

Youth in Natural Resources



Children today spend half as much time outdoors as their parents.... We must help our children get close to nature while helping the natural resources upon which their future depends.

*Ken Salazar, Secretary of the Interior
August 5, 2009*

The future success of resource conservation efforts and effective stewardship of public lands and resources relies on an engaged public that values nature. Informed citizens and stewards are developed and nurtured over time. According to Richard Louv, author of *Last Child in the Woods*, "Studies have shown that most conservation leaders credit their commitment to the environment to two sources: many hours spent outdoors, when they were children...and an adult who taught respect for nature." The initial childhood wonder about the natural world can be sustained through hands-on experiences during the school-age years and enriched through long-term engagement and involvement in natural resource programs.

The 2011 budget recognizes the importance of youth to the future of natural resource conservation as well as the importance of nature to youth and their well-being. A large body of evidence attributes improved health, particularly in youth, to nature and early exposure to the natural environment. In addition, childhood experiences with nature are associated with increased environmental awareness, which is linked to environmentally responsible behavior.

One of the recommendations of the July 2009 Outdoor Resources Review Group report, *Great Outdoors America*, is for public and private organizations to aggressively promote recreation and outdoor education for America's youth. The report underscores the need to engage early in children's lives in order to realize the lifelong health and other benefits from participating in outdoor activities.

A key theme of the report is the importance of youth programs that can engage children at a young

age; environmental education through schools, clubs, parks, nature centers, conservation groups, and others; and the inclusion of conservation employment programs and partners. In other words, there is no single answer to reconnecting children and youth to nature. The report identifies proximity as a critical component in determining participation in environmental programs and in the use of parks and open space. Thus, Interior's youth strategy will



Golden Gate National Recreation Area hosts regular programs for "knee-high naturalists" to learn the A-Zs of indigenous plants. Students gain an understanding of plant adaptation and life cycles. Older students go with their school classes on hikes through volcanoes that erupted underwater millions of years ago and learn about the geologic forces that shaped the Bay Area. Interior plans to replicate successful programs like these to reach even more youth around the country.



reach greater numbers of youth at parks, refuges, and public lands; programs that take conservation into the classroom; and promotional events through National Fishing Day, and other such events.

As the Nation's population moves to urban areas and more indoor recreational pursuits, Americans are developing a gap in their knowledge of resource conservation. Reduced engagement is most acute in the younger generations – the most important population component relative to future protection and conservation of natural resources. In the past, young people would aspire to careers in public service, working as park rangers, biologists, and recreation managers. Today, the appeal to work in natural resource jobs must compete with new vocational interests and careers that reflect our changing society. The Department of the Interior and other government conservation agencies will experience a recruitment problem as more baby boomers retire. The Federal government must be proactive in its efforts to recruit talented and capable young people who are interested in careers as natural resource professionals. Another challenge for agencies is recruiting new workers who represent the changing demographics of the labor pool.

In recognition of an expanding gap in knowledge, engagement, and appreciation for nature, the Secretary of the Interior has set forth a bold vision to engage, educate, and develop new generations of Americans with an ethic for conservation and resource stewardship.

In keeping with the Secretary's vision and commitment to youth, the 2011 budget includes \$45.4 million, an increase of \$9.3 million over 2010 for the Youth in Natural Resources initiative. The purpose of the initiative is to expand public engagement, particularly youth from underrepresented groups, in the management of the Nation's resources and to prepare young people for careers in conservation. Interior bureaus, including the Bureau of Land Management, U.S. Geological Survey, Fish and Wildlife Service, and National Park Service, will implement new, creative ways to reach America's young people and instill a life-long commitment to protect, preserve, and enjoy our natural environment and cultural treasures. The initiative builds on bureau strengths in youth programs and introduces new ways to significantly expand upon their success.

THE SECRETARY'S COMMITMENT TO YOUTH

Youth are a special interest of the Secretary of the Interior, Ken Salazar. One of his proudest legacies is the youth programs he established when he held a cabinet post in the State of Colorado. In June 2009, Secretary Salazar joined Senior White House Advisor Valerie Jarrett and several hundred schoolchildren on the National Mall to sign a Secretarial Order establishing an Office of Youth in Natural Resources at the Department of the Interior. The Secretary pointed out to the assembled crowd that President Obama and he believe that, during tough economic times, national youth programs are needed to provide jobs, outdoor experiences, and career opportunities for young people, especially minorities, tribal members, and other under-served youth.

Youth employment programs in BLM, USGS, FWS, and NPS engage thousands of young men and women in all States and Territories, from diverse backgrounds, including tribal and under-served populations and those who have little opportunity to experience the outdoors. These jobs are urgently needed because the unemployment rate among young people continues to grow. Last summer, three million young people were unemployed. The youth unemployment rate in July 2009 was 18 percent, the highest it has been during a comparable period since 1982. Youth unemployment disproportionately affects minorities.

