training programs, and collaborative research and technology development to support coastal managers. Additional funding will allow for expansion of the NERRS to new estuaries in Wisconsin and Connecticut. In addition, NERRS construction and acquisition funding is critical to maintain, upgrade, and construct facilities and acquire priority lands for conservation.

FY 11 Recommendation:

NERRS - \$34.3 million

An increase of \$10.8 million over the FY 10 enacted level of \$23.5 million

NERRS Construction and Acquisition - \$15.0 million

An increase of \$11.1 million over the FY 10 enacted level of \$3.9 million

Estuary Restoration Program

The Estuary Restoration Program is a comprehensive program for the restoration of our nation's estuaries, authorized through the Estuary Restoration Act. Among the most productive ecosystems on earth, estuaries provide vital habitat to fish and wildlife species, and important environmental, cultural, and recreational benefits to human populations. The Act encourages coordination among all levels of government, and engages the unique strengths of the public, non-profit, and private sectors. The Act ensures a strong federal commitment and resources to restore estuary habitat by authorizing \$4 million for NOAA, which includes \$2.5 million for implementation of on-the-ground restoration projects and \$1.5 million for the acquisition, maintenance, and management of monitoring data on restoration projects.

FY 11 Recommendation:

Estuary Restoration Program - \$4.0 million

An increase of \$1.0 million over the FY 10 enacted level of \$3.0 million

Coastal Zone Management Act (CZMA)

For more than thirty years, the Coastal Zone Management Program has helped states to manage the nation's coasts, islands, and Great Lakes. This innovative partnership offers an effective mechanism for federal and state managers to address important national coastal objectives. It has resulted in the establishment of thirty-four coastal management programs, which have reduced environmental impacts of coastal developments, resolved significant conflicts between competing coastal uses, and provided critical assistance to local governments in coastal planning. States are empowered by the CZMA to make their own management decisions, and all federal activities within a state's coastal zone must comply with the state plan once it is approved at the federal level. The CZMA is a true financial partnership, with each federal dollar matched by a state dollar and often leveraged for additional funds from local and private investment.

FY 11 Recommendation:

Coastal Zone Management Grants - \$100.0 million

An increase of \$31.8 million over the FY 10 enacted level of \$68.2 million

Coastal and Estuarine Land Conservation Program

According to NOAA, coastal counties constitute only 17 percent of the nation's land area, but account for 53 percent of its population. This longstanding trend has lead to intense development pressure along our once-pristine coastlines. In response, Congress created the Coastal and Estuarine Land Conservation Program (CELCP) in 2002 to provide state and local governments with matching funds to protect significant coastal and estuarine areas. Since the program's inception, CELCP has proven to be an integral coastal conservation tool. To date, Congress has appropriated over \$220 million for CELCP. This funding has allowed the completion of more than 150 conservation projects in 26 of the nation's 35 coastal states and has preserved upwards of 35,000 acres of threatened coastal habitat. In March 2009, the CELCP program was formally authorized by Congress to receive up to \$60 million annually as part of the Omnibus Public Lands Management Act.

The CELCP program is leveraged by at least an equal amount of non-federal funds, which demonstrates the program's broad appeal and effective application by state and local governments. Conserving coastal areas helps filter pollutants from storm-water runoff, supports flood control, provides important habitat for many fish and bird species, and creates valuable opportunities for coastal recreation. Unfortunately, demand for CELCP dollars far exceeds Congressionally-appropriated levels, particularly with funding falling to a low of \$8 million in FY 08. For FY 10, requests for over \$90 million in projects from 29 states were submitted to the national competition. Full funding for the CELCP program is critically needed to meet demand, protect sensitive coastal areas, and respond to the mounting development pressures on our coasts.

FY 11 Recommendation:

Coastal and Estuarine Land Conservation Program - \$60.0 million An increase of \$40.0 million over the FY 10 enacted level of \$20.0 million

Marine Protected Areas Center

Marine protected areas (MPAs) are an important tool for maintaining marine biological diversity, protecting ocean habitats, and managing marine resources, including fisheries. They also provide opportunities for scientific research, education, and recreation when compatible with the objectives of the MPA. The National Marine Protected Areas Center was established within NOAA to undertake the essential task of developing an integrated national system of MPAs which advances the conservation of our nation's vital natural and cultural marine resources. Appropriated funding has been inadequate to implement a truly effective national system of MPAs. The MPA Center must have its funding restored to 2004 levels to adequately support MPA Center functions, advance stewardship and science initiatives, allow for scientific analysis to understand and demonstrate existing marine protected area benefits, identify gaps for additional protection, and increase public participation. The MPA Center is leading the effort to develop a methodology to collect standardized data on human uses of the ocean in a spatially explicit format, including consumptive, non-consumptive and military/industrial uses, in order to inform future ocean planning.

FY 11 Recommendation:

Marine Protected Areas Center - \$5.0 million (Restores the MPA Center FY 04 enacted level) *An increase of \$2.0 million over the FY 10 enacted level of \$3.0 million*

National Marine Sanctuary Program

The Office of National Marine Sanctuaries manages 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument under the National Marine Sanctuary Program. Together, these areas encompass more than 150,000 square miles (nearly the size of California) of ocean and Great Lakes waters, and include several of our nation's most diverse marine ecosystems. Amazingly, only 3.5 percent of America's oceans are protected by the sanctuary program, with Papahānaumokuākea comprising by far the greatest amount. Sanctuaries encompass a wide variety of habitats, from coral reef and mangrove forest ecosystems off the Florida Keys to the tide pools and kelp forests on the Olympic Coast. Sanctuaries also protect cultural resources such as ancient shipwrecks found within the boundaries of Thunder Bay National Marine Sanctuary. Sanctuaries even cover the breadth of both maritime and natural history protection in places like Stellwagen Bank, which is rich in both shipwrecks and marine habitat by providing key feeding and nursery grounds for endangered humpback, northern right, sei, and fin whales. Covering 140,000 square miles, Papahānaumokuākea Marine National Monument is the newest addition to the program's management responsibility. The islands and surrounding waters of the monument are home to millions of seabirds, an incredible diversity of coral reef species — including deep sea corals, and the critically endangered Hawaiian monk seal.

The National Marine Sanctuary Program provides important educational opportunities and outreach to the public, conducts ocean monitoring and research, and manages sanctuary resources. With an area of more than 150,000 square miles, the National Marine Sanctuary System is larger than the US National Park Service and US Fish and Wildlife Refuge System combined. Yet, the Office of National Marine Sanctuaries is currently funded at a fraction (less than 2%) of these other two systems. Level funding has caused real erosion of management and protection efforts over time due to increases in rents and required federal salary adjustments, as well as rising inflation. The recommended funding would allow NOAA to manage these protected areas at a more robust level.

FY 11 Recommendation:

National Marine Sanctuary Program - \$80.0 million An increase of \$18.0 million over the FY 10 enacted level of \$62.0 million

Global Warming and Ocean Acidification

Our oceans are affected by increased emissions of greenhouse gases in two ways: climate change and ocean acidification. Higher atmospheric concentrations of greenhouse gases result in increased air temperatures, which in turn lead to warmer ocean waters and changes in sea level, salinity, currents, and nutrient dynamics. Marine organisms will face a period of nearly unprecedented environmental change as the result of these impacts.

The second set of effects includes large scale ocean acidification caused by elevated atmospheric concentrations of carbon dioxide. Increased carbon dioxide in the air results in increased carbon dioxide in the ocean, which when combined with ocean water forms carbonic acid and increases ocean acidity

(i.e., lowers pH). Many forms of marine life are susceptible to increased acidity, particularly those with carbonate shells or other exterior structures, such as tropical and cold water corals. This change in pH will directly affect many organisms at the base of marine food chains as well as organisms that provide critical habitat for other forms of marine life. Increased acidity may also have direct physiological effects on vulnerable juvenile stages of other types of marine organisms, such as fish and squid. These changes could severely impact commercial and recreational fishing, as well as coastal communities and economies.

Limiting the impacts of both climate change and ocean acidification will require cutting greenhouse gas emissions at home and around the world and promoting marine ecosystem resilience, including through funding many of the

types of marine conservation and management strategies discussed elsewhere in this document and through passage and implementation of a national ocean policy or adaptation policy that would promote the protection, maintenance, and restoration of ocean and coastal ecosystems across Federal actions. One specific funding need, targeted to ocean acidification, is presented below.

Ocean Acidification

Hawaiian monk seals are one of the most endangered marine mammals in the world. AFdditionally, the Hawaiian monk seal is the only marine mammal whose entire distribution range lies within the jurisdiction of the United States. Over the last 50 years, the Hawaiian monk seal population has declined by more than 60% and is now at its lowest level in recorded history, with less than 1,200 individuals. Human and environmental factors contributing to the decline include habitat loss, shark predation, entanglement in marine debris, reduction in food availability, injuries and deaths by aggressive adult male monk seals, and human disturbance. Appropriate and adequate management is needed to mitigate the above threats as outlined in NOAA's Hawaiian monk seal recovery plan (2007). The recovery plan identifies funding needs at \$36 million over five years.

FY 11 Recommendation:

NOAA Ocean Acidification Program - \$15.0 million NSF Ocean Acidification Program - \$12.0 million This is a new program in FY 11

NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION OFFICE OF EDUCATION

Environmental Education Initiatives

The National Oceanic and Atmospheric Administration's (NOAA) Office of Education oversees several Environmental Education Initiatives, the largest being the Environmental Literacy Grants (ELG) program which helps to establish new partnerships that deliver educational materials to thousands of teachers and students. The ELG program enables NOAA to partner with the top science centers, aquaria, and educators in the country to educate the public about vital issues around our changing planet. It also allows NOAA to leverage the vast array of climate science being undertaken to increase public understanding and the quality of education in critical areas. These funds are awarded on a competitive basis and are increasingly used to build capacity at the national and regional levels.

Funding NOAA Environmental Education Initiatives at \$20.0 million, including \$18.0 million for Environmental Literacy Grants, will enable NOAA's Office of Education to implement the education recommendations called for in the U.S. Ocean Action Plan, particularly the goal to strengthen collaboration among public and private sectors, states and regions, scientists and educators, and the federal agencies. Funding would also further leverage the existing capabilities of formal and informal education partners through competitive grants and coordinate regional education efforts, such as the education component of the Gulf of Mexico Alliance. These funds are important to NOAA because they represent virtually all of the discretionary funds available to the Office of Education for addressing annual NOAA education goals as called for in the America COMPETES Act.

FY 11 Recommendation:

Environmental Education Initiatives - \$20.0 million Environmental Literacy Grants - \$18.0 million An increase of \$6.0 million over the FY 10 enacted level of \$14.0 million

Bay Watershed Education and Training Programs

Administered by the National Oceanic and Atmospheric Administration (NOAA) since 2003, the Bay Watershed Education and Training (B-WET) program offers competitive grants to leverage existing environmental education programs, foster the growth of new programs, and encourage development of partnerships among environmental education programs within watershed systems. B-WET's rigorously evaluated programs are implemented by region, which allows the unique environmental and social characteristics of the region to drive the design of targeted activities to improve community understanding, promote teacher competency, and enhance student interest and achievement in science. A fundamental goal of the program is to demonstrate how the quality of the watershed affects the lives of the people who live in it. B-WET supports programs for students as well as professional development for teachers, while sustaining regional education and environmental priorities. B-WET awards have provided environmental education opportunities to more than 100,000 students and 10,000 teachers.

With an increase in funding in FY 08, B-WET expanded from the Chesapeake Bay, California, and Hawaii to also include the Pacific Northwest, the northern Gulf of Mexico, and New England. An increase of \$4.3 million in FY 11 will enable this successful program to expand to additional watersheds in the Great Lakes and Alaska.

FY 11 Recommendation:

Bay Watershed and Training Programs - \$14.0 million

An increase of \$4.3 million over the FY 10 enacted level of \$9.7 million (includes B-WET regional programs and B-WET California program)

NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION OFFICE OF EDUCATION

Climate Change Education Grant Program

Implementation of comprehensive global climate change policies being considered by Congress will require coordinated and effective federal efforts to help improve broad public understanding of the core ecological, social, and economic concepts and principles involved in climate change mitigation and adaptation. The National Oceanic and Atmospheric Administration's (NOAA) Office of Education has legislative authority for such education initiatives through the America COMPETES Act (PL 110-69 Sec. 1502). Funding in FY 11 for a new Climate Change Education Grant Program will enable NOAA to leverage the vast array of climate science being undertaken at the agency as part of developing strategies for addressing the gaps between the state of climate change education and the state of public climate change literacy. Grants would contribute to improving the climate literacy of the nation's citizens, students, workforce, and decision- and policy- makers by systemically and strategically strengthening climate change education in formal and informal education at all age levels.

FY 11 Recommendation:

Climate Change Education Grant Program - \$10.0 million

An increase of \$10.0 million over the FY 10 enacted level of \$0.0 million

DEPARTMENT OF EDUCATION DEPARTMENT OF LABOR

CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

NASA

NATIONAL SCIENCE FOUNDATION

DEPARTMENT OF EDUCATION

University Sustainability Program

Interest in sustainability is exploding on college campuses across the nation, and institutions are making remarkable changes to try to reduce campus carbon footprints and energy use. However, despite increasing interest and demand from students, sustainability education programs on college campuses are on the decline according to an independent study released in August 2008. Environmental curriculum requirements are slipping and today's students may be less environmentally literate when they graduate than their predecessors.

Congress recently authorized a new University Sustainability Program (USP) at the Department of Education as Part U of the recently enacted Higher Education Opportunity Act of 2008 (HR 4137). This program has the potential for high impact, high visibility, broad support within higher education, and is responsive to an important national trend in higher education. Sustainability on college campuses is critical, from education in the classroom to facility operations. Higher education produces almost all of the nation's leaders in all sectors and endeavors, and many college campuses are virtually small cities in their size, environmental impact, and financial influence. Campuses use vast amounts of energy to heat, cool, and light their facilities. In all, the nation's 4,100 campuses educate or employ around 20 million individuals and generate over three percent of the nation's GDP. The economic clout of these schools is further multiplied by the hundreds of thousands of business suppliers, property owners, and other commercial and nonprofit entities involved with higher education. Funding for the newly authorized USP is necessary to help provide difficult-to-get seed funding to launch sustainability education programs and to help support mainstream higher education associations in including sustainability in their work with their member institutions.

In FY 10 Congress appropriated \$28.8 million for the University Sustainability Program and five other programs as "invitational priorities" under the Fund for Improvement in Postsecondary Education. We recommend that in FY 11 Congress fund the University Sustainability Program as a standalone program at \$50 million.

FY 11 Recommendation:

University Sustainability Program - \$50.0 million

An increase of \$50.0 million over the FY 10 enacted level of \$0.0 million (an unknown amount of the \$28.2 million that was appropriated in FY 10 may go to USP or five other programs)

No Child Left Inside Act

The 111th Congress is expected to authorize the No Child Left Inside (NCLI) Act as part of the reauthorization of the Elementary and Secondary Education Act. The NCLI Act supports teacher training, improves student achievement and health, prepares youth for the workplace, and ensures every student graduates from high school environmentally literate. The House passed a modified version of the bill by a bipartisan vote of 293-109 in September 2008.

Environmental education has a measurably positive impact on student achievement in science, reading, math and social studies as well as increased motivation, critical thinking and interest in science and math as future career pathways. Environmental education "in the field" as part of the regular school curriculum gets kids outside contributing to healthy lifestyles. Environmental education also provides critical tools for a 21st Century workforce by providing students with the skills to understand complex environmental issues so they may make informed decisions in their own lives and find solutions for real world challenges facing us as a nation. Business leaders also increasingly believe that an environmentally literate workforce is critical to their long-term success. Environmental education helps prepare students for real world challenges.

DEPARTMENT OF EDUCATION

Funding No Child Left Inside is critical for states to develop and implement state environmental literacy plans, train teachers, and provide classroom environmental education and outdoor experiences to ensure that all high school students graduate environmentally literate.

FY 11 Recommendation:

No Child Left Inside Act - \$100.0 million

An increase of \$100.0 million over the FY 10 enacted level of \$0.0 million

Healthy High Performance Schools Program

The Healthy High Performance Schools Program seeks to facilitate the design, construction and operation of high performance schools: environments that are not only energy and resource efficient, but also healthy, comfortable, well lit, and containing the amenities for a quality education. This grant program is critical at a time when energy costs for America's elementary and secondary schools are skyrocketing. The No Child Left Behind Act (PL 107-110, Title 5, Part D, Subtitle 18) authorized grants to state education agencies to advance the development of "healthy, high performance" school buildings. States may use the funds to provide information, technical assistance, monitor, evaluate, and provide funding to local education agencies for healthy, high performance school buildings. In turn, local agencies may use the funding to obtain technical assistance, develop plans that address reducing energy and meet health and safety codes, and conduct energy audits. Funds may not be used for construction, maintenance, repair or renovation of buildings. This program has yet to be funded by Congress. While it would seem to be a given that we are providing our children with a healthy learning environment, many of the nation's 150,000 public school buildings fall far short of this standard. Research clearly shows that improving specific factors such as school indoor environmental quality improves attendance, academic performance, and productivity.

FY 11 Recommendation:

Healthy High Performance Schools Program - \$25.0 million An increase of \$25.0 million over the FY 10 enacted level of \$0.0 million

DEPARTMENT OF LABOR EMPLOYMENT AND TRAINING ADMINISTRATION

Energy Efficiency and Renewable Energy Worker Training Program

The Green Jobs Act (GJA), Title X of the Energy Independence and Security Act, authorizes \$125 million per year in grants for an Energy Efficiency and Renewable Energy Worker Training Program. The GJA identifies needed skills, develops training programs, and trains workers for jobs in a range of green industries, but has a special focus on creating "green pathways out of poverty." The Energy Efficiency and Renewable Energy Worker Training Program is administered by the Department of Labor in consultation with the Department of Energy. The program responds to already existing skill shortages. The National Renewable Energy Lab has identified a shortage of skills and training as a leading barrier to renewable energy and energy efficiency growth. This labor shortage is only likely to get more severe as baby-boomers skilled in current energy technologies retire; in the power sector, for example, nearly one-quarter of the current workforce will be eligible for retirement in the next five to seven years.

The program received \$500 million in FY 09 and FY 10 through the American Recovery and Reinvestment Act, a critical, first-time investment to help prepare worker for jobs in the clean energy economy targeted towards the industries as defined in the Green Jobs Act. In the FY 10 Labor, HHS, Education and Related Agencies Appropriations Bill, Congress provided \$50 million. As the economic recovery funding winds down after FY 10, it is critical that Congress continues funding at the authorized amount of \$125 million in FY 11.

FY 11 Recommendation:

Energy Efficiency and Renewable Energy Worker Training Program - \$175.0 Million *An increase of \$75.0 million over the FY 10 enacted level of \$50.0 million*

CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

Clean Energy Service Corps

In 2009 Congress passed and the President signed the Edward M. Kennedy Serve America Act (Public Law 111-13), which reauthorized America's national service programs operated by the Corporation for National and Community Service and created a new Clean Energy Service Corps program to engage Americans in energy conservation and service to the environment. The Clean Energy Service Corps, built on the legacy of the depression-era Civilian Conservation Corps and modeled after today's Service and Conservation Corps, stands ready to address the nation's energy and transportation infrastructure needs while providing work and service opportunities for disadvantaged youth. In a manner similar to the Civilian Conservation Corps of the 1930s, disconnected young people can be mobilized to retrofit, weatherize, and otherwise improve the energy efficiency of residential and public facilities that account for more than 40 percent of carbon emissions.

FY 11 Recommendation:

Clean Energy Service Corps - \$100.0 million

An increase of \$100.0 million over the FY 10 enacted level of \$0.0 million

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Climate Change Education

Climate Change Education Grant Program

While public awareness and concern for climate change continues to rise, the vast majority of the public remains illiterate about how climate change works, how it impacts their lives, and how their decisions and actions contribute to it. In FY 08, Congress appropriated funds for the first time to address this issue by providing funding for climate change education grants through the National Aeronautics and Space Administration (NASA). In August 2008, NASA announced a Request for Proposals for a first-ever competitive grant program seeking applications from educational and nonprofit organizations to use NASA's unique contributions to climate and earth system science. The goals of the program include: improving the teaching and learning about global climate change in elementary and secondary schools and on college campuses, increasing the number of students using NASA earth observation data/NASA earth system models to investigate and analyze global climate change issues, increasing the number of undergraduate students prepared for employment and/or to enter graduate school in technical fields relevant to global climate change, and increasing access to high quality global climate change education among students from groups historically underrepresented in science. Congress should grow this grant program in FY 11 to \$15 million.

FY 11 Recommendation:

Climate Change Education Grant Program - \$15.0 million

An increase of \$5.0 million over the FY 10 enacted level of \$10.0 million

NATIONAL SCIENCE FOUNDATION

Research and Related Activities

Climate Change Education Grant Program

Climate change education (and research) has been identified as a Presidential priority area for NSF. While public awareness and concern for climate change continues to rise, the vast majority of the public remains demonstrably illiterate about how climate change works, how it impacts their lives, and how their decisions and actions contribute to it. Yet climate change education (CCE) is newly emerging as a field, with few materials, curricula, models, standards, or professional development opportunities to fill the void. Furthermore, CCE is inherently interdisciplinary; and as a result, it often falls through the cracks in traditional science education.

NSF initiated the Climate Change Education grant program with an FY 09 appropriation of \$10.0 million from Congress (with the same appropriated in FY 10). This program is aimed at improving K-12 to graduate education in climate change science and increasing the public's understanding of climate change and its consequences. It is catalyzing activity at the national level and helping to develop the next generation of environmentally-engaged scientists and engineers by supporting awards in the following areas: increasing public understanding and engagement; development of resources for learning; informing local and national science, technology, engineering, and mathematics (STEM) education policy; preparing a climate science professional workforce; and enhancing informed decision-making associated with adaptation to and mitigation of climate change impacts. These emerging priorities lie at the intersection of social/behavioral/economic and Earth system sciences.

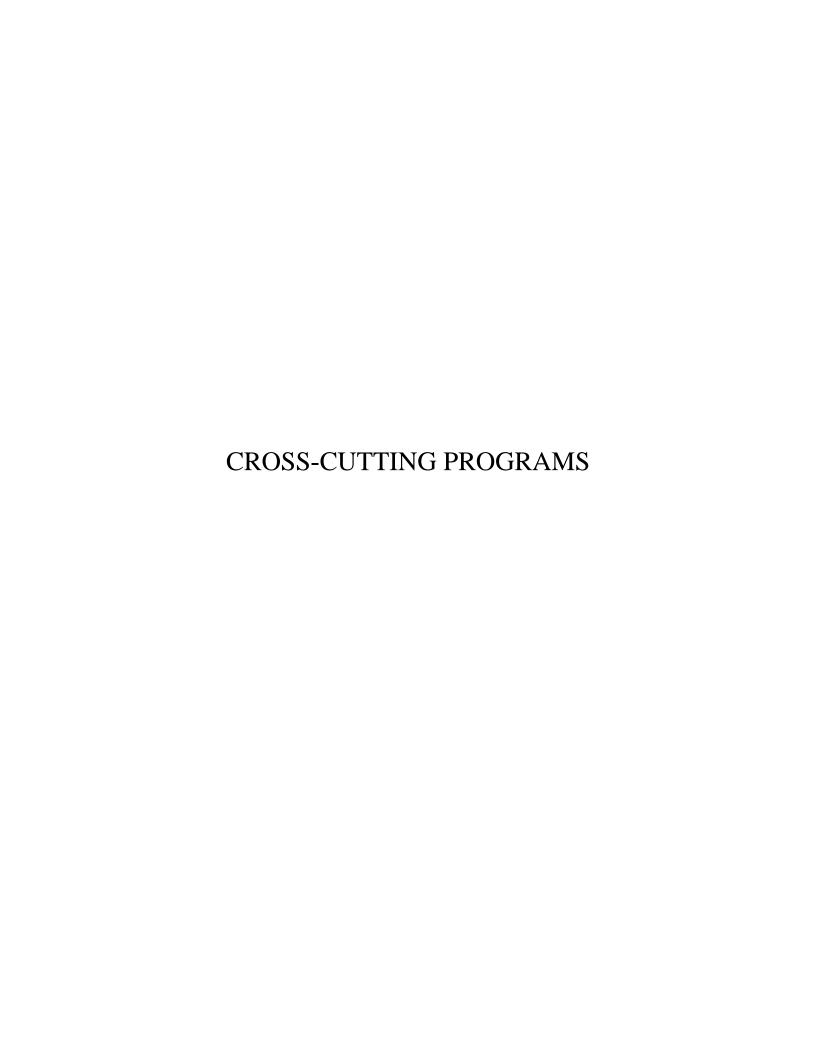
NSF has wisely chosen to use these funds to tackle some of the most pressing issues in the critical but still unformed field of CCE: strategies for scaling up and widely disseminating effective curricula and instructional resources, assessment of student learning of complex climate issues as it translates into action, addressing local and national STEM educational standards and policy for teaching CCE, and professional development in climate change literacy for policy decision makers at all levels (local to national).

The FY 09 funding was only able to fund 10 projects. Congress should significantly expand this grant program in FY 11.

FY 11 Recommendation:

Climate Change Education Grant Program - \$30.0 million

An increase of \$20.0 million over the FY 10 enacted level of \$10.0 million



CROSS-CUTTING PROGRAMS OCEANS POLICY INITIATIVE

In June, 2009, President Obama convened an Interagency Ocean Policy Task Force (Task Force) to recommend a unifying oceans, coasts, and Great Lakes policy and to provide a coastal and marine spatial planning framework. A strong national policy for the oceans, coasts and Great Lakes will help our nation rebuild overexploited fisheries, protect endangered species, restore vulnerable habitats, and develop measures to deal with the marine impacts of climate change (e.g. ocean acidification, warming waters, and sea-level rise). It will also strengthen the nation's economy by providing jobs, energy, food, and will help protect our country's prime living, recreation and tourism locations. With adequate and appropriate funding, federal agencies can begin to implement this effort in FY 11.

Regional Approaches to Ocean Management

Regional Ocean Ecosystem Assessments and Planning - \$10.0 Million NOAA, EPA, USGS

Within three years complete comprehensive ocean ecosystem assessments in each region by evaluating *existing data* on ecosystem health and potential threats. The assessments would provide a baseline for developing regional strategic plans, and would also inform coastal and marine spatial planning, and climate change adaptation planning. Assessments would also help guide prioritization of additional data needs and policy issues in each region. Both offshore and nearshore marine areas should be evaluated. In addition, the agencies should work to conduct coastal vulnerability assessments, to help identify needs and prioritize planning to address impacts from climate change and other coastal hazards.

Regional Ocean Partnership Grants - \$45.0 Million NOAA

Similar to the existing funding in NOAA's budget for the Gulf of Mexico Governor's Alliance, this funding would provide grants to address priority marine and coastal issues within each region. Most areas of the coast have already established regional ocean partnerships (ROP). The Administration should provide financial support to these entities and use them as place-based lenses through which to focus funding for marine and coastal priorities. Initial funding could be directed to developing regional strategic plans. These strategic plans would be based on the ecosystem assessments (noted above), and would establish shared regional-federal priorities, consistent with the Task Force's National Ocean Policy. Funding should also be provided through competitively awarded grants for specific projects to implement regional strategic plans and joint regional-federal priorities. In addition, up to 5% of the funding for each region should be available to pay for administration of the ROP (e.g., staff time, meeting and travel costs), to help ensure that these entities become enduring institutions that can guide regional efforts.

LIDAR and Coastal Imagery - \$20.0 Million USGS, NOAA

Funding is needed for Light Detection and Ranging (LIDAR), high resolution photography, and hyperspectral imaging in priority coastal areas to understand the effects of sea level change. This data will support coastal change and coastal vulnerability analysis, as well as provide detailed elevation data to inform planning for coastal hazards and adaptation to climate change. Agency staff estimate that LIDAR for the entire US coast will cost upwards of \$250 million. At this level of funding, progress can be made in priority areas in each region over multiple years.

Ecosystem Protection and Restoration

Habitat Mapping and Characterization - \$25.0 Million NOAA, USGS

CROSS-CUTTING PROGRAMS OCEANS POLICY INITIATIVE

Funding would be used to collect data to produce high resolution bathymetric, geological, and ecological seafloor maps to identify and characterize priority habitats and important ecological areas. This funding would be used for data collection, as well as modeling and analysis to develop maps in key areas. These maps would support sound siting of alternate energy facilities, identification of suitable routes for cables and pipelines, identify conservation priorities, and assist states that are implementing ocean management programs, including coastal and marine spatial planning efforts. Shared federal-regional priorities would be determined in each region, based in part from the data from the regional ocean ecosystem assessments (noted above). Initial efforts could emphasize data collection in the Arctic, where the need to inform new management is significant. In addition, offshore areas that will be the focus of coastal and marine spatial planning pilot efforts should be emphasized.

Habitat Restoration - \$30.0 Million NOAA

This funding would support mid-scale restoration projects that can begin to have ecosystem-level impacts and significance at regional scales. The response to the American Recovery and Reinvestment Act funding made available through NOAA demonstrated the significant backlog (\$3 billion) of restoration work that is needed for our coasts and marine environments to support healthy resilient coastal communities. Funding could be regionally targeted to align with regional ocean partnership priorities. In addition to creating healthy coastal ecosystems, this work will provide jobs, often in rural coastal communities which lack other major employment, and support ecosystem services that offer protection and promote resilience for coastal communities facing the impacts of climate change. The proposed increase would increase the NOAA Restoration Program by \$30 million.

Coastal and Marine Spatial Planning

Human Use Patterns and Conflicts Analysis - \$5.3 Million NOAA, MMS

This funding would create nationwide mapping of human use patterns in the ocean and would require approximately fifty workshops and associated data gathering and processing. This baseline data is a critical component for coastal and marine spatial planning. Using the pilot project of the California Ocean Atlas as a template, mapping human use patterns is expected to cost \$10 million. The California Ocean Atlas project covered all human uses within the EEZ of the entire California coastline, excluding bays and inland waters. This project had a data-gathering period to build background geospatial data maps, a workshop for users to verify those maps and gather input, a data reporting and processing period, and post workshop data cleaning.

In addition to mapping human uses, an assessment of direct and indirect conflicts between users in ocean and Great Lakes areas will greatly advance coastal and marine spatial planning efforts. Understanding the full range of human uses of the ocean, and their compatibility with healthy ecosystems and other uses, is central to planning. To this end, a careful examination of four aspects of ocean uses needs to take place:

- o The impacts of ocean uses on key ecosystem characteristics
- o The dependency of ocean uses on ecosystem characteristics
- The indirect, ecologically-mediated impacts of ocean uses on other ocean uses (i.e., indirect conflicts)
- o Direct user conflicts among different but co-occurring ocean uses

A rigorous assessment of such direct and indirect conflicts, as determined by regional ocean managers, scientists and users jointly, can help develop a suite of decision-support tools to inform zoning approaches for coastal and

CROSS-CUTTING PROGRAMS OCEANS POLICY INITIATIVE

marine spatial planning and ecosystem-based management. This would bring the total cost of the human uses and conflicts project to \$10.6 million, split over two years.

Multipurpose Marine Cadastre - \$5.0 Million NOAA, MMS

The multipurpose marine cadastre, currently housed in the Department of Interior (Mineral Management Service) with technical support from the Department of Commerce (NOAA), is the most logical place to house data sets covering a wide range of marine topics. To create a robust data set from which data layers can be readily retrieved for coastal and marine spatial planning, efforts from all agencies with marine, coastal and Great Lakes mapping and data gathering programs must be included. Bird data from the Fish and Wildlife Service, fisheries data from the National Marine Fisheries Service, transportation lanes from the Department of Transportation, and training ground boundaries from the Department of Defense are but a small representation of data needs to successfully implement coastal and marine spatial planning. To accomplish this large goal of integrated spatial mapping of federal marine, coastal and Great Lakes data, a common platform must be found to consolidate data from a wide variety of data and mapping programs as well as a technological fix for differences in scale between data collection programs and projects within those programs. The anticipated cost to integrate existing data and mapping programs between federal agencies is \$5 million. A gap analysis will also need to be conducted after data and mapping programs have been integrated into the multipurpose marine cadastre to aid federal agencies in guiding their mapping programs and to ensure full compliance with the goals of the Task Force's National Ocean Policy.

Two Regional MSP Pilots - \$20.0 Million NOAA, EPA, MMS, USGS

Coastal and marine spatial planning is an important tool to help implement ecosystem-based management. This tool requires a great deal of input from every user group, as well as from scientists in terms of biotic and abiotic data required to make geospatial baseline maps. In addition, a social science element will be necessary as comprehensive spatial planning for the ocean is a paradigm shift and users must be drawn into the process to ensure success. A regional demonstration project would require technical, policy, and coordination support for coastal states and regional ocean governance groups. All government agencies represented by the Task Force would need to provide requested support to advance coastal and marine spatial planning in waters covered by these regional demonstration projects. Crucial components of the regional pilot projects will need to include the synthesis of key ecosystem data, analysis of legal authorities, convening a participatory planning process, support for state agencies' participation, and basic program management. Initial efforts should focus on areas currently engaging in coastal and marine spatial planning or those areas ripe for such planning. Each demonstration project will require minimally \$10 million over two years.