Educational and employment opportunities offered by the Department offer a wide range of opportunities for today's youth to experience and appreciate America's heritage hands-on. In 2010, the first year

THE NEXT GENERATION OF CONSERVATION LEADERS

THE SECRETARY'S VISION

The Department of the Interior offers unlimited opportunities to engage young people to explore and connect with the great outdoors. Interior can change the lives of millions of young Americans and, in doing so, transform the Department itself by bringing in a new generation of employees. Interior will:

- **Employ youth to protect our resources and restore our environment.** I have and will continue to advocate for the resources to expand our youth employment. These are truly investments in the future that can provide immediate and direct benefits in employment and opportunity. We will recruit thousands of young people to do important work.
- **Educate youth about our lands, waters, and heritage.** Beyond direct employment, we engage millions of young people every year. We will expand our educational programs both within our parks and refuges, as well as outside of our boundaries to reach classrooms throughout the country. And we will ensure that these programs are delivering high quality, educationally important opportunities for youth of all ages.
- **Reach youth from all backgrounds.** The Department of the Interior can connect young Americans from all backgrounds with opportunities to serve our Nation. As the stewards of our Nation's lands and waters, we have a unique opportunity to reach out to under-served populations, as well as a responsibility to ensure that these lands are available and meaningful for all Americans.

of the initiative, Interior bureaus received \$20.5 million to expand programs that engage, educate, and employ youth in exploring, connecting with, and preserving the shared natural and cultural heritage represented by the lands, waters, and physical assets of the Department. Funding in 2010 included \$4.3 million to expand existing FWS education programs and other opportunities for youth participation in activities in refuges, fish hatcheries, and urban areas; \$5.0 million for NPS to expand youth internship programs that bring young people into the parks to restore habitat and assist visitors; \$5.0 million for BLM to expand youth programs for children and families, school-age children, high school and college age youth, and also to recruit and retain youth in natural resource professions; and \$2.0 million for USGS youth internships to introduce youth to earth science as an education and career option. In addition, the FWS National Conservation Training Center received \$4.2 million to coordinate training and program support activities with all Interior bureaus; provide the skills, best practices, and program resources needed to engage and mentor young people; and increase awareness of nature based careers.

The Administration has established a High-Priority Performance Goal to increase the employment of youth between the ages of 15 and 25 in Interior's conservation mission by 50 percent by 2012.

Of the \$20.5 million increase in 2010, about half is for programs at parks, refuges, and other public lands that employ youth in meaningful environmental education and service-learning programs. Many

YOUTH EMPLOYMENT

SECRETARY'S CHALLENGE

- The Secretary has challenged the bureaus to increase in 2010 the employment of youth between the ages of 15 to 25 by 50 percent over 2009, a year ahead of the High Priority Performance goal.
- The Secretary has challenged the bureaus to increase in 2011 the employment of youth by 60 percent over 2009.

YOUTH EMPLOYMENT GOALS

Bureau	2009	Percent Change	
	Employed Youth*	from 2009	
		2010	2011
BLM	2,223	+35	+45
MMS	50	+35	+35
OSM	111	+35	+35
Reclamation	181	+40	+40
USGS	742	+35	+35
FWS	1,420	+50	+75
NPS	3,466	+60	+75
BIA	17	+500	+500
Total	8,210	+50	+60

* Estimate

of these programs are accomplished with the aid of partner groups that provide additional financial resources and often match the funds made available by the bureaus. With the help of partners, the increased level of support in 2010 for these programs is expected to generate permanent and temporary employment opportunities for 50 percent more youth than employed in 2009, an increase of approximately 4,000 youth. This ambitious goal will involve bureaus and offices throughout the Department. In 2009 and 2010, projects funded under the American Recovery and Reinvestment Act further bolstered youth employment. With these funds, Interior employed over 1,000 youth in 2009 and an estimated 3,700 youth in 2010. The 2011 initiative will employ an additional 1,000 youth in BLM, FWS, and NPS.

THE 2011 YOUTH IN NATURAL RESOURCES INITIATIVE

The 2011 Youth in Natural Resources initiative builds on the 2010 program of \$36.1 million that funds operational components in BLM, USGS, FWS, and NPS and the \$4.4 million in revenues authorized under the Federal Lands Recreation Enhancement Act that NPS utilizes to fund certain youth activities. These agencies and other Interior bureaus and offices support youth activities including internships, summer youth employment programs, and outreach.

The 2011 budget dedicates \$45.4 million, an additional \$9.3 million, to expand on the BLM, FWS and NPS programs. This includes a \$1.0 million redirection in base funding for BLM to partner with the National Fish and Wildlife Foundation

to promote conservation programs on public and private lands. The Foundation will leverage the funding by more than two to one with corporate and other donations.