Fisheries

Bringing U.S. Fisheries into the 21st Century: An investment in technology - \$60.0 Million NOAA

Managing fisheries in a sustainable manner is critical to ensure the health of our coastal economies and ecosystems, a priority of the recently released <u>Interim Report of the Interagency Ocean Policy Task Force</u>. Sustainable fisheries facilitation integrally supports implementation of the Administration's policies identified by both the Task Force and the Catch Shares Task Force. Yet, many fisheries are in poor health and in desperate need of resources for data collection and monitoring. However, inadequate scientific data collection and monitoring contribute directly to the mismanagement of many fisheries and undermine efforts to restore fisheries that are overfished and depleted. Only 40 fisheries out of more than 200 have some level of coverage and only 25 of these have adequate coverage.

CROSS-CUTTING PROGRAMS OCEANS POLICY INITIATIVE

Robust monitoring and data collection are essential for sustainable management of fisheries and to implement changes to the Magnuson Stevens Fishery Conservation and Management Act. Electronic reporting systems offer a suite of tools to address these challenges and have proved to be a cost-effective method for expanding and improving monitoring and data collection.

In many regions, managers rely on systems that fail to capture essential data elements, are heavily dependent on self-reported data, and fail to process information in a timeframe that ensures conservation goals such as preventing overfishing are achieved. These out-dated systems reduce fisheries management options and create inefficiencies which drive down industry profitability. An investment in emerging electronic tools can supplement and expand on existing methods of reporting and observing providing access to more real-time, transparent, abundant, low-cost, and quality data. This technology can bolster the on-board human observer program, which is essential for many fisheries, and bring monitoring to many more fisheries where it has so far been infeasible. A one-time investment of \$60 million is needed to modernize fisheries science. In particular, we recommend that:

- \$15 million be made available to support fishermen in covering up-front capital costs for new electronic equipment (e.g., on-board and shore-side data management and reporting systems);
- \$10 million go to designing innovative pilot projects and new technologies that can be scaled up for fleetwide implementation;
- \$20 million be made available specifically to the recreational fishing sector to explore pilot projects and assist with up front capitol costs for new equipment;
- \$15 million be designated for grants to encourage innovation of new technologies to address the evolving needs of fisheries managers.

For example, the West Coast shore—based Hake Mid-Water Trawl Fishery uses at-sea video monitoring, one option of an electronic reporting system, for 100% of its vessels. This technology works particularly well for this fishery because it has 100% retention (i.e., everything caught is brought back to the dock) and relatively low bycatch. The at-sea video monitoring is cost-effective, adding to on-board human observers (10-20% coverage). The fishery covers 36 vessels totaling 1,817 seas days for \$423,000. To cover the same amount of sea days with observers would cost roughly \$2.1 million. For fisheries transitioning to electronic reporting systems, the initial expense of purchasing and installing the equipment poses a sizeable barrier to implementation. Investment capital is needed to help install and deploy this technology as well as the infrastructure to receive and process the information.

Recreational fisheries present another case where new monitoring and data collection systems are necessary. The current system of data collection, the Marine Recreational Information Program (MRIP), isn't designed to meet the growing need for real-time catch, effort and discard data that managers need to effectively implement annual catch limits and accountability measures. Though electronic reporting system technology in parts of the recreational sector is still in its infancy, it has shown initial promising results. Additional resources are needed for both development and deployment of new systems.

There is no one size fits all approach – different fisheries will require different combinations of monitoring tools to effectively meet the diverse needs of each fishery. Investment in pilot projects is needed to evaluate individual needs and requirements for monitoring and data collection, to determine which fisheries and regions would benefit from these improvements and to better estimate the cost of full scale implementation. This investment is a critical first step to bring fisheries data collection and reporting into the 21st century and is an important element of implementing a National Ocean Policy.

CROSS-CUTTING PROGRAMS NATIONAL FISH AND WILDLIFE FOUNDATION

National Fish and Wildlife Foundation

The National Fish and Wildlife Foundation (NFWF) is a private, non-profit organization established by Congress to conserve fish, wildlife, plants and habitats through multi-sector partnerships. The primary function of NFWF is to support wildlife and habitat conservation in partnership with the U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration, and other Federal Agencies through competitive grant programs using privately matched funding. This collaborative model has leveraged more than \$500 million in federal funds into over \$1.5 billion for conservation since NFWF was established in 1984. NFWF continues to excel in grant making while emphasizing accountability, measurable results, and sustainable conservation outcomes. Modest funding increases will allow NFWF to multiply the effect of appropriated dollars with matching funds to expand well-established partnerships focusing on select species of birds, fish and sensitive habitats in need of immediate conservation action.

In fiscal year 2011, the Foundation plans to use increased appropriated funding for new and existing wildlife and habitat conservation partnerships, matched by private funds to:

- Expand matching grants with the U.S. Fish and Wildlife Service that benefit the Service's spotlight species and produce measurable population results.
- Work with the Bureau of Land Management to expand protection of wildlife corridors, particularly in fractured landscapes where renewable and fossil fuel development is occurring.
- Expand partnerships with the U.S. Forest Service to restore wet meadows, conserve riparian areas and improve fish passage in critical habitats.
- Work with the National Oceanic and Atmospheric Administration to promote Limited Access Privilege Programs, or catch shares, in coordination with local community groups, to protect healthy and economically-viable ocean fisheries

FY 11 Recommendation:

U.S. Fish and Wildlife Service

Resource Management - \$9.5 million

An increase of \$2.0 million over the FY 10 enacted level of \$7.5 million, matched at least one-to-one by private funding, to help recover endangered species and improve habitats.

U.S. Forest Service

National Forest System - \$5.0 million

An increase of \$2.0 million over the FY 10 enacted level of \$3.0 million, matched at least one-to-one by private funding, to restore critical wet meadow habitats and improve fish passage.

Bureau of Land Management

Management of Lands and Resources - \$4.0 million

An increase of \$1.0 million over the FY 10 enacted level of \$3.0 million, matched at least one-to-one by private funding, to protect vital wildlife corridors in fractured landscapes.

National Oceanic and Atmospheric Administration

National Marine Fisheries Service - \$2.5 million

An increase of \$2.5 million over the FY 10 enacted level of \$0.0, matched at least one-to-one by private funding, to work with the Administration and local communities to implement Limited Access Privilege Programs, or catch shares, and reduce by-catch in sensitive ocean fisheries.

CROSS-CUTTING PROGRAMS NATIONAL STRATEGY TO ADDRESS IMPACTS OF GLOBAL WARMING & OCEAN ACIDIFICATION

National Strategy to Address Impacts of Global Warming & Ocean Acidification

Global warming poses one of the most serious threats to wildlife and wildlife habitats in the U.S. and around the world. Cutting greenhouse gas emissions is essential to stave off mass extinctions and major disruptions of ecosystems, but cutting emissions alone is not sufficient. Global warming is already happening and substantial additional warming is inevitable due to pollution already released into the atmosphere. Scientists project that this warming will lead to increased sea level rise, intensified storms, floods and droughts, disappearing mountain snowpack and altered stream flows, evaporating lakes and wetlands, and numerous other disruptions.

Planning for how to best assist wildlife and ecosystems in becoming more resilient and adapting to the impacts of climate change and ocean acidification is needed by all federal land management agencies. A report by the Government Accountability Office (GAO) underscores natural resource managers' need for national policy direction on this issue. In *Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources*, the GAO found that federal land and wildlife management agencies lack the guidance and capacity to respond effectively to the impacts of global warming on our federal lands and wildlife.

The final FY 09 Interior, Environment, and Related Agencies appropriations bill directed the development of a comprehensive national strategy across the federal government and in coordination with states, tribes and other stakeholders to assist fish, wildlife, and ecosystems in becoming more resilient and adapting to the impacts of climate change. The FY 10 bill reinforced and expanded upon this direction and designated the Council on Environmental Quality, with the Department of the Interior in the lead, in crafting the strategy, requiring a timeline, blueprint for completion, and regular updates to the Appropriations Committees. Future federal climate change legislation is likely to direct significant funding to wildlife adaptation measures, and the U.S. must start planning now to ensure that federal funds are prudently committed and positive results are achieved. The strategy must also address the effects of ocean acidification.

The national strategy should:

- Include prioritized goals and measures, and a schedule for implementation to identify, monitor, and conserve natural resources threatened by climate change and ocean acidification;
- Be crafted in coordination with other relevant conservation plans, including the State Wildlife Action Plans, the North American Waterfowl Management Plan, the national fish habitat actions plans, coastal zone management plans, and reports of the Pew Oceans Commission and the U.S. Commission on Ocean Policy;
- Be developed with the support of a Science Advisory Board comprised of 10-20 scientists recommended by the National Academy of Sciences and appointed by the President to help ensure the scientific integrity of the national strategy and to provide advice on the best available science regarding the impacts of climate change and ocean acidification on wildlife and ecosystem, adaptation responses, and research needs.

FY 11 Recommendation:

National Strategy for Addressing Global Warming & Ocean Acidification Impacts on Wildlife and Habitat - \$5.0 million allocated among the following agencies: Council on Environmental Quality, the Department of the Interior, Forest Service/Natural Resources Conservation Service, National Oceanic and Atmospheric Administration, Environmental Protection Agency, and the Army Corps of Engineers

CROSS-CUTTING PROGRAMS BORDERLANDS ENVIRONMENTAL PROTECTION

Borderlands Environment Protection

America's nearly 2,000 mile long border with Mexico includes many national parks, forests, wildlife refuges, wilderness areas, tribal reservations and other environmentally important areas of federal, state, tribal, and private lands and waters. Several nationally significant federal protected areas are found here, including Big Bend National Park, Organ Pipe Cactus National Monument, and Santa Ana and Buenos Aires National Wildlife Refuges (NWR). These federal protected lands provide essential habitat for hundreds of imperiled species, including nearly 40 species listed or proposed for listing under the Endangered Species Act in Arizona alone. Much of this country's most spectacular wildlife, including jaguar, ocelot, pronghorn, and hundreds of bird and butterfly species, and the substantial economic benefit these species provide to local communities, depend upon maintaining connected and intact habitat on borderlands - public and private.

Illegal border crossings and related enforcement activities - both infrastructure such as barriers and roads and ongoing operations - are placing a tremendous burden on federal land management agencies and are causing serious long-term damage to natural and cultural resources. In addition, natural and cultural resources on private property, tribal lands, and state lands, all have been adversely impacted by large-scale construction projects, including more than 650 miles of border barriers and roads. Barriers have been constructed on protected federal lands, including at Buenos Aires NWR and San Pedro Riparian National Conservation Area in Arizona, and on the Lower Rio Grande Valley NWR in Texas. The effects of large-scale border security infrastructure across sensitive areas have adverse effects on people and wildlife, such as erosion and sedimentation that impairs water quality and stream habitat, elevated risk to wildlife and human safety from increased floods, untamed wildfires, and the many devastating ancillary effects of fragmenting wildlife populations in previously unbroken and vast habitat.

Ordinarily, these construction projects and operations would have been carefully analyzed under a variety of environmental and other provisions of law and regulations, including public input and, as a result, would have avoided sensitive areas altogether or, at least, included careful steps to avoid, minimize, or mitigate for any adverse impacts on sensitive natural and cultural resources. In addition, under normal circumstances, the agency responsible for the actions (here, the Department of Homeland Security (DHS)) would bear the cost of both the analyses and the "avoid, minimize, or offsetting" measures before, during, and after the projects and activities.

However, as a result of exercise of the DHS "waiver authority" provided by provisions of the "REAL ID Act", these full and rigorous assessments were not conducted. Accordingly, now attempts must be made "after the fact" to minimize or offset the impacts resulting from the security-related construction and other activities previously taken or ongoing in these sensitive borderland areas, such as: damage from barrier and road construction in the Otay Mountain Wilderness in California; fragmentation of habitat for jaguars, black bear, desert tortoise and many other species and blockage of desert washes from infrastructure construction resulting in exacerbated seasonal flooding and natural resource damage in protected areas of southern Arizona (e.g. Organ Pipe Cactus National Monument and San Pedro Riparian National Conservation Area); proposed construction of barriers in Southmost Preserve in Texas that will divide ocelot and jaguarundi habitat; and construction-induced siltation in the Tijuana River Estuary in California.

The authority provided to DHS has been unprecedented and extraordinary. With such extraordinary authority comes equally extraordinary responsibility to fully address the consequences of actions taken or being taken pursuant to that authority. In essence, the public policy and funding choices boil down to the following three alternatives:

1. The adverse impacts of border security infrastructure and operations are not addressed, and no funding is provided to either DHS or the land managing agencies to address those impacts;

CROSS-CUTTING PROGRAMS BORDERLANDS ENVIRONMENTAL PROTECTION

- 2. The funding to address those impacts comes from the federal land managing agencies upon whose lands and waters the infrastructure is built and the operations are conducted; or
- 3. The funding to address those impacts comes from DHS, the agency directing and responsible for the construction of infrastructure and the planning for, and conduct of, security operations.

The correct policy choice is obvious, and the budget and appropriations for FY 11 should reflect that policy choice.

In FY 11, as in the past two fiscal years, the source of funding to address these existing and ongoing impacts should be the "Border Security Fencing, Infrastructure, and Technology (BSFIT)" account within the budget of the Customs and Border Protection Agency under the annual DHS appropriation. An annual appropriation of at least \$50 million from within that account on an ongoing basis is required. Moreover, additional costs, including overhead, that the land managing agencies bear in addressing the impacts of the activities of elements of DHS, should be provided to those agencies by the transfer of funds from the CBP BSFIT account

Despite the specific commitment of funds for this purpose in both FY 09 and 10, adequate funding as described above for both the core monitoring and mitigation activities has not as yet been provided to the land managing agencies by DHS. In the absence of such funds from DHS, federal land management agencies' resources have been, and will continue to be, compelled to divert funding intended for other purposes to make up the shortfall in order to meet their responsibilities to reduce or mitigate the effects of border security construction and other activities. The administration and, if necessary, Congress, should take action to ensure that those previously-provided funds are transferred without further delay to the land managing agencies for appropriate monitoring and mitigation activities.

In FY 11 and the outyears the budget should include a cross-cutting initiative to ensure that funding adequate to fully address the adverse impacts of border security infrastructure and operations is budgeted by, and provided to, DHS on an ongoing, regular basis via the annual DHS appropriations. The level of such funding should be at least \$50 million dollars annually. In addition, the Office of Management and Budget should take steps to ensure that such funding is transferred by DHS to federal land managing agencies on a timely basis for implementation (to include overhead) of the measures required.

In addition to mitigating for border security infrastructure impacts, this budget initiative should include adequate funding for:

- More staff and appropriate infrastructure improvements for resource agencies, including more law enforcement agents; providing environmental and cultural sensitivity training for Border Patrol and other non-land management agency law enforcement agents; needed facilities and vehicles; and improving visitor services.
- Biological research, habitat restoration, and monitoring programs, including funding for understanding and mitigating impacts on endangered species, other wildlife and habitat; and restoration of degraded habitats.
- Resource protection, including the removal of trash and abandoned vehicles; cleaning and protecting fouled
 water sources; blocking hundreds of miles of illegal roads; using surveillance and deterrence technology;
 fighting fires associated with border crossers; and protection and restoration of important historic, cultural, and
 anthropological structures and artifacts.

FY 11 Recommendation:

Borderlands Environment Protection - \$50.0 million An increase of \$10.0 million over the FY 10 enacted level of \$40.0 million

CROSS-CUTTING PROGRAMS WILD AND SCENIC RIVER MANAGEMENT

Wild and Scenic River Management

The Wild and Scenic Rivers Act protects free-flowing rivers with outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. Four federal agencies share responsibility for administering designated rivers, conducting studies to determine if rivers qualify for wild and scenic river designation, and developing wild and scenic river management plans: the Bureau of Land Management, U.S. Forest Service, National Park Service, and U.S. Fish and Wildlife Service. Unfortunately, none of these agencies receives sufficient funding to adequately protect the Wild and Scenic Rivers System and ensure that it represents a broad diversity of river types, as Congress intended. Although 84,500 stream miles are potentially eligible for designation, only about 165 rivers covering almost 11,500 miles are currently designated. With increased funding, these agencies could complete management plans and studies to identify additional rivers that qualify for designation. Additional funding would also allow them to better manage and protect designated rivers and promote their values to the public.

FY 11 Recommendation:

Department of Agriculture

Forest Service (FS):

National Forest System- Recreation, Heritage, and Wilderness-

\$9.0 million for Forest Service wild and scenic river management

\$3.0 million for the creation of river management plans

\$3.0 million for completion of wild and scenic river studies

Department of the Interior-

Bureau of Land Management (BLM):

Wild and Scenic Rivers (WSR)

National Landscape Conservation System-

\$7.0 million for WSR Management

\$5.0 million for completion of WSR studies

Fish and Wildlife Service (FWS):

National Wildlife Refuge System-

\$2.0 million for FWS wild and scenic river management, restoration and studies

National Park Service (NPS):

Natural Programs- Rivers and Trails Studies-

\$1.0 million for wild and scenic river studies

\$16.0 million for wild and scenic rivers managed as units of the National Park System *An increase of \$16.6 million over the FY 10 enacted level of \$406,557*

Park Support- Partnership Wild and Scenic Rivers- \$2.9 Million

An increase of \$1.16 million over the FY 10 enacted level of \$1.74 million

(The Wild and Scenic Rivers programs for the Forest Service, Bureau of Land Management, and Fish and Wildlife Service above are included in larger program requests, management funding is not tracked by the agencies, and do not have separate line requests in either the President's Budget request or individual appropriation bills, so there can be no comparison to the FY 10 levels.)

CROSS-CUTTING PROGRAMS COASTAL LOUISIANA RESTORATION

Coastal Louisiana Restoration

Where the Mississippi River meets the Gulf of Mexico it forms a complex web of ecosystems that are unique and vitally important to the economic, environmental, and security-related concerns of the gulf region and its citizens. Vast wetland complexes that previously covered acres of the Mississippi delta are disappearing at an alarming rate because the river cannot deposit its vital sediments into the surrounding wetlands. The loss of more than 2000 square miles of wetlands through the years has led to a dramatic decrease in the natural protection afforded by wetlands and barrier islands to coastal cities such as New Orleans. The added impacts of sea level rise, rising water temperatures, salt water intrusion, invasive species, and the increasing frequency and intensity of extreme weather events, all being exacerbated by global warming, make clear the urgent need for coastal restoration and conservation as an integral portion of the rebuilding of New Orleans and the Gulf Coast and to appropriate funds accordingly.

The Funding requests are laid out into three separate categories. The first being project studies and investigations associated with projects authorized in WRDA 2007 under the Louisiana Coastal Area / Ecosystem Restoration. The Second are construction projects authorized in WRDA 2997 that have special language to expedite many of the US ACCE processes to get the projects moving as quickly as possible. They final number is as requests for authorized construction projects not associated with the LCA.

FY 11 Recommendation:

Atchafalaya Restoration [WRDA 2007 § 7002(e)] - \$10.0 million *An increase of \$10.0 million over FY 10*

LCA Investigations - \$37.5 million

An increase of \$12.5 million over FY 10 funding level of \$25.0 million

Existing Track LCA Construction including Beneficial Use of Dredged Material - \$22,479,737 *An increase of* \$22,479,737 *over FY 10*

Expedited Projects Preconstruction Engineering and Design - \$173,580,084 Preconstruction Engineering and Design - \$27,070,083 Construction - \$146,510,001 *An increase of \$173,580,084 over FY 10*

Non LCA Construction - \$55.0 million An increase of \$55.0 million over FY 10

CROSS-CUTTING PROGRAMS EVERGLADES ECOSYSTEM RESTORATION

Everglades Ecosystem Restoration

The 18,000-square-mile Everglades ecosystem of central and southern Florida is one of the world's most diverse and productive wetlands, but is also one of the nation's most imperiled natural wetland ecosystems. Since 1900, more than half of the ecosystem has been drained and lost to urban and agricultural development, and the remaining marshes are crisscrossed by 1,400 miles of canals that alter natural water flows. Restoration of the Everglades is at a critical juncture and keeping the Everglades' restoration on schedule along with the Federal/Florida partnership requires significant federal investment in 2009. **The long anticipated Modified Waters and Kissimmee River Restoration Projects will be completed by 2012, but only if fully funded over the next two years**. It is time to begin implementation of the Comprehensive Everglades Restoration Plan (CERP), authorized 6 years ago.

Comprehensive Everglades Restoration Program

The Comprehensive Everglades Restoration Program (CERP) is aimed at reversing the decline of the Everglades and loss of the many ecological and economic services it provides. The program will restore water flows throughout the ecosystem, clean up polluted waters, purchase privately owned lands to create a buffer between natural and urban areas, protect habitat, and enhance recreational opportunities.

Kissimmee River Restoration

Upon completion of the Kissimmee River restoration project in 2011, over 40 square miles of river and floodplain ecosystem will be restored, including returning 43 miles of meandering river to its original course and re-creating 27,000 of the 35,000 acres of wetlands that were lost to past flood control efforts. The estimated \$494.8 million restoration project is being jointly implemented and equally cost-shared by the South Florida Water Management District and the Army Corps of Engineers.

FY 11 Recommendation:

Comprehensive Everglades Restoration Program (CERP)

U.S. Army Corps of Engineers:

Indian River Lagoon - \$40.0 million

An increase of \$39.9 million over FY 10 enacted level of \$100,000

Picayune Strand - \$20.0 million

A decrease of \$82.9 million over FY 10 enacted level of \$62.1 million plus \$40.8 million in ARRA funding

Site I Impoundment - \$60.0 million

An increase of \$59.9 million over FY 10 enacted level of \$100,000

CERP Design - \$45.0 million

A decrease of \$4.3 million over FY 10 enacted level of \$49.3 million

C-111 South Dade project (restores flows to Florida Bay) - \$40.0 million

An increase in \$35.6 million over FY 10 enacted level of \$4.4 million

C-51/STA 1-E (wetlands creation) - \$12.0 million

An increase of \$4.8 million over FY 10 enacted level of \$7.2 million

Kissimmee River Restoration - \$25.0 million

A decrease of \$27.2 million over FY 10 enacted level of \$44.7 million plus \$7.5 million in ARRA funding

Seminole/Big Cypress (critical project) - \$4.0 million

An increase in \$3.0 million over FY 10 enacted level of \$1.0 million

Modified Water Deliveries to Everglades National Park - \$30.0 million

An increase of \$22.0 million over FY 10 enacted level of \$8.0 million

Department of the Interior:

CROSS-CUTTING PROGRAMS EVERGLADES ECOSYSTEM RESTORATION

Fish & Wildlife Service and National Park Service - CERP - \$10.0 million Critical Ecosystem Studies Initiative (CESI) - \$6.0 million South Florida Ecosystem Restoration Task Force - \$1.3 million USGS Integrated Research, Planning, and Interagency Coordination - \$8.0 million

U.S. Department of Commerce, National Oceanic Atmospheric Administration-NMFS, NOS, OAR programs - \$6.0 million

CROSS-CUTTING PROGRAMS

FEDERAL ENERGY REGULATORY COMMISSION HYDROPOWER RELICENSING

Hydropower Relicensing

The Federal Energy Regulatory Commission (FERC) issues 30-50 year operating licenses for non-federal hydroelectric dams, setting the rules for how these dams may be operated. When issuing these licenses, FERC is required by law to look beyond power production and give equal consideration to fish and wildlife, recreation, environmental protection, and other public values. When these licenses expire, Americans get a once-in-a-lifetime opportunity to protect and improve the health of the rivers that flow through their communities.

Federal resource agencies play a very important role in FERC's hydropower licensing process. Congress has given these agencies the authority to recommend license conditions that will minimize the harmful impacts that dam operations have on public resources. The Energy Policy Act of 2005 (EPAct) gave these agencies significant new obligations associated with protecting public assets affected by hydropower dams. In particular, agencies must now hold costly "trial-type" administrative hearings for disputed license conditions. Federal resource agencies need funding sufficient to allow them to uphold their congressionally authorized duties to protect public resources with license conditions when appropriate and hold hearings mandated by EPAct when the factual basis of the conditions are being reviewed.

FY 11 Recommendation:

Federal Energy Regulatory Commission, Energy Projects - \$57.5 million

National Oceanic and Atmospheric Administration - National Marine Fisheries Service, Habitat Conservation:

- \$12.4 million and a direct line item for hydropower relicensing
- \$2.8 million for implementation of hydropower requirements under the EPAct of 2005

Department of the Interior - Fish and Wildlife Service, Habitat Conservation, Project Planning:

- \$2.35 million for hydropower relicensing
- \$1.5 million for implementation of hydropower requirements under the EPAct of 2005

Bureau of Indian Affairs - FERC Activities, Trust Services:

- \$2.0 million for hydropower relicensing

Bureau of Land Management, Land Resources/Wildlife and Fisheries:

- \$1.1 million for hydropower relicensing
- \$300,000 for implementation of hydropower requirements under the EPAct of 2005

National Park Service - Hydropower Recreation Assistance:

- \$1.5 million for hydropower relicensing
- \$150,000 for implementation of hydropower requirements under the EPAct of 2005

Department of Agriculture - U.S. Forest Service, Lands Budget:

- \$11.6 million and a direct line item for hydropower relicensing
- \$750,000 for implementation of hydropower requirements under the EPAct of 2005

CROSS-CUTTING PROGRAMS LONG ISLAND SOUND RESTORATION

The Long Island Sound Restoration Act strives to protect and restore the environmentally and economically vital resources of the Sound. In 1985, the Sound was one of the first estuaries recognized under the National Estuary Program because it provides feeding, breeding, nesting and nursery areas for a diversity of plant and animal life, and contributes an estimated \$5.5 billion per year to the regional economy from commercial fishing, sport fishing, and recreational activities. More than eight million people live in the Long Island Sound watershed, and the resultant development has led to increasingly poor ecosystem health. Future funding will allow regional conservation groups to continue their implementation of programs aimed at restoring the health of the Sound through improvements in water quality, the control of invasive species, the restoration of and/or reclamation of natural areas, and the bolstering of native species populations. In 2006, Congress passed the Long Island Sound Stewardship Act which will build on the ongoing work of restoring the Sound.

FY 11 Recommendation:

Long Island Sound Restoration Act - \$10.0 million

An increase of \$3.0 million over the FY 10 enacted level of \$7.0 million

Long Island Sound Stewardship Act - \$6.0 Million *An increase of \$6.0 million over the FY 10 enacted level of \$0.0*

CROSS-CUTTING PROGRAMS CHESAPEAKE BAY RESTORATION

The Chesapeake Bay, the largest estuary in the United States and one of the most productive in the world, suffers from serious water quality impairments. Excess nitrogen and phosphorus discharged into rivers and streams throughout the 64,000 square mile watershed are responsible for algal blooms and oxygen free dead zones that have decimated the Bay watershed's flagship species such as crabs, oysters and striped bass and the commercial and recreational industries dependent upon them. In addition, excess sediment buries aquatic vegetation and oyster reefs, destroying habitat where these species thrive.

To stem the tide of pollution and restore water quality to the Chesapeake Bay and the tributary rivers and streams that feed it, the federal government has committed to significant action. EPA has begun work on a judicially ordered Total Maximum Daily Load, or pollution budget, and President Obama has issued an Executive Order charging federal agencies with increasing efforts to reduce pollution. To fully implement these ambitious actions, significant increases in funds will be necessary.

FY 11 Recommendation:

Environmental Protection Agency Chesapeake Bay Program - \$80.0 million An increase of \$30.0 million over the FY 10 enacted level of \$50.0 million

Chesapeake Bay Targeted Watershed Grants - \$20.0 million

Report language was included in the FY 10 appropriation bill that the agency would decide how much of the base budget to allocate to small and targeted grants. Since this decision has yet to be made, an FY 10 enacted funding level is not yet available.

Army Corps of Engineers

Chesapeake Bay Oyster Restoration - \$6.0 million

An increase of \$2.0 million over the FY 10 enacted level of \$4.0 million

National Oceanic and Atmospheric Administration

Chesapeake Bay Studies - \$6.0 million

An increase of \$3.0 million over the FY 10 enacted level of \$3.0 million

Chesapeake Bay Oyster Restoration - \$6.0 million

An increase of \$3.0 million over the FY 10 enacted level of \$3.0 million

USDA

We request that the appropriations committee not cap any mandatory NRCS programs or funding streams detailed in the 2008 Farm Bill.

CROSS-CUTTING PROGRAMS LACEY ACT AMENDMENT

Illegal logging threatens some of the world's most biologically diverse and vulnerable forests, while harming the legal forest products trade by significantly depressing world timber prices. In 2008, the U.S., the world's largest consumer of forest products, became the first country to ban trafficking of all products containing illegally sourced wood. Through an amendment of the Lacey Act, commerce of plants and derivative products – including all timber and wood products – that have been illegally taken or traded is now prohibited. Additionally, the new law requires importers to declare the species, country of origin, and other related sourcing information in an effort to increase wood supply chain transparency and focus law enforcement efforts.

The law requires U.S. importers to file an electronic declaration identifying the scientific name and country of harvest—a critical measure intended by the law's sponsors to increase supply chain transparency and assist U.S. agencies in fair and strong enforcement. The prohibition and the declaration requirement affect a wide array of American industry, so it is critical that the declaration process generates data in a streamlined, cost-effective manner that can be the useful tool intended by law without unduly burdening legitimate trade. To that end, APHIS, which is responsible for implementing the declaration provision, needs to create an electronic declarations database system and add internal capacity to perform data analysis for enforcement purposes. In order to effectively implement its new responsibilities under the Lacey Act, APHIS needs at least \$5.5 million of dedicated funding. Support for APHIS will help effectively curb the importation of illegal wood products into the United States, thereby decreasing both the devastating economic and environmental consequences of illegal logging of timber and harvesting of plant products.

Funding for the Department of State Bureau of Oceans and International Environment and Scientific Affairs (OES) would enable the agency to work with the U.S. Forest Service International Program to undertake new responsibilities such as training and outreach efforts on the legal requirements as well as on wood identification, tracking, and risk assessment both within relevant US agencies and within the relevant agencies of major wood producing and trans-shipping countries thought to be at risk for exporting illegal wood products.

FY 11 Recommendation:

USDA/APHIS-Lacey Act Amendment - Prevention of Illegal Logging - \$5.5 million, including:

- *Streamlined declaration database \$5.0 million
- *Additional data analysts \$500,000

An increase of \$5.5 million over the FY 10 enacted level of \$0.0

Department of State/Bureau of OES - \$4.0 million

An increase of \$2.0 million over the FY 10 enacted level of \$2.0 million

CROSS-CUTTING PROGRAMS GREAT LAKES ECOSYSTEM RESTORATION PROJECTS

The Great Lakes hold one fifth of the world's fresh surface water supply. For the more than 30 million people that live within the watershed, the Great Lakes hold the key to economic health, recreation, and irreplaceable family experiences. They support the economy through agriculture, industrial manufacturing, steel production, commercial and sport fisheries, and recreation and tourism. More than 150,000 Americans work in the Great Lakes' shipping industry, which provides passage for approximately 180 million tons of cargo annually. The economic benefits in the Great Lake states are more than \$15 billion for hunting, fishing, and wildlife watching.

Despite their overwhelming greatness and their vast expanse, the Great Lakes are fragile and in peril. Raw sewage contaminates beaches, invasive species threaten native fish, and toxic mercury makes fish unsafe to eat. These problems have reached a critical tipping point. Scientists say that action must be taken now or the entire Great Lakes' ecosystem will be damaged beyond repair. Funding is needed to restore the health of the Great Lakes. The problems continue to worsen and the solutions get more costly with each passing day.

In 2005, the Great Lakes Regional Collaboration (GLRC) produced a blueprint to protect and restore the Great Lakes. The GLRC, which was made up of over 1,500 leaders from around the region, identified goals to restore this fresh water resource. In 2009, President Obama announced his Great Lakes Restoration Initiative, which seeks to in part implement the recommendations of the GLRC and restore and protect the Great Lakes.

Other programs outlined in other areas of this report, such as the Clean Water State Revolving Fund and Farm Bill conservation programs, are also important to the Great Lakes. The programs listed below are specific to the Great Lakes.

FY 11 Recommendation:

Environmental Protection Agency

Great Lakes Restoration Initiative - \$475.0 million

This initiative funds activities to clean up toxic pollutants in Great Lakes harbors and rivers; restore habitat and wetlands; prevent and control invasive species; and reduce polluted runoff.

Part of this funding should be set aside for the Great Lakes Legacy Act (at least \$54.0 million) and the Great Lakes National Program Office (\$25.0 million).

The same as the FY 10 enacted level of 475.0 million

U.S. Army Corps of Engineers

Great Lakes Fishery and Ecosystem Restoration - \$10.0 million

Provides grants to protect and restore fish and wildlife habitat.

An increase of \$7.53 million over the FY 10 enacted level of \$2.47 million

Great Lakes Tributary Modeling Program - \$1.5 million

Supports actions to de-list Great Lakes Areas of Concern.

An increase of \$360,000 over the FY 10 enacted level of \$1.14 million

RAP Assistance (Sec. 401) - \$4.0 million

Supports the planning for toxic harbor clean ups.

An increase of \$590,000 over the FY 10 enacted level of \$3.41 million

CROSS-CUTTING PROGRAMS GREAT LAKES ECOSYSTEM RESTORATION PROJECTS

Chicago Sanitary Ship Canal Invasive Species Dispersal Barrier - \$12.5 million

Supports ongoing maintenance and operation of the dispersal barrier and the completion of additional emergency, rapid response measures and studies to prevent Asian carp from getting into Lake Michigan

An increase of \$6.7 million over the FY 10 enacted level of \$5.83 million.