For NPS, there is an increase of \$5.8 million in the operations account for youth employment and education programs in 19 units of the national park system, benefitting 27 parks as part of the park base allocation. The NPS will also dedicate an additional \$2.0 million in recreation fee revenues in 2011.

The budget proposes an increase of \$2.0 million for national wildlife refuge system youth programs in the FWS Resource Management account. The FWS budget also includes an increase of \$1.0 million in its General Operations for youth partnerships with the National Fish and Wildlife Foundation.

YOUTH IN NATURAL RESOURCES (dollars in millions)

Bureau	2010	2011	Change
BLM	7.6	8.6	+1.0
USGS	4.3	4.3	0.0
FWS	13.2	15.7	+2.5
NPS	<u>11.1</u>	<u>16.9</u>	<u>+5.8</u>
Total	36.1	45.4	+9.3
<i>NPS Recreational Fees</i>	[4.4]	[6.4]	[+2.0]

Youth Programs at the Parks – With long-standing traditions of preserving and protecting national treasures, the NPS works to ensure that young Americans age five to 25 from different economic, ethnic, social, and cultural backgrounds learn about and enjoy park resources. In 2010, NPS will invest more than \$15.5 million in programs that directly expand opportunities for America’s children and families and expand the use of volunteers through groups such as the Student Conservation Association and Youth Conservation Corps. In 2009, NPS employed over 3,400 youth in Youth Conservation Corps projects, internships, and temporary positions. In 2010, the increase for youth internships will generate a 60 percent growth in youth employment opportunities. With few exceptions, the parks receiving increases are located in or very near major metropolitan areas, which should facilitate easier engagement of urban youth from diverse ethnic and economic backgrounds.

The youth programs foster a strong relationship between youth and the natural and cultural resources managed by NPS. There are numerous park managers, past and present, who developed a life-long commitment to parks through these programs. The cadre includes Robert Stanton, former Director of the NPS, who began his career as a Youth Conservation Corps enrollee. Participants learn valuable natural and cultural resource management skills and develop a greater appreciation of American history and our Nation's most renowned ecosystems.

The 2011 NPS increase of \$5.8 million in park operational funding will establish or enhance programs that introduce youth to the park mission of conserving and preserving the Nation's treasures. Over half of the increases are for youth employment programs designed to engage underserved populations. The programs will lead to employment opportunities for additional youth in 2011 and will increase youth employment by 75 percent over 2009. The programs involve work in resource management, interpretation and visitor services, maintenance, and special events. Examples of proposed park youth programs include:

- The \$249,000 increase request at Chamizal National Memorial in Texas will fund educational and employment opportunities for minority youth.
- An increase of \$220,000 at Canyonlands National Park will lead to the expansion and enhancement of curriculum-based youth education programs at four parks in southeast Utah. The four parks are located in large rural counties, with significant communities of Hispanic and Navajo populations. The increase will fund both the Canyon Country Outdoor Education program and the educational element of the Canyon Country Conservation Corps.
- An increase of \$313,000 for 15 National Capital Region parks in and around Washington, D.C., will enhance a youth employment program which attracts an urban minority population and provides job readiness training, progressive work assignments, skill development, and educational and vocational experiences.
- An increase of \$129,000 at Lowell National Historical Park in Massachusetts will

foster partnerships that will engage urban youth from diverse ethnic and economic backgrounds within communities surrounding Lowell and three other parks in New England. The program will engage 75 youth in experiential learning using park resources, leadership development, and occupational skills training. In addition, eight to 16 interns will be recruited for jobs in resource management, interpretation, and visitor services annually.

- The \$306,000 increase for the Anchorage Interagency Visitor Center in Alaska will create urban education programs for the local Native Alaskan community developed in concert with Native Alaskans.

The Federal Lands Recreation Enhancement Act authorizes NPS to collect recreation fees at select parks. Fees are used to improve visitor services and enhance the visitor experience. The majority of



Grace Talmadge worked with the Student Conservation Association to fix campsites along the Flat Creek Trail in North Cascades National Park. She created new tent pads and dug out fire pits. She also re-routed a trail that had been washed away by a flood. Grace says: "The experience was filled with thrills and plenty of spills. It's great to know that hikers will appreciate all our hard work now and ten years from now." She dreams of one day joining the National Park Service. We are creating pathways for Grace and others like her to fulfill their dreams and serve at the Interior Department.

the revenues return directly to the park where they were collected. The NPS estimates that it will collect \$173.0 million in revenues in 2011. In recent years, NPS has dedicated \$4.4 million in revenue to youth projects that benefit the visitor experience. The NPS will increase that amount to \$6.4 million in 2011.