Department of the Interior, Fish and Wildlife Service

Great Lakes Fish and Wildlife Restoration Act - \$8.0 million

Provides grants for local and regional projects designed to protect and restore fish and wildlife habitat

An increase of \$6.3 million over the FY 10 enacted level of \$1.7 million.

Department of the Interior, U.S. Geological Survey

Great Lakes Science Center - \$15.0 million

Supports Great Lakes research and monitoring, including additional deepwater fishery science and ecosystem research.

An increase of \$500,000 over the FY 10 enacted level of \$14.5 million.

Department of State

Great Lakes Fishery Commission - \$22.2 million

Supports invasive sea lamprey prevention and control.

An increase of \$500,000 over the FY 10 enacted level of \$21.7 million

International Joint Commission - \$8.0 million

Supports Upper Great Lakes study to evaluate impacts of water levels and flow regulation in Upper Great Lakes.

The same as the FY 10 enacted level of \$8.0 million.

Department of Agriculture, Natural Resource Conservation Service

Great Lakes Basin Program for Soil Erosion and Sediment Control-\$5.0 million

Helps control soil erosion and protect waterways in the Great Lakes.

An increase of \$4.6 million over the FY 10 enacted level of \$0.404 million

Department of Commerce

Great Lakes Environmental Research Laboratory - \$15.0 million

Supports Great Lakes research and monitoring on issues like invasive species and global warming. *An increase of \$4.67 million over the FY 10 enacted level of \$10.03 million*

CROSS-CUTTING PROGRAMS KLAMATH RIVER RESTORATION

Klamath River Restoration

The Klamath River begins in a high arid basin ringed by the volcanic peaks of the Cascade Range in Oregon and flows for over 250 miles to the Pacific south of Crescent City in California. Downstream of the Upper Klamath Lake, the river plunges into a canyon where PacifiCorp operates five mainstem dams, two in Oregon and three in California. In between two of these dams is a Wild and Scenic stretch that is well-known for its fishing and whitewater rafting.

The dams, built between 1908 and 1962, cut off more than 300 miles of once-productive salmon spawning and rearing habitat in the Upper Klamath, which was once the third most productive salmon river on the west coast. The dams also create toxic conditions in the reservoirs that threaten the health of fish and people. Salmon populations have plummeted to less than 10 percent of historic numbers, and the commercial salmon fishing industry was virtually shutdown along 700 miles of coastline in California and Oregon in 2006 to protect Klamath salmon stocks. The fishery closure caused more than \$100 million damage to California and Oregon economies, and harmed numerous fishing communities. Native American tribes throughout the Klamath basin have treaty rights to fish salmon, but lower basin tribes have had to drastically reduce their catch to protect the salmon runs, and upper basin tribes have not seen salmon in their waters for nearly 100 years

The Agreement in Principle released November 13, 2008 is intended to guide the development of a final settlement agreement in June 2009 and includes provisions to remove PacifiCorp's four mainstem dams in 2020. These four dams produce a nominal amount of power, which can be replaced using renewables and efficiency measures, without contributing to global warming. A study by the California Energy Commission and the Department of the Interior found that removing the dams and replacing their power would save PacifiCorp customers up to \$285 million over 30 years.

The Restoration of the Klamath River will represent the biggest dam removal and river restoration effort the world has ever seen.

FY 11 Recommendation:

Department of the Interior
Fish and Wildlife Service - \$2.1 million
Same as the FY 10 enacted level of \$2.1 million

Bureau of Reclamation - \$2.0 million

An increase of \$100,000 over the FY 10 enacted level of \$1.9 million

CROSS-CUTTING PROGRAMS NATIONAL FISH HABITAT ACTION PLAN

National Fish Habitat Action Plan

The mission of the National Fish Habitat Action Plan (2006) is to "protect, restore, and enhance the nation's fish and aquatic communities through partnerships and foster fish habitat conservation and improve the quality of life for the American people." This is a science-based, non-regulatory program to benefit fish and aquatic habitat conservation.

The delivery architecture for on-the-ground conservation projects are Fish Habitat Partnerships (analogous to Joint Ventures in the migratory bird community); 14 such FHP's have been endorsed by the National Fish Habitat Board to date and another seven FHP's are considered Candidates. A National Fish Habitat Assessment will be completed in 2010, providing a scientific basis for planning and the delivery of priority conservation projects.

Many federal agencies are engaged with implementation of the Plan. Key leadership roles reside within the U. S. Fish and Wildlife Service (Fish Habitat Partnership support), the U. S. Geological Survey, Biological Resources Division (science and data support), and the National Marine Fisheries Service (Board support and coastal assessments). The U.S. Fish & Wildlife Service requested and was appropriated \$7.2 million in its 2010 Fisheries Program budget to implement the Action Plan.

FY 11 Recommendation:

National Fish Habitat Action Plan - \$12.0 million total

An increase of \$4.8 million over the FY 10 total of \$7.2 million, allocated as follows:

U.S. Fish and Wildlife Service - \$10.0 million

An increase of \$2.8 million over the FY 10 enacted level of \$7.2 million

U.S. Geological Survey - \$1.0 million

New funding of \$1.0 million specifically allocated to NFHAP to supplement the support being provided in FY10 through base funds of existing programs.

NOAA/National Marine Fisheries Service - \$1.0 million

New funding of \$1.0 million specifically allocated to NFHAP to supplement the support being provided in FY 10 through base funds of existing programs.

CROSS-CUTTING PROGRAMS PUBLIC LANDS CORPS

Public Lands Corps Program

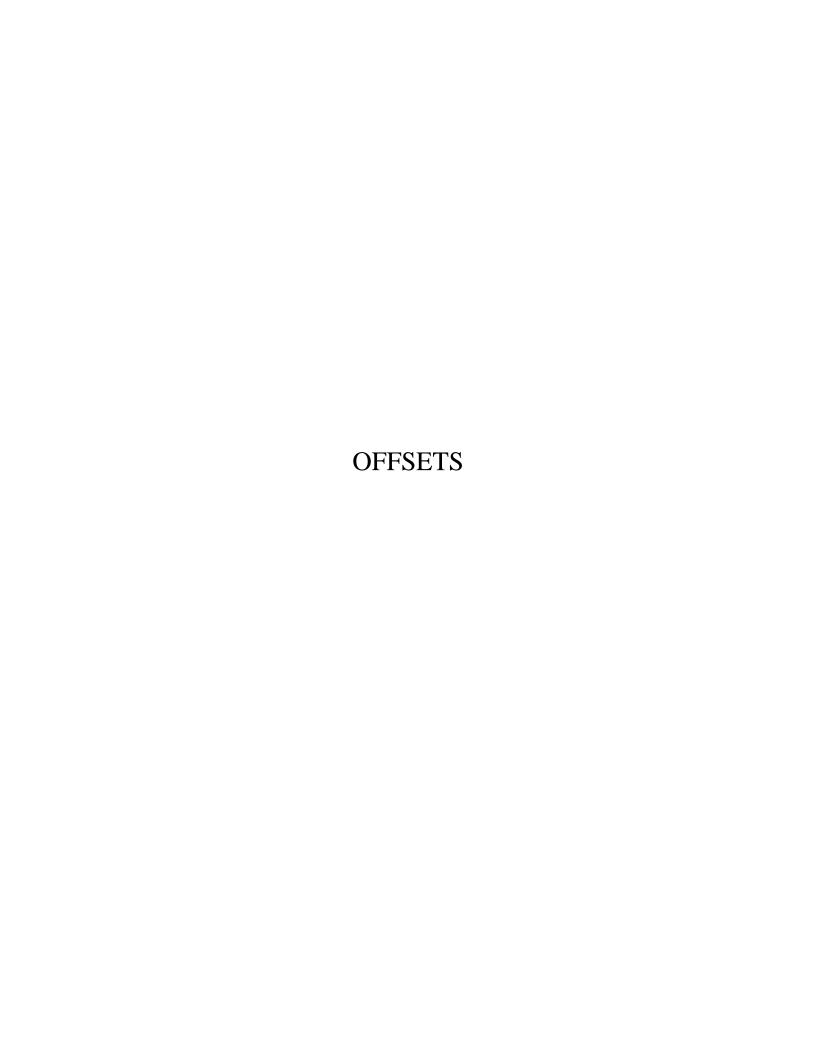
Since its authorization in 1993, the Public Lands Corps program has enabled thousands of youth to work and do environmental service on Department of Interior and U.S. Forest Service lands. While making important improvements to our nation's public lands, such as trail and campground building and maintenance, habitat and watershed restoration, invasive species removal, tree and native species planting, hazardous fuel removal, and wildfire mitigation, Public Lands Corps members receive an education, acquire job and life skills, and gain an appreciation for our nation's natural resources. Many of these young people go on to pursue further education and careers in land and resource management. An increased investment in this important program would allow agency partners, including youth programs like Service and Conservation Corps, to engage many more young people, complete many more backlog maintenance projects, and develop the next generation of land managers and public lands stewards.

In FY 10, up to \$2.5 million was appropriated for the Public Lands Corps program at the U.S. Forest Service. In FY 11, Congress should fund the program at its authorized level of \$12.0 million total at both the Department of Interior and the U.S. Forest Service.

FY 11 Recommendation:

Public Lands Corps Program - \$12.0 million

An increase of \$9.5 million over the FY 10 enacted level of \$2.5 million



OFFSETS ARMY CORPS OF ENGINEERS

Inland Waterway Trust Fund Receipts (User Fees)

Currently, the Inland Waterway Trust Fund is essentially bankrupt due to annual expenditures for inland waterway new construction and rehabilitation projects in recent years substantially exceeding annual receipts from the Inland Waterway Fuel Tax. U.S. taxpayers are continuing to pay in excess of 90 percent of the annual costs of constructing, operating and maintaining the inland waterway system. This level of public subsidy far exceeds all other forms of transportation, including highways, rail and air travel, and recently federal taxpayers were asked to pay 100 percent of the inland waterway-related costs associated with economic stimulus funding.

It is time that commercial inland waterway users begin to shoulder considerably more of the costs of constructing and operating the inland waterway system. Congress should immediately authorize collection of lock user fees that initially should at least double the present only 9-10 percent total contribution to IWW system costs, Such an additional fee system, which would be designed to encourage scheduling of lock usage, would have the immediate effect of reducing or eliminating congestion and increasing efficiency, and would provide revenues for system investments.

FY 11 Recommendation:

Enact IWW User fees to increase annual IWWTF revenues by \$90.0 million

Cut Funding for Wasteful and Environmentally Damaging Corps of Engineers Water Projects

The FY 10 Energy and Water Development Appropriations legislation included numerous wasteful and damaging projects that should be cut from the budget in FY 11. These projects are among the most controversial projects -whose future-year costs threaten to engulf the potential for other worthy projects to ultimately receive funding. These include projects such as the \$450 million Grand Prairie Region Irrigation Demonstration Project (\$9.7 million, in FY 10), AR, which would siphon off water from the White River in Arkansas for rice farming, threatening damage to two of the nation's premier National Wildlife Refuges and inaugurating the Corps into the irrigation business at a potential ultimate cost of billions for what has never before been a Corps mission, in one of the wettest regions of the U.S., along with a similarly expensive Bayou Meto project in the Arkansas River Basin and numerous others being contemplated. Important Agriculture Department NRCS programs provide alternative assistance to farmers to improve on-farm storage and water efficiency at far less cost and far less damage to the environment. They also include the \$331 million Delaware River Main Channel Deepening Project that threatens environmental resources of the Delaware Bay and River and has engendered lawsuits from the States of Delaware and New Jersey in opposition (\$4.8 million in FY 10). They also include stream channelization and land drainage projects in the Yazoo River basin, MS, (\$40 million in FY 10), as well as numerous costly "environmental infrastructure" projects that are outside Corps' missions, are generally local in nature and often compete unfairly with EPA revolving loan water programs (\$26 million in FY 10).

FY 11 Recommendation:

Cuts wasteful and environmentally damaging Corps project; a reduction in funding from FY 10 levels of more than \$60.0 million

OFFSETS DEPARTMENT OF AGRICULTURE

Farm Bill Subsides

The federal government spends billions of dollars each year on agricultural programs that were established during the Great Depression. These programs were originally intended to strengthen American agriculture's competitiveness on the world market by increased production of designated crops. While portrayed as a way to support the livelihood of the small family farmer, these programs benefit large corporate farms, damage the environment and our food supply, and place massive and unnecessary costs on the American taxpayer.

In 2005, the federal government spent approximately \$24 billion to subsidize the production of 15 agricultural crops, a majority of which went to the largest farms. These crops include cotton, sugar, corn, wheat, and soy beans, which are being subsidized at a time of record yields. Many of these crops such as cotton, sugar, and corn have significant environmental impacts when produced. For instance, sugar production in Florida is partially responsible for the decay of the Everglades. The monocropping of corn in the Midwest, with intense pesticide and fertilizer inputs, is contributing to dead zones in the Gulf of Mexico. By subsidizing farmers to overproduce, the government is also promoting an industrial model of agriculture that depends on oil, pesticides, and herbicides.

FY 11 Recommendation:

Shift wasteful subsidies to cost-effective programs like conservation, nutrition and organics and deficit reduction

Direct Subsidies to Factory Animal Farms

Concentrated Animal Farming Operations (CAFOs or Factory Farms) are both directly and indirectly subsidized. CAFOs are the source immense water and air pollution due to poor manure management and the types of food animals are fed. A recent report by the World Resourced Institute noted that Animal Agriculture could be responsible for half of global greenhouse gas emissions. Feed grains are already heavily subsidized (as noted), which is particularly beneficial for CAFOs. In addition to this, factory farms are benefit through the Environmental Quality Incentives Program (EQIP). Originally, this program was aimed at assisting smaller farming operations that could not afford upgrading their systems to reduce environmental damage, but was changed in 2002 to include the more financially secure CAFOs and give them a competitive advantage. Analysis by the Union of Concerned Scientists suggests that subsidies from EQIP to CAFOs have totaled roughly \$100 million or more each year.

FY 11 Recommendation:

Restrict financing for the EQIP program from CAFOs, resulting in savings of \$500.0 million over the next five years

¹ Robert Goodland and Jeff Anhang. "Livestock and Climate Change: What if the key actors in climate change are cows, pigs and chickens?" World Resources Institute, November/December 2009.

⁽http://www.worldwatch.org/files/pdf/Livestock%20and%20Climate%20Change.pdf, viewed December 18th, 2009)

² Doug Durian-Sherman. "CAFOs Uncovered: The Untold Costs of Confined Animal Feeding Operations." Union of Concerned Scientists, April 2008, p. 37 (http://www.ucsusa.org/assets/documents/food_and_agriculture/cafos-uncovered.pdf, viewed December 18, 2009)

OFFSETS DEPARTMENT OF ENERGY

Loan Guarantees for Dirty Energy

Title XVII of the Energy Policy Act of 2005 (EPACT 2005) created a DOE run program to guarantee loans for corporations to build commercial energy facilities.³ The program was billed as a way to get a small number of projects for new low emission technologies off the ground so that they could develop a proven track record and attract private funding in the future. Unfortunately, the program was set up to enable tested and environmentally harmful technologies such as liquid coal and nuclear reactors to qualify for guarantees.

In the 2009 Omnibus Appropriations Bill, Congress gave the Department of Energy (DOE) authority to hand out \$47 billion in new loan guarantees for energy projects. Appropriations for the loan guarantee are scored by the Congressional Budget Office at 1%, so this cost taxpayers \$47 million. The majority of the loan guarantee authority has been earmarked to dirty coal and nuclear industries for the construction of new power plants and reactors. \$20.5 billion was earmarked for nuclear reactors and reprocessing and \$8 billion for coal projects, leaving only \$18.5 billion to support renewable energy and transmission projects. This program has received so much money so quickly that DOE has been unable to spend the money that has already been allocated.

FY 11 Recommendation:

Do not include additional loan guarantee authority in the FY 11 budget, saving \$47.0 million from FY 10

NUCLEAR ENERGY

Fuel Cycle Research and Development

Globally, over \$100 billion has already been spent globally in unsuccessful attempts to commercialize reprocessing and transmutation technologies. Reprocessing is expensive, polluting and proliferating. According to the National Research Council, a reprocessing and fast reactor program that processes only existing U.S. spent fuel would cost \$700 billion (2007\$). Reprocessing actually increases the number and complexity of the radioactive waste streams that must be managed. Globally, commercial reprocessing has produced nearly 250 metric tons of separated plutonium, which is vulnerable to theft or diversion and enough to make 30,000 nuclear weapons. Even NNSA's non-proliferation analysis of DOE's R&D program confirmed that none of DOE's proposed schemes for mixing plutonium with other radionuclides would significantly reduce the risk of theft or diversion compared to pure plutonium.

DOE, however, continues to pursue this nuclear alchemy under a new name, the Fuel Cycle R&D program. The scope of the program, however, is supposed to be broader than its previous incarnation to also include research on storage technologies, security systems, alternative disposal pathways (e.g. salt formation and deep borehole) and geologic storage. Another important change to the program is a shift of the focus from demonstration projects to small-scale experiments.

FY 11 Recommendation:

³ Energy Policy Act of 2005 § 42 U.S.C § 16513 (2005).

⁴ Arjun Makhijani, *Plutonium End Game Managing Global Stocks of Separated Weapons-Usable Commercial and Surplus Nuclear Weapons Plutonium*, Institute for Energy and Environmental Research, January 2001, p. 27, http://www.ieer.org/reports/pu/index.html.

⁵ Office of Nonproliferation and International Security, *Draft Nonproliferation Assessment for the Global Nuclear Energy Partnership Programmatic Alternatives*, December 2008, pages 68-70, http://nnsa.energy.gov/nuclear_nonproliferation/documents/GNEP_NPIA.pdf

⁶ This program has had several incarnations: Advanced Accelerator Applications (AAA) Program (FY2001-2002); Spent Fuel Pyroprocessing and Transmutation Program (FY2003); and the Advanced Fuel Cycle Initiative (AFCI) (FY2004-2009).

OFFSETS DEPARTMENT OF ENERGY

Fuel Cycle R&D - \$0.0 million

A decrease of \$136.0 million from the FY 10 authorized level of \$136.0 million

Generation IV

Generation IV is a program to develop the next generation of nuclear reactors, which DOE has narrowed down to the Very-High Temperature Reactor (VHTR). The most researched VHTR is the pebble bed design. The German government researched this design from the 1950s until 1989. The publicly-owned South African electric utility Eskom has been pursuing this design since 1998, but recently abandoned it due to escalating costs and serious technical problems. The South African government spent \$1 billion on research into this design. Thus far, the U.S. Congress has spent \$529 million on the design. The 13 license applications pending before the Nuclear Regulatory Commission are for building 22 Generation 3.5 reactors, modified versions of operating reactors.

FY 11 Recommendation:

Generation IV - \$0.0 million

A decrease of \$220.0 million from the FY 10 authorized level of \$220.0 million

Nuclear Power 2010

Nuclear Power 2010 is a program to subsidize the industry's cost of new reactor license applications. The Obama administration has stated its intention to terminate this program after FY 10, which is the original sunset of the program, and the conference report for the FY 10 Energy and Water Appropriations bill concurs that this is the "final installment to complete the Department's commitment to this effort."

The NP2010 program funded the design certification and detailed standardized plant designs for Westinghouse's AP1000 and General Electric Hitachi's (GEH) ESBWR and for NuStart's reference license application for the AP1000. The Nuclear Regulatory Commission recently rejected the amended AP1000 reactor design, slated for 14 of the 25 proposed reactors in the U.S. and two of the short-listed projects for loan guarantees, because it cannot withstand severe weather such as hurricanes, tornados and earthquakes. There is currently no schedule for the AP1000 certification. DOE informed Entergy in 2008 that the ESBWR design would not be eligible for loan guarantees. Two of the four sites proposing the ESBWR subsequently abandoned the design.

Historically, the NP2010 program has also funded three Early Site Permits that have been approved by the NRC at the North Anna site in Virginia, the Clinton site in Illinois, and the Grand Gulf site in Mississippi. An Early Site Permit establishes that a site is environmentally suitable for new reactors and, these issues cannot be raised again in the subsequent Construction and Operation License proceeding. Of the three Early Site Permits, no license application has been submitted to build a reactor at Clinton and the Grand Gulf and North Anna COLs are suspended because the ESBWR design is so problematic.

FY 11 Recommendation:

Nuclear Power 2010 - \$0.0 million

A decrease of \$105.0 million from the FY 10 authorized level of \$105.0 million

Yucca Mountain

President Obama has declared Yucca Mountain "no longer an option" and DOE has put Yucca Mountain on its Termination List, a list of programs that are discontinued. The NRC licensing process, however, continued in FY

OFFSETS DEPARTMENT OF ENERGY

10. DOE Secretary Chu intends to convene a Blue Ribbon Commission to evaluate alternative approaches and make recommendations for managing spent fuel and defense high-level radioactive waste. Therefore, further funding of the licensing process is unnecessary and the budget should be cut.

FY 11 Recommendation:

Yucca Mountain - \$0.0 million

A decrease of \$197.0 million from the FY 10 authorized level of \$197.0 million

Fusion Energy

While renewable energies are developing rapidly, fusion energy has been researched for decades with no perceptible advances. Fusion research is unlikely to lead to viable electricity generation that can be commercialized in the next century, if ever. This program is a waste of taxpayer dollars that should be spent on research that can lead to real solutions in the near-term.

FY 11 Recommendation:

Fusion Energy - \$0.0 million

A decrease of \$426.0 million from the FY 10 authorized level of \$426.0 million

Mixed Oxide (MOX) Fuel

In FY2010, Congress fully funded the Fissile Materials Disposition program, which included \$588 million for the construction of the Mixed Oxide (MOX) Fuel Fabrication Facility in South Carolina to fabricate plutonium oxide into MOX fuel for use in U.S. reactors, and another \$77 million for its accompanying Waste Solidification Building to handle waste from the MOX facility. This was an enormous increase of 1,600% for the MOX part of the Fissile Materials Disposition program. At the same time, the budget for down-blending U.S. highly enriched uranium, a very important nonproliferation program, was reduced by \$4.5 million from FY2009. The FY 10 conference report stated the "concern that future cost increases in the construction of the Mixed Oxide Fuel Fabrication Facility, Waste Solidification Building, and supporting activities could divert resources from high-priority overseas nonproliferation activities."

Additionally, the conferees expressed concern about the Department's management of the program. The MOX facility, which is currently being built in South Carolina, has been cited by the DOE IG for serious construction problems that have increased costs by more than \$600,000.⁷ Even if the facility gets up and running, not a single utility in the U.S. is licensed to use the MOX fuel in its reactors. The only utility that had a license, Duke Energy, decided to let its contract with DOE lapse. Rather than throwing massive amounts of funding at this project, the Obama administration should zero out funding for the MOX Fuel Fabrication Facility while it reassesses the program.

FY 11 Recommendation:

MOX Fuel - \$0.0 million

A decrease of \$665.0 million from the FY 10 authorized level of \$665.0 million

http://www.ig.energy.gov/documents/IG-0814.pdf

OFFSETS DEPARTMENT OF THE INTERIOR

Bureau of Land Management and Forest Service Public Lands Grazing

The public land grazing program administered by the Forest Service and the Bureau of Land Management is highly subsidized and benefited only two percent of the nation's livestock operators. According to the Government Accountability Office, the grazing programs cost taxpayers roughly \$136 million to operate, but only earned \$21 million. Below-cost grazing fees encourage overgrazing and, along with other problematic features of the existing federal program, have resulted in extensive and severe environmental damage to public lands and riparian areas, resulting in reduced ecologic resiliency and ability to adapt to a warming western climate. In FY 07, the fee dropped to a ludicrous low of \$1.35, the lowest allowable amount by law. To put that in perspective, the first uniform federal grazing fee that was established in 1934 was set at \$1.23.

FY 11 Recommendation:

Charge a grazing fee on federal lands that covers management costs, and eliminate program expenditures that neither protect nor restore resources

Bureau of Land Management Oil and Gas Program

In FY 10 \$45.5 million was appropriated for processing applications for permits to drill. In recognition of the increasing costs of this program, and the vast profits going to the oil and gas industry from this program, Congress imposed a "cost recovery fee" of \$6,500 per drilling permit application to defray the BLM's administrative costs that reduced the amount appropriated for the program.

FY 11 Recommendation:

Charge a cost recovery fee high adequate to cover the entire cost of administering the program

Bureau of Land Management Hardrock Mining Reforms

Under the 1872 Mining Law, mining companies extract minerals from publicly owned lands without paying royalties to the federal government. This policy differs from federal policy toward the coal, oil and gas industries, all of which must pay royalties for extracting minerals from public lands. The estimated value of hardrock minerals extracted from federal lands is about \$1 billion annually, without any royalty payment to taxpayers. Adding insult to injury, the 135-year-old law also allows mining companies to patent, or buy, mineral-rich public land for \$5 an acre or less, paying 1872 prices for land worth billions of dollars. The archaic 1872 Mining Law not only distorts the minerals market, it promotes environmental destruction of public lands because it includes no provisions for environmental protection and elevates mining as the best use of the land, regardless of other potential uses. The law has allowed the mining industry to scar Western landscapes with an estimated half a million abandoned mines, which could cost taxpayers as much as \$50 billion dollars to clean up.

In addition to the 1872 Mining Law, the hardrock industry is further subsidized by the U.S. tax code. After taking valuable minerals from public lands for free, a mining company is then allowed to compensate for the reduced value of a mine as it is exhausted. This tax break, called the percentage depletion allowance, was established in 1912 and allows the mining industry a deduction of anywhere from 5 to 22 percent, depending on the mineral.

FY 11 Recommendation:

1) Require fair market returns to taxpayers for extraction of publicly owned minerals. A gross royalty of 4 percent on existing mines and eight percent on future mines could raise \$30.0 million annually in FY 11, based on Congressional Budget Office mineral estimates

OFFSETS DEPARTMENT OF THE INTERIOR

- 2) Increase the fee mining companies pay to maintain their unpatented claims on public lands, from \$125 or \$140 to \$250 per claim annually, to better reflect the value of these claims. Moreover, the fee should be doubled again to \$500 if no mining occurs within five years of filing a mining claim
- 3) In addition to an 8 percent gross royalty, a sliding scale fee should be levied on all mining occurring on lands claimed or patented under the 1872 Mining Law. A conservation alternative (though it would raise no revenue) would be to instead permanently end the sale, or "patenting" of public lands for \$2.50 or \$5 an acre. Although there has been a moratorium on this practice since 1994, mining companies have purchased public lands the size of Connecticut under this outdated law
- 4) Remove the double subsidy given by the "percentage depletion allowance." The "percentage depletion allowance" is a concept created nearly a century ago to spur exploration and extraction of natural resources. As a result of this concept, mining companies are given what is tantamount to a double subsidy on public lands: first, they are allowed to mine on federal lands for free and then, under the percentage depletion allowance, they are allowed to take tax deductions beyond the value of investments they have made. The elimination of this subsidy would save taxpayers an estimated \$250.0 million over the next 5 years

Fossil Fuel Tax Breaks

The federal tax code contains billions of dollars in tax breaks for the oil and gas industry. Tax incentives range from new tax breaks in the Energy Policy Act of 2005 in addition to a host of incentives that existed prior to passage of the energy bill. President Obama's first budget did away with over \$30 billion giveaways to these giant multinational corporations. President Obama went a step further at the G20 in Pittsburg, calling for an end to all subsidies for fossil fuels. Additionally President Obama's budget called for a new tax on oil producers in the Gulf of Mexico to fix a Clinton era mistake that is costing taxpayers billions of dollars. Between 1996 and 2000, the Interior Department awarded offshore drilling leases to companies drilling for oil and natural gas in the Gulf of Mexico. The new tax would be in lieu of these royalty payments. Congress should follow his lead and act immediately to end these giveaways to the oil and gas industry and invest this money in environmental protection.

Oil and gas percentage depletion allowance

This oil and gas depletion allowance allows independent oil companies to deduct 15 percent of their sales revenue to reflect the declining value of their investment. This flat deduction bears little resemblance to the actual loss in value over time and companies often end up deducting more than the value of their initial investment.

FY 11 Recommendation:

Removing this tax break will save taxpayers \$8.3 billion over nine years and \$316.0 million in FY 11

Manufacturing tax deduction for oil and gas companies

In 2004, Congress passed H.R. 4520, the American Jobs Creation Act of 2004. The intent of the bill was to bring U.S. export subsidies into compliance with global trade laws. During the legislative process, provisions were added to the bill that classified oil and natural gas production as a manufactured good. The change allowed oil and gas companies to claim billions of dollars of new tax deductions, effectively lowering their tax rate.

FY 11 Recommendation:

Eliminating this deduction would return more than \$13.3 billion to the federal treasury over nine years and \$757.0 million in FY 11.

Levy excise tax on Gulf of Mexico oil and gas

In the late 1990s leases in the Gulf of Mexico that waived the payment of royalty fees to the federal government were purchased by oil and gas producers, allowing producers to extract taxpayer's resources without payment. In an oversight the leases did contain any clause ending the waiver when oil and gas prices are high. An excise tax of 13 percent on Gulf of Mexico oil and gas production that allows producers credit against the tax for royalties paid would allow the government to recoup the losses from these lease giveaways. This is modeled after a plan proposed by Senate Energy and Natural Resources Chairmen Jeff Bingaman (D-NM).

FY 11 Recommendation:

The proposal would begin return \$5.3 billion to taxpayers over nine years and \$582 million in FY 11

Last in, first out accounting

For more than 70 years, the oil and gas companies have used an accounting method known as "last in, first out," or "LIFO," to minimize their tax liability. Using LIFO accounting, oil companies can sell the last oil (and currently most expensive) placed into their reserves first, before selling longer-held and cheaper reserves. By using this

method, when oil prices are high companies are able to minimize the value of their reserves and therefore their tax burden.

FY 11 Recommendation:

Repealing the LIFO accounting method would save consumers \$61.0 billion over eight years, though not all of this would come from oil companies.

Intangible drilling costs

Integrated oil companies such as ExxonMobil are allowed to immediately deduct 70 percent of "intangible drilling costs" such as the cost of wages, supplies, and site preparation, rather than capitalizing them. Smaller, independent oil and gas producers are allowed to immediately deduct all of their intangible drilling costs.

FY 11 Recommendation:

Repealing this tax giveaway will save the treasury \$3.3 billion over nine years and save \$347 million in FY 11

Geological and geophysical expenditures

This tax break was created in the Energy Policy Act of 2005 and allows companies to deduct the costs associated with searching for oil. President Obama's budget increases the amortization period for independent producers from 5 to 7 years.

FY 11 Recommendation:

Repeal this tax giveaway to save taxpayer \$1.2 billion over nine years and \$41 million in FY 11

Ultra-deepwater drilling research and development subsidy

This provision was added to the Energy Policy Act of 2005 conference report after the conference committee was gaveled closed. It creates an oil research and development program for ultra-deepwater drilling, benefiting an oil consortium in former-Representative Tom DeLay's home district of Sugarland, TX.

FY 11 Recommendation:

Repealing this giveaway will save taxpayers \$210.0 million over nine years and \$210.0 million in FY 11

Passive loss

This tax break allows owners and investors in oil and gas properties to use loses from the oil and gas business to shelter other income.

FY 11 Recommendation:

Fixing this giveaway would save taxpayers \$49.0 million over nine years and \$2.0 million in FY 11

Deduction for tertiary injections

The deduction for tertiary injections allows oil and gas companies to get a deduction equal to any cost or expense for advanced oil recovery.

FY 11 Recommendation:

Getting rid of this giveaway will save taxpayers \$62.0 million over nine years and \$5.0 million in FY 11

Expensing property used to refine liquid fuels

The provision, created in the Energy Policy Act of 2005, allows 50 percent of the cost of building a refinery.

FY 11 Recommendation:

Eliminate this subsidy and save \$3.03 billion from FY 11-14

Producing fuels from an unconventional source

This provision subsidizes the production of certain fuels, including oil shale, tar sands, coal, and biomass.

FY 11 Recommendation:

Eliminate this subside and save \$20.0 million from FY 11-12

Tax Breaks for Biofuels

Currently, the biofuels industry is lavished with generous tax credits, with no heed to the environmental and social costs that biofuels can cause. Depending on where, from what and how they are produced, biofuels can cause an increase in global warming emissions over gasoline (or diesel). The vast majority of today's biofuels fall into this category. In addition, widespread production of monoculture crops, such as corn for corn ethanol, requires massive fertilizer and other agrochemical inputs and result in water pollution and siltation. Ethanol production has been subsidized for nearly 30 years, and the cost of this subsidization to tax payers is sharply growing. Over the next five years, the biofuels industry could garner nearly \$40 billion from US taxpayers. On top of this, biofuels are further subsidized by a guaranteed market created through the Renewable Fuels Standard (RFS), which mandates the consumption of increasing levels of biofuels through 2022 and reaching 36 billion gallons in that year.