Youth Programs at National Wildlife Refuges

– Hundreds of national wildlife refuges offer employment, education, and recreation opportunities that connect youth with the outdoors. In 2009, the refuges, fish hatcheries, and other FWS operations employed over 1,400 youth. The operational request in 2010 will increase that number by 50 percent. In 2011, the proposed increase, which will partly be leveraged through a partnership with the National Fish and Wildlife Foundation, will increase youth employment by 75 percent over 2009.



Joe Pete is a young Native Alaskan. Last summer, he counted salmon on the Kwethluk River for the Fish and Wildlife Service. The Native Alaska Science and Engineering Program recruits and retains Alaskan Native and indigenous Americans for science and engineering positions. Mike Rearden, former manager of the Yukon Delta Refuge, notes: "A Native student who has grown up on the Yukon-Kuskokwim Delta and goes on to college to obtain a degree in biology will bring valuable skills and knowledge to a refuge biologist position in this region." We hope to expand this program and create others to bring on board the next generation of talented employees.

The FWS has existing partnerships with friends organizations, volunteers, educational institutions, and local conservation organizations. For example, FWS's longstanding Shorebird Sister Schools Program engages students in learning about the mechanics of the shorebird's annual migration along the Pacific Flyway. These connections foster understanding and appreciation of the need to conserve America's migratory birds and their natural habitats. The FWS youth programs also provide opportunities to promote career opportunities and public service as part of a life-long commitment to natural resource conservation.

The 2011 budget will build upon existing proven programs and offer public service opportunities on refuges, science-based education and outdoor learning laboratories, and engage young Americans in wildlife-related activities such as monitoring. The 2011 budget includes an increase of \$2.0 million for the Youth Conservation Corps program to provide opportunities for young adults from varied backgrounds to work together on conservation projects such as maintenance and construction, habitat management, and visitor services. The budget will result in youth employment totals 75 percent higher than in 2009.

National Fish and Wildlife Foundation Partnerships

– Congress created the National Fish and Wildlife Foundation to foster private sector-government partnerships for the conservation and management of fish, wildlife, and plant resources of the United States. The budget provides an increase of \$2.0 million for this purpose. This includes \$1.0 million each in FWS and BLM, to foster youth programs through public-private partnerships managed by the Foundation.

The public-private partnership expanded with these increases will leverage the Federal funding with at least an equal amount of privately financed contributions. Funds will be competitively awarded to friends groups, the Youth Conservation Corps, non-governmental organizations, and others who will work with FWS and BLM managers to develop innovative conservation employment opportunities for youth. The primary focus of the grant program will be to preserve and protect priority species and their habitats on both public and private lands. Summer employment opportunities will be specifically targeted, but after-school and weekend employment programs will also be considered.

The Foundation will seek matching funds for Federal grants through partnerships with corporations who participate in the commerce of recreational goods and services. By reaching out to private partners, the Foundation, BLM, and FWS will be able to engage a broader audience of participants and incorporate programs that can attract youth from urban areas and sectors of the population that may not be adequately served by current programs and introduce these activities to youth. Historically, the Foundation has leveraged Federal funds with non-Federal matching contributions at a two to one or greater ratio.

Environmental education will be an integral aspect of the grant program. Eligible grantee organizations will need to demonstrate how environmental learning goals have been incorporated into the traditional job opportunity. To assist potential grantee organizations, the National Conservation Training Center will work with the Foundation to develop learning goals, curricula, and other training material that can be made available through the web or through a handbook. The material will include both lessons and suggestions for hands-on educational activities that can be conducted outdoors.



THE SHOREBIRD SISTER SCHOOLS PROGRAM

The Shorebird Sister Schools program is a science-based environmental education program designed to engage students in learning about shorebirds and their conservation. The program began as part of the Kachemak Bay Shorebird Festival hosted by the Alaska Maritime National Wildlife Refuge, the Homer Chamber of Commerce, and local public schools to help students better understand the mechanics of the shorebirds' annual migration along the Pacific Flyway to arrive to nest in Alaska each year. It also provides opportunities for students to learn about endangered, threatened, and vulnerable species and their habitats in their local area.

Every May for two short weeks, thousands of shorebirds arriving from the south descend on the town of Homer in Kachemak Bay, Alaska, en route to their Arctic breeding grounds. A local teacher proposed to build an information-sharing e-mail network among schools



located all along the Pacific Flyway, from Alaska down to Latin America, where many birds spend the winter. Students from each migratory stopover site could monitor the progress of shorebird migration and report their observations by sending e-mail to all other schools participating in the program. Starting in 1994, 17 schools from Alaska to California were connected to the shorebird information network. Eventually the network grew to include schools all across the U.S. and beyond to many Latin American countries, Japan, and Russia.