The Volumetric Ethanol Excise Tax Credit

The most egregious of these tax credits is the Volumetric Ethanol Excise Tax Credit (VEETC), enacted in the 2004 American JOBS Act and extending a similar credit that originated from 1978. A recent report by the Government Accountability Office (GAO) concluded that VEETC was no longer stimulating the additional ethanol consumption above the RFS levels and was "duplicative to the RFS with respect to ethanol use." Additionally, the GAO also noted that the tax credit did not actually have any effect on corn grower's income, but instead was assisting motor fuel blenders (oil companies), and ethanol producers (many of which are oil companies). Presently, this subsidy credits \$0.45 per gallon to the blender (oil industry) per gallon of ethanol blended into gasoline, and is eligible for both domestic and internationally produced ethanol. If this credit was repealed, \$29.7 billion could be saved over the next five years (assuming RFS consumption mandate continues unchanged) from subsidizing corn ethanol. An

^[1] The Government Accountability Office. "Biofuels: Potential Effects and Challenges of Required Increases in Production and Use." GAO-09-446 August 25, 2009, p. 105.

^[2] The Government Accountability Office. "Biofuels: Potential Effects and Challenges of Required Increases in Production and Use." GAO-09-446 August 25, 2009, p. 105.

additional \$1.2 billion could be saved from other forms of ethanol, such as sugar, not including from cellulosic technology. In total, repealing this credit could result in \$30.9 billion in avoided expenditures. [3]

The Volumetric Biodiesel Excise Tax Credit

Enacted in the 2004 American JOBS Act, the Volumetric Biodiesel Excise Tax Credit (VBETC) credits \$1.00 per gallon of biodiesel blended into petroleum diesel fuel. The credit is not limited to domestic producers, meaning that palm oil biodiesel from plantations within the Borneo Rainforests can also receive the credit. Because the RFS mandate provides a guaranteed market for biodiesel this tax credit is extraneous. Over the next five years, this VBETC could benefit the biodiesel industry \$4.45 billion (assuming RFS consumption mandate continues unchanged). [4]

FY 11 Recommendation:

Repeal tax credits for conventional biofuels (VEETC and VBETC), worth \$35.4 billion over the next 5 years.

^[3] Figure calculated by assuming that RFS mandate levels for conventional (corn) ethanol and other advanced ethanol, excluding the cellulosic carve out, remained unchanged. This would result in a total of 68.75 billion gallons of ethanol consumed. This figure is then multiplied by the value of the credit, \$0.45 per gallon.

^[4] Figure calculated by assuming that RFS mandate levels for biodiesel remained unchanged. This would result in a total of 4.45 billion gallons of biodiesel blended and consumed. This figure is then multiplied by the value of the credit, \$1.00 per gallon.

APPENDICES

A – FUNDING TABLE

B – PROGRAM CONTACTS

	2010	2011	
	Enacted	Recommended	
RMY CORPS OF ENGINEERS 1-1			
Project Modification for Improvement of the Environment	24.2	40.0	
Aquatic Ecosystem Restoration	27.1	50.0	
Flood Hazard Mitigation and Riverine Restoration (Challenge 21)	0.0	20.0	
National Levee Safety Program	9.5	20.0	
Navigation and Ecosystem Sustainability Program	6.276	17.0	
Upper Mississippi Environmental Management Program	16.4	33.2	
Missouri River Fish and Wildlife Recovery Project: IA, NE, KS &MO	56.7	85.0	
Lower Columbia River Ecosystem Restoration: OR & WA	1.6	2.0	
Water Resource Priorities Study	0.0	2.0	
Floodplain Management Services	8.059	15.0	
Planning Assistance to States	7.161	10.0	
Matilija Dam Removal	0.0	1.0	
Rindge Dam Removal	0.0	0.595	
Rio Grande Environmental Management Program	0.0	15.0	
Estuary Restoration Program	1.0	5.0	
Total, Selected Energy Efficiency and Renewable Energy Programs	158.0	315.8	

	2010	2011
	Enacted	Recommended
CPARTMENT OF ENERGY 2-1		
Office of Energy Efficiency and Renewable Energy		
Biomass and Biorefinery Systems R&D Program	222.0	270.0
Solar Energy Technologies Program	225.0	250.0
Wind Energy Program	80.0	95.0
Geothermal Technology Program	44.0	90.0
Water Energy Program	50.0	100.0
Vehicle Technologies Program	311.0	355.0
Building Technologies Program	200.0	220.0
Building America/ Zero Net EnergyHomes Program	NA	40.0
Commercial Buildings Initiative (CBI)	NA	30.0
building energy codes	NA	25.0
national building rating programs	NA	10.0
DOE Energy Star	NA	15.0
Industrial Technologies Program	96.0	150.0
Federal Energy Management Program	32.0	40.0
Weatherization Assistance Program	210.0	500.0
State Energy Program	50.0	125.0
The Energy Efficiency and Conservation Block Grant Program	NA	1000.0
International Sub-Program	10.0	160.0
Office of Electricity Delivery and Energy Reliability	172.0	212.0
Office of Science	4903.7	5158.9
Advanced Research Projects Agency - Energy	15.0	100.0
Environmental Cleanup		
Uranium Enrichment Decontamination and Decommissioning Fund	573.9	573.9
Defense Environmental Cleanup	5600.0	6000.0
Non-Defense Environmental Cleanup	244.7	244.7
Loan Guarantee Programs	136.0	0.0
Loan Guarantee Authority- Fuel Cycle	NA	0.0
Energy Information Administration	111.0	133.0
Energy Sustainability and Efficiency Grants and Loans for Institutions	0.0	750.0
Grants	0.0	250.0
Loans	0.0	500.0
Community College Energy Training Program	0.0	100.0
Total, Department of Energy	13286.3	16747.5

	2010	2011
	Enacted	Recommended
ARTMENT OF AGRICULTURE 3-1		
Farm Bill Conservation Programs		
Natural Resource Conservation Service		
Agriculture Management Assistance Program	NA	15.0
Agricultural Water Enhancement Program	NA	74.0
Conservation Reserve Program	NA	NA
Conservation Stewardship Program	NA	NA
Environmental Quality Incentives Program	NA	1588.0
Farm and Ranch Lands Protection Program	NA	175.0
Grasslands Reserve Program	NA	NA
Healthy Forests Reserve Program	NA	9.75
Wetlands Reserve Program	NA	NA
Wildlife Habitat Incentive Program	NA	85.0
Chesapeake Bay Region Watershed Program	NA	72.0
Voluntary Public Access and Habitat Incentive program	NA	17.0
Total, NRCS Farm Bill Programs		2035.8
JSDA Energy Programs		
Rural Energy for America Program	NA	130.0
Biomass Research and Development Program	NA	65.0
Biomass Crop Assistance Program	NA	full funding
Biorefinery Assistance Program	NA	150.0
Repowering Assistance Program	NA	15.0
Community Wood Energy Program	NA	5.0
Rural Energy Self-Sufficiency Program	NA	5.0
	0.0	370.0
Total, Farm Bill Conservation Programs	0.0	370.0
Total, Farm Bill Conservation Programs	0.0	370.0
Total, Farm Bill Conservation Programs Additional Farm Bill Conservation Programs	0.0	370.0
	0.0	10.0
Additional Farm Bill Conservation Programs		
Additional Farm Bill Conservation Programs Access to Local Foods and School Gardens	0.0	10.0

	2010	2011
	Enacted	Recommended
est Service		
Forest and Rangeland Research		
Forest Inventory and Analysis Program	66.9	76.0
Forest & Rangeland Research	245.1	265.1
State and Private Forestry		
Forest Legacy Program	79.5	150.0
Community Forest and Open Space Program	0.5	10.0
Urban and Community Forestry Program	30.4	40.0
International Program	9.8	16.0
State Fire Assistance	110.4	150.0
Conservation Education Program	20.0	40.0
National Forest System		
Land Management Planning Program	45.9	80.0
Inventory and Monitoring	170.5	180.5
Recreation, Heritage & Wilderness Program	285.1	408.1
Wildlife and Fisheries Habitat Management Program	143.0	163.0
Vegetation & Watershed Management Program	188.0	208.0
Law Enforcement Operations Program	145.0	172.0
Capital Improvement and Maintenance		
Roads Maintenance Program	166.9	250.0
Trails Program	85.4	131.0
Deferred Maintenance	9.1	25.0
Legacy Roads and Trials Remediation Program	90.0	150.0
Wildland Fire Management		
Preparedness Program	675.0	681.75
Cohesive Wildfire Management Strategy	NA	2.0
Restoration		
Collaborative Forest Landscape Restoration (CFLR) Program	10.0	40.0
Tongass National Forest Watershed Restoration Program	15.0	15.0
FLAME Fund	413.0	500.0
National Environmental Policy Act	NA	2.2
Total, Selected Forest Service Programs	3004.5	3755.7

	2010	2011
	Enacted	Recommended
COUNCIL ON ENVIRONMENTAL QUALITY 4-1		
Council on Environmental Quality	3.159	5.0
DEPARTMENT OF HOMELAND SECURITY 4-3		
Federal Emergency Management Agency		
Flood Mitigation Assistance Program	40.0	40.0
Hazard Mitigation Grant Program	99.0	NA
National Dam Safety Program	10.3	11.7
Repetitive Flood Claims	10.0	20.0
Severe Repetitive Loss Program	70.0	80.0
National Pre-Disaster Mitigation Fund	100.0	150.0
Flood Hazard Identification Map Modernization	220.0	220.0
Total, Selected Federal Emergency Management Agency Programs	549.3	521.7
Coast Guard		
Coast Guard Marine Debris	0.0	2.0
DEPARTMENT OF STATE 4-6		
UNFCCC, IPCC, Montreal Protocol	38.5	38.5
International Organizations and Programs (IO&P)		
International Conservation Programs	7.0	10.0
Total, Selected Dept. of State Programs	45.5	48.5
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID) 4-7		
Biodiversity Conservation Programs	205.0	350.0
Population Assistance Program	648.5	1000.0
Bilateral International Climate Funding		
Adaptation	122.75	300.0
Forests and Land Use/REDD	74.45	300.0
Total, Selected USAID Programs	1050.7	1950.0

	2010	2011
	Enacted	Recommended
PARTMENT OF THE INTERIOR 5-1		
Bureau of Land Management		
National Landscape Conservation System	77.7	130.0
Wildlife and Fisheries Management	50.4	65.4
Threatened and Endangered Species Management	22.6	32.6
Tackling Climate Impacts: Adapting to Climate Change	15.0	18.0
Challenge Cost Share	9.5	19.5
Plant Conservation	NA	5.0
Native Plant Materials Development	5.0	21.0
Resource Management Planning	50.0	55.0
Healthy Landscapes	7.8	30.0
Land and Realty Management	16.1	16.1
NEPA Implementation	NA	4.0
Total, Selected Bureau of Land Management Programs	254.1	396.6
Bureau of Reclamation		
Water Conservation Field Services Program	6.2	7.5
Yakima River Basin Enhancement Project	9.7	10.0
Deschutes Resources Conservancy	0.0	0.75
California-Federal Bay Delta Program	40.0	42.0
Total, Selected Bureau of Reclamation Programs	55.9	60.3

	2010	2011
	Enacted	Recommended
Fish and Wildlife Service		
Climate Change Adaptive Science Capacity		
Landscape Conservation Cooperatives	20.0	40.0
National Wildlife Refuge Inventory and Monitoring	12.0	20.0
Endangered Species Program	150.5	217.1
National Wildlife Refuge System	503.3	578.3
Migratory Bird Management	54.5	68.5
International Affairs	14.4	22.0
Office of Law Enforcement	65.8	77.0
National Fish Passage Program	4.9	6.5
Coastal Program	15.9	25.0
National Fish Habitat Initiative	5.2	6.0
State and Tribal Wildlife Grants Program	90.0	115.0
Cooperative Endangered Species Fund	85.0	100.0
Partners for Fish and Wildlife Program	60.0	62.0
Multinational Species Conservation Fund	11.5	18.0
North American Wetland Conservation Fund	47.6	52.6
Neotropical Migratory Bird Conservation Fund	5.0	6.5
Estuary Restoration Program	0.0	2.5
Total, Selected Fish and Wildlife Service Programs	1145.6	1417.0
d and Water Conservation Fund (LWCF)		
LWCF Federal Program	266.3	425.0
LWCF Stateside Program	40.0	175.0
Total, LWCF	306.3	600.0

Enacted	Recommended
2262.0	
2262.0	
2262.0	2402.0
NA	5.0
NA	2.0
233.0	573.0
15.0	50.0
10.0	25.0
8.9	18.0
20.0	20.0
NA	2.0
2.5	3.0
2551.4	3100.0
	70.0
	70.0
	15.0
=	28.4
	170.0
24.9	25.7
19.3	22.5
NA	5.0
15.0	27.0
325.1	363.6
	NA 233.0 15.0 10.0 8.9 20.0 NA 2.5 2551.4 66.5 11.0 27.7 160.7 24.9 19.3 NA 15.0

	2010	2011
	Enacted	Recommended
EPARTMENT OF TRANSPORTATION 6-1		
Office of the Secretary		
Interagency Partnership for Sustainable Communities	0.0	140.0
Transportation Investments Generating Economic Recovery (TIGER)	600.0	3000.0
Federal Highway Administration		
Congestion Mitigation and Air Quality Improvement	1751.0	3500.0
Safe Routes to School	183.0	600.0
Transportation, Community, and System Preservation Program	61.3	75.0
Nonmotorized Transportation Pilot Program	25.0	25.0
Recreational Trails Program (RTP)	85.0	100.0
Transportation Enhancements (TE)	forn	nula - funded
Total, Selected Federal Highway Administration Programs	2105.3	4300.0
Federal Transit Administration Fixed Guideway Modernization	1760.0	3800.0
New Starts/Small Starts	2000.0	3800.0
Bus and Bus Facility Program	884.0	1750.0
Clean Fuels Grants Programs	62.0	70.0
Transit Investments for Greenhouse Gas and Energy Reduction (TIGC		100.0
Total, Selected Federal Transit Administration Programs	4781.0	9520.0
Federal Railway Administration	15650	2040.0
Amtrak	1565.0	2040.0
Federal Matching Grants for State Rail Corridor Investments	2500.0 4065.0	4000.0
Total, Selected Federal Railway Administration Programs	4003.0	6040.0
EPARTMENT OF TREASURY 6-7		
Global Environment Facility	86.5	215.0
Tropical Forest Conservation Act	20.0	20.0
UNFCCC Copenhagen Green Climate Fund to Support International Climate	e Programs	
LDCF and SCCF	50.0	1200.0
REDD (under UNFCCC's CGCF)	75.0	1100.0
Clean Energy Technology Deployment under the UNFCCC's CGCF	400.0	600.0
Tax Incentives for Private Land Conservation		
Tax Deduction for Conservation Easement Donations	NA	761.0
Incentives for Land Conservation in Reforms of the Estate Tax	NA	16200.0
Total, Selected Treasury Programs	631.5	3135.0

	2010 Engeted	2011
VIRONMENTAL PROTECTION AGENCY 7-1	Enacted	Recommende
Selected Science and Technology		
Global Change and Sustainability Research	20.0	21.0
Human Health and Ecosystem Research	250.0	263.0
Integrated Risk Information System Database	5.8	6.0
STAR Fellowship Program	62.7	64.0
Hydraulic Fracturing of Oil and Gas Wells	0.0	4.0
Total, Selected Science and Technology	338.5	354.0
Total, Science and Technology	220.2	227.0
Environmental Programs and Management	• • • • •	
Regulatory Programs	3000.0	3400.0
Enforcement Program	196.0	300.0
Environmental Justice	7.2	7.5
Clean Water Act Permits	4.0	4.0
WaterSense	2.0	10.0
Estuary Restoration Program	0.0	2.5
National Estuary Program	32.5	33.0
Diesel Emissions Reduction Act Implementation	60.0	200.0
Total, Environmental Programs and Management	241.7	357.0
Superfund	1300.0	1500.0
Superfund	1300.0	1300.0
Looking Underground Changes Toules Duccess		
Leaking Underground Storage Tanks Program	112.1	120.0
Leaking Underground Storage Tanks	113.1	120.0
State and Tribal Assistance Grants		
State Revolving Funds		
Clean Water State Revolving Fund	2100.0	2500.0
Drinking Water State Revolving Fund	1400.0	2000.0
Brownfields	100.0	120.0
Non-Point Source Management Program, CWA Section 319	201.0	220.0
Pollution Control - Sec. 106	229.3	230.0
State and Local Air Quality Management	258.0	269.0
BEACH Act Grant Program	9.9	30.0
	50.7	60.0
Energy Star Tribal Air Quality Management	13.3	22.0
Tribal Air Quality Management Tribal General Assistance Program		
e	62.9	98.7
Direct Implementation Tribal Cooperative Agreements	NA	8.0
Office of Solid Waste and Emergency Response	0.0	4.5.0
RE-Powering America's Lands Initiative	0.0	15.0
Total, Selected EPA Programs	4425.1	5572.7
Environmental Education		
National Environmental Education Act Programs	9.0	14.0
	9.0	14.0
National Environmental Policy Act		
National Environmental Policy Act Implementation	NA	21.1

	2010	2011
	Enacted	Recommended
TONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) 8-1	
Overall NOAA Funding Level	3920.0	4500.0
National Marine Fisheries Service		
Marine Mammal Protection	49.7	82.0
Hawaiian Monk Seal	4.3	7.0
Sea Turtle Conservation	14.6	26.4
Expand Stock Assessments	51.0	60.0
Regional Councils and Fisheries Programs	31.9	31.9
Marine Recreational Information Program	21.07	41.06
Fisheries Information Networks	22.0	22.0
Survey and Monitoring Projects	24.0	30.0
Illegal, Unreported and Unregulated (IUU) Fishing	NA	NA
Reduce Fishing Impacts on Essential Fish Habitat (EFH)	0.5	5.0
Bycatch Monitoring and Reduction	3.4	10.0
Catch Share Fishery Management	24.6	50.0
Sustainable Tuna Management	NA	4.0
Fisheries Enforcement	65.7	75.0
Fishery Observer Program	41.1	50.9
Antarctic Research	2.7	4.8
Cooperative Research	17.6	20.0
NEPA Implementation	NA	10.0
Survey Technology	NA	6.0
Pacific Coast Salmon Recovery Fund	80.0	120.0
Fisheries Habitat Restoration Program	27.9	100.0
Total, Selected National Marine Fisheries Service Programs	482.1	756.1

	2010	2011
	Enacted	Recommended
ional Ocean Service		
Deep Sea Coral Research and Technology Program	2.5	7.0
Coral Reef Conservation Program	29.0	50.0
Response and Restoration	10.8	29.2
Marine Debris	4.0	10.0
National Estuarine Research Reserve System (NERRS)		
NERRS	23.5	34.3
NERRS Construction and Acquisition	3.9	15.0
Estuary Restoration Program	3.0	4.0
Coastal Zone Management Grants	68.2	100.0
Coastal and Estuarine Land Conservation Program	20.0	60.0
Marine Protected Areas Center	3.0	5.0
National Marine Sanctuary Program	62.0	80.0
Global Warming and Ocean Acidification	NA	8.0
Ocean Acidification	NA	15.0
Total, Selected National Ocean Service Programs	229.9	417.5
ce of Education Environmental Education Initiatives		
Environmental Education Initiatives	NA	20.0
Environmental Literacy Grants	NA	18.0
Subtotal, Enivonrmental Education Initiatives	14.0	38.0
Bay Watershed and Training Programs	9.7	14.0
Climate Change Education Grant Program	0.0	10.0
Total, Selected Office of Education Programs	23.7	62.0

	2010	2011
	Enacted	Recommended
DUCATION - LABOR - MULTIPLE AGENCIES 9-1		
Department of Education		
University Sustainability Program	0.0	50.0
No Child Left Inside Act	0.0	100.0
Healthy High Performance Schools Program	0.0	25.0
Total, Dept. of Education Funding	0.0	175.0
Department of Labor		
Employment and Training Administration		
Energy Efficiency and Renewable Energy Worker Training Prog	50.0	175.0
Corporation for National and Community Service		
Clean Energy Service Corps	0.0	100.0
National Aeronatics and Space Administration		
Climate Change Education		
Climate Change Education Grant Program	10.0	15.0
Total, NASA Funding	10.0	15.0
National Science Foundation		
Climate Change Education Grant Program	10.0	30.0

	2010	2011
CONTRACTOR DE CO	Enacted	Recommended
SS-CUTTING PROGRAMS 11-1		
cean Policy Institute		
Regional Approaches to Ocean Management		
Regional Ocean Ecosystem Assessments and Planning	NA	10.0
Regional Ocean Partnership Grants:	NA	45.0
LIDAR and Coastal Imagery	NA	20.0
Ecosystem Protection and Restoration		
Habitat Mapping and Characterization	NA	25.0
Habitat Restoration	NA	30.0
Marine Spatial Planning		
Human Use Patterns and Conflicts Analysis	NA	5.3
Multipurpose Marine Cadastre	NA	5.0
Two Regional MSP Pilots	NA	20.0
Fisheries		
Bringing U.S. Fisheries into the 21st Century: An investment in t	NA	60.0
Bringing C.S. I isheries into the 21st Century. I'm investment in v		
Total, Penobscot River Restoration Project	0.0	220.3
		220.3 9.5
Total, Penobscot River Restoration Project ational Fish and Wildlife Foundation	0.0	
Total, Penobscot River Restoration Project ational Fish and Wildlife Foundation U.S. Fish and Wildlife Service - Resource Management	7.5	9.5
Total, Penobscot River Restoration Project ational Fish and Wildlife Foundation U.S. Fish and Wildlife Service - Resource Management U.S. Forest Service - National Forest System	7.5 3.0	9.5 5.0
Total, Penobscot River Restoration Project ational Fish and Wildlife Foundation U.S. Fish and Wildlife Service - Resource Management U.S. Forest Service - National Forest System Bureau of Land Management - Management of Lands and Resources	7.5 3.0 3.0	9.5 5.0 4.0
Total, Penobscot River Restoration Project ational Fish and Wildlife Foundation U.S. Fish and Wildlife Service - Resource Management U.S. Forest Service - National Forest System Bureau of Land Management - Management of Lands and Resources National Oceanic and Atmospheric Administration Total, National Fish and Wildlife Foundation ational Strategy to Address Impacts of Global Warming & Ocean Acid	7.5 3.0 3.0 0.0 13.5	9.5 5.0 4.0 2.5
Total, Penobscot River Restoration Project ational Fish and Wildlife Foundation U.S. Fish and Wildlife Service - Resource Management U.S. Forest Service - National Forest System Bureau of Land Management - Management of Lands and Resources National Oceanic and Atmospheric Administration Total, National Fish and Wildlife Foundation ational Strategy to Address Impacts of Global Warming & Ocean Acid Council on Environmental Quality (CEQ)	7.5 3.0 3.0 0.0 13.5	9.5 5.0 4.0 2.5
Total, Penobscot River Restoration Project ational Fish and Wildlife Foundation U.S. Fish and Wildlife Service - Resource Management U.S. Forest Service - National Forest System Bureau of Land Management - Management of Lands and Resources National Oceanic and Atmospheric Administration Total, National Fish and Wildlife Foundation ational Strategy to Address Impacts of Global Warming & Ocean Acid Council on Environmental Quality (CEQ) Department of the Interior	7.5 3.0 3.0 0.0 13.5	9.5 5.0 4.0 2.5
Total, Penobscot River Restoration Project ational Fish and Wildlife Foundation U.S. Fish and Wildlife Service - Resource Management U.S. Forest Service - National Forest System Bureau of Land Management - Management of Lands and Resources National Oceanic and Atmospheric Administration Total, National Fish and Wildlife Foundation ational Strategy to Address Impacts of Global Warming & Ocean Acid Council on Environmental Quality (CEQ) Department of the Interior DoA - Forest Service/Natural Resources Conservation Service	7.5 3.0 3.0 0.0 13.5	9.5 5.0 4.0 2.5
Total, Penobscot River Restoration Project ational Fish and Wildlife Foundation U.S. Fish and Wildlife Service - Resource Management U.S. Forest Service - National Forest System Bureau of Land Management - Management of Lands and Resources National Oceanic and Atmospheric Administration Total, National Fish and Wildlife Foundation ational Strategy to Address Impacts of Global Warming & Ocean Acid Council on Environmental Quality (CEQ) Department of the Interior DoA - Forest Service/Natural Resources Conservation Service Army Corps of Engineers	7.5 3.0 3.0 0.0 13.5	9.5 5.0 4.0 2.5
Total, Penobscot River Restoration Project ational Fish and Wildlife Foundation U.S. Fish and Wildlife Service - Resource Management U.S. Forest Service - National Forest System Bureau of Land Management - Management of Lands and Resources National Oceanic and Atmospheric Administration Total, National Fish and Wildlife Foundation ational Strategy to Address Impacts of Global Warming & Ocean Acid Council on Environmental Quality (CEQ) Department of the Interior DoA - Forest Service/Natural Resources Conservation Service Army Corps of Engineers Environmental Protection Agency	7.5 3.0 3.0 0.0 13.5	9.5 5.0 4.0 2.5
Total, Penobscot River Restoration Project ational Fish and Wildlife Foundation U.S. Fish and Wildlife Service - Resource Management U.S. Forest Service - National Forest System Bureau of Land Management - Management of Lands and Resources National Oceanic and Atmospheric Administration Total, National Fish and Wildlife Foundation ational Strategy to Address Impacts of Global Warming & Ocean Acid Council on Environmental Quality (CEQ) Department of the Interior DoA - Forest Service/Natural Resources Conservation Service Army Corps of Engineers	7.5 3.0 3.0 0.0 13.5	9.5 5.0 4.0 2.5

	2010	2011
	Enacted	Recommended
Vild and Scenic River Management		
Department of Agriculture, Forest Service, Nat'l Forest System		
Forest Service Wild and Scenic River Management	NA	9.0
Creation of River Management Plans	NA	3.0
Completion of Wild and Scenic River Studies	NA	3.0
Department of Interior, Bureau of Land Management		
Wild and Scenic Rivers Management	NA	7.0
Completion of Wild and Scenic River Studies	NA	5.0
Department of Interior, Fish and Wildlife Service		
Wild and Scenic River Management, Restoration, and Studies	NA	2.0
Department of Interior, National Park Service		
Wild and Scenic River Studies	NA	1.0
Wild and Scenic Rivers Managed as units of the National Park S	0.407	16.0
Park Support - Partnership Wild and Scenic Rivers	1.74	2.9
Total, Wild and Scenic River Management	2.1	48.9
oastal Louisiana Restoration		
Atchafalaya Restoration	0.0	10.0
LCA Investigations	25.0	37.5
Existing Track LCA Construction including Beneficial Use of Dredge	0.0	22.5
Expedited Projects Preconstruction Engineering and Design	0.0	173.6
Non LCA Construction	0.0	55.0
Total, Coastal Louisiana Restoration	25.0	298.6
omprehensive Everglades Restoration Program (CERP)		
Army Corps of Engineers		
Indian River Lagoon	0.1	40.0
Picayune Strand	102.9	20.0
Site 1 Impoundment	0.1	60.0
CERP Design	49.3	45.0
C-111 South Dade project (restores flows to Florida Bay)	4.4	40.0
C-51/STA 1-E (wetlands creation)	7.2	12.0
Kissimmee River Restoration	52.2	25.0
Seminole/Big Cypress (critical project)	1.0	4.0
Modified Water Deliveries to Everglades National Park	8.0	30.0
Department of the Interior (FWS, NPS)		
CERP - Fish & Wildlife Service and National Park Service	NA	10.0
Critical Ecosystem Studies Initiative (CESI)	NA	6.0
South Florida Ecosystem Restoration Task Force	NA	1.3
· · · · · · · · · · · · · · · · · · ·	NA	8.0
USGS integrated Research, Planning, and interagency Coordinal	. =	
USGS Integrated Research, Planning, and Interagency Coordinal Department of Commerce (NOAA)		
Department of Commerce (NOAA) NMFS, NOS, OAR Programs	NA	6.0

	2010	2011
	Enacted	Recommende
ederal Energy Regulatory Commission Hydropower Relicensing		
Federal Energy Regulatory Commission, Energy Projects	NA	57.5
Department of Commerce - NOAA/NMFS Habitat Conservation		
Hydropower Relicensing	NA	12.4
Implementation of Hydropower Requirements under the EPAct	(NA	2.8
Department of the Interior - FWS Habitat Conservation, Project Plant	ning	
Hydropower Relicensing	NA	2.35
Implementation of Hydropower Requirements under the EPAct	c NA	1.5
Bureau of Indian Affairs - FERC Activities, Trust Services		
Hydropower Relicensing	NA	2.0
Bureau of Land Management - Land Resources/Wildlife and Fisherie	S	
Hydropower Relicensing	NA	1.1
Implementation of Hydropower Requirements under the EPAct	c NA	0.3
National Park Service - Hydropower Recreation Assistance		
Hydropower Relicensing	NA	1.5
Implementation of Hydropower Requirements under the EPAct	c NA	0.15
Department of Agriculture - USFS Lands Budget		
Hydropower Relicensing	NA	11.6
Implementation of Hydropower Requirements under the EPAct	(NA	0.75
Total, FERC Hydropower Relicensing		94.0
ng Island Sound Restoration Long Island Sound Restoration Act	7.0	10.0
Long Island Sound Stewardship Act	0.0	6.0
Total, Long Island Sound Restoration	7.0	16.0
nesapeake Bay Restoration		
EPA - Chesapeake Bay Program	50.0	80.0
Chesapeake Bay Targeted Watershed Grants	8.0	20.0
Army Corps of Engineers - Oyster Restoration	4.0	6.0
NOAA - Chesapeake Bay Oyster Restoration	3.0	6.0
NOAA - Chesapeake Bay Studies		
USDA NRCS Agricultural Management Assistance Program		st no funding cap
Total, Chesapeake Bay Restoration	65.0	112.0
acey Act Amendment		
Department of Agriculture/APHIS - Lacey Act Logging Amendment		
Streamlined declaration database	NA	5.0
Additional data analysts	NA	0.5
Department of State/Bureau of OES	4.0	4.0
Total, Lacey Act Amendment	4.0	9.5

	2010	2011
	Enacted	Recommende
reat Lakes Ecosystem Restoration Projects		
Environmental Protection Agency		475.0
Great Lakes Legacy Act	35.0	54.0
Great Lakes National Program Office	21.8	25.0
Army Corps of Engineers		
Great Lakes Fishery and Ecosystem Restoration	2.47	10.0
Great Lakes Tributary Modeling Program	1.14	1.5
RAP Assistance (Sec. 401)	3.41	4.0
Chicago Sanitary Ship Canal Invasive Species Dispersal Barrier	5.83	12.5
Department of the Interior - FWS		
Great Lakes Fish and Wildlife Restoration Act	1.7	8.0
Department of the Interior - USGS		
Great Lakes Science Center	14.5	15.0
Department of State		
Great Lakes Fishery Commission	21.7	22.2
International Joint Commission	8.0	8.0
Department of Agriculture (NRCS)		
Great Lakes Basin Program for Soil Erosion and Sediment Contr	0.404	5.0
Department of Commerce		
Great Lakes Basin Program for Soil Erosion and Sediment Contr	10.03	15.0
Total, Great Lakes Restoration	122.5	655.2
loweth Dinor Doctoration		
<u>Jamath River Restoration</u> Department of the Interior - FWS	2.1	2.1
Department of the Interior - Bureau of Reclamation	1.9	2.0
•		
U.S. Fish and Wildlife Service	7.2	10.0
U.S. Fish and Wildlife Service U.S. Geological Survey	0.0	10.0 1.0
U.S. Geological Survey NOAA/National Marine Fisheries Service	0.0 0.0	1.0 1.0
U.S. Fish and Wildlife Service U.S. Geological Survey	0.0	1.0

FUNDING SUMMARY TABLE (dollars in millions)

2010	2011
Enacted	Recommended
FSETS 11-1	
Army Corps of Engineers	
Inland Waterway Trust Fund Receipts (User Fees)	90.0
Cut Funding for Wasteful and Environmentally Damaging Corps of Engineers Wat	
Total, Selected Army Corps of Engineers Offsets	150.0
Department of Agriculture	
Farm Bill Subsidies	NA
Direct Subsidies to Factory Animal Farms	500.0
2 noot successors to 1 noot) 1 nnnnn 1 nnns	20010
Department of Energy	
Loan Guarantees for Dirty Energy	47.0
Fuel Cycle Research and Development	136.0
Generation IV	220.0
Nuclear Power 2010	105.0
Yucca Mountain	197.0
Fusion Energy	426.0
Mixed Oxide (MOX) Fuel	665.0
Total, Selected Department of Energy Offsets	1796.0
Department of the Interior	
Bureau of Land Management and Forest Service Public Lands Grazing	NA
Bureau of Land Management Oil and Gas Program	NA
Bureau of Land Management Hardrock Mining Reforms	30.0
Department of the Treasury	
Fossil Fuel Tax Breaks	316.0
Manufacturing tax deduction for oil and gas companies	757.0
Levy excise tax on Gulf of Mexico oil and gas	582.0
Last in, first out accounting	61000.0*
Intangible drilling costs	347.0
Geological and geophysical expenditures	41.0
Ultra-deepwater drilling research and development subsidy	NA
Passive loss	2.0
Deduction for tertiary injections	5.0
Expensing property used to refine liquid fuels	3030.0‡
Producing fuels from an unconventional source	20.0†
Volumetric Ethanol Excise Tax Credit	35.4∫
Total, Selected Department of Energy Offsets	66135.4

*over eight years ‡from FY 11-14 †from FY 11-12

Jover five years

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Oceana

Ocean Conservancy
Physicians For Social Responsibility
Population Action International
Restore America's Estuaries
Sierra Club
Southern Utah Wilderness Alliance
The Surfrider Foundation
The Trust For Public Land
Union Of Concerned Scientists
The Wilderness Society
World Wildlife Fund