Restoring America's Everglades

Progress and Next Steps for Restoring a Treasured Landscape and Sustaining a Way of Life

Credits: Carlton Ward, Jr./ CarltonWard.com

There are no other Everglades in the world. They are, they have always been, one of the unique regions of the Earth, remote, never wholly known...It is a river of grass."

- Marjory Stoneman Douglas, The Everglades: River of Grass, 1947

JULY 13, 2012

Executive Summary

The Everglades ecosystem has helped shape the natural heritage, culture, and economy of Florida and the Nation. Recognized worldwide as a unique and treasured landscape, the Everglades is a one-of-a-kind network of natural resources that makes up the largest wilderness east of the Mississippi River, and the largest subtropical wilderness in the United States. The Everglades is the primary source of drinking water for more than 7 million Americans – more than a third of Florida's population – and a cornerstone of the regional economy, supporting the State's estimated $67 billion tourism industry,[1] $13 billion outdoor recreation economy, [2] and $100 billion agriculture sector. [3] Over the past 100 years, population growth, development, the excessive drainage of wetlands, and the resulting changes in water flow and quality have caused great stress to this fragile ecosystem, and stresses are only expected to grow.

For many years, efforts to restore adequate supplies of high quality water to Everglades National Park and the surrounding region were at best slow, and often times stalled. Lawsuits, State-Federal disagreements over respective commitments, and bureaucratic delays led to years of limited activity and dispute. Over the past three years, the Obama Administration has reversed that course. President Obama has made restoring the iconic Everglades a national priority. Since 2009, we have taken urgent action to reinvigorate Federal leadership in Everglades restoration by significantly increasing Federal investment, constructing critical projects, and partnering with the State of Florida, Tribes, local communities, and local ranchers and farmers on restoration measures. Using the partnerships and community-led approach that is a hallmark of the President's America's Great Outdoors initiative, the Administration has invested more than $1.5 billion in Everglades projects and initiatives that will make a measurable impact on the ground, including nearly $900 million to jump start key construction projects that will restore water flow and essential habitat. And the President has requested an additional $246 million in the Fiscal Year 2013 Budget to build on this progress and continue the investments, partnerships and projects that will return the Everglades to health.

Working in partnership with the State of Florida, the Administration has restored more than 3,000 acres of the floodplains along the Kissimmee River; is constructing the first mile of bridging for the Tamiami Trail to restore water flow to Everglades National Park; has worked with landowners to improve habitat and water quality on more than 400,000 agricultural acres; and has begun implementing key components of the Comprehensive Everglades Restoration Plan to make more water available for environmental, urban and agricultural use. We have also reached an historic agreement with the State of Florida to make essential water quality improvements that will ensure the Everglades receives the clean water it needs, including $879 million in State commitments for water quality projects.

The Everglades is a good investment: A recent economic study[4] estimated that every dollar spent on Everglades restoration has the potential to yield four dollars in economic benefits for the South Florida economy. Restoration projects launched by the Administration already have generated 6,600 jobs and are expected to generate more. There is significant work still needed to achieve restoration goals, and we are committed to continuing the momentum we began in 2009. This report identifies the progress made, and steps needed to restore the natural splendor of the Everglades and protect the area's economies and ways of life.

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[1] VISIT FLORIDA. *Inside VISIT FLORIDA.* http://www.visitflorida.org/AM/Template.cfm?Section=Inside_Visit_Florida

[2] The Nature Conservancy. *Economic Benefits of Land Conservation: A Case for Florida Forever.* http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/florida/howwework/economic_benefits_of_land_conservation-2.pdf

[3] Florida Department of Agriculture and Consumer Services. *Florida Agriculture by the Numbers.* http://www.florida-agriculture.com/brochures/P-01304.pdf

[4] Mather Economics. *Measuring the Economic Benefits of America's Everglades Restoration: An Economic Evaluation of Ecosystem Services Affiliated with the World's Largest Ecosystem Restoration Project"* everglades.3cdn.net/90fb17eeadba310af8_6tm6barv5.pdf

Restoring Water Quantity, Timing and Distribution

Credit: Susan Jackson

Decades of water management activities have substantially reduced the amount of water entering the Everglades, drying the ecosystem and putting it at risk from invasive species, severe fires and other stressors. In fact, 1.7 billion gallons of water that once flowed through the ecosystem now bypass the Everglades and go directly to the ocean or gulf. We must restore a more natural pattern of flows and ecologically improve water and habitat management.

Progress

Starting Key Construction Projects: Through the substantial investments made by the Administration and through the partnership between the Army Corps of Engineers and the South Florida Water Management District, the Administration is building several major projects to restore natural quantity, timing and distribution of water to the Everglades, including:

- **The Tamiami Trail One Mile Bridge**: In one of the most significant steps toward successfully restoring the Everglades, the Administration is constructing a one-mile bridge to elevate the Tamiami Trail to allow more natural water flows into the southern Everglades.
- **The Site-1 impoundment in Palm Beach County**: When completed, this project will leave more water in the Arthur R. Marshall Loxahatchee National Wildlife Refuge to protect important habitat and provide 4 billion gallons of drinking water for Palm Beach County.
- **The Indian River Lagoon-South Project**: This project will restore more natural flows to the lagoon and allow for more ecologically sound water management in the Everglades system.
- **The Picayune Strand Project**: By plugging canals and removing roads built for a failed residential development area, this project will restore flow to the 55,000 acres of Picayune Strand and facilitate the restoration and return of natural vegetation and wildlife, including the endangered Florida panther.

Completing Planning on Second Generation CERP Projects: The Comprehensive Everglades Restoration Program (CERP), a 30-year program authorized by Congress in 2000, is the largest single component aimed at restoring the greater Everglades ecosystem. CERP focuses on modifying the massive flood protection system in South Florida to restore the Everglades and meet other water-related needs of the region. After a decade of little progress on CERP, the Administration worked with partners to resolve conflicts and delays, dedicated funding to construct several CERP projects, and completed planning for several more, including:

- The C-111 spreader canal project, which will keep more of the natural rainfall and water flows within Taylor Slough, restoring Everglades National Park habitat and water flow to Florida Bay. This project is already under construction by the State of Florida – completing the planning for it allows it to be considered for Congressional approval to receive Federal funding.
- The C-43 Reservoir along the Caloosahatchee River that will improve salinity in significant fish nursery habitat in the Gulf of Mexico.

In addition, the Army Corps is completing planning for the following CERP projects:

- The Broward Water Preserve Area Project to reduce harmful discharges of stormwater into the Everglades.
- The Biscayne Bay Coastal Wetlands Project, which will adjust the quantity, quality, timing and distribution of fresh water entering the bay and Biscayne National Park to help restore the ecology of Biscayne Bay, including the freshwater wetlands, tidal creeks and near-shore habitat. This project is also already under construction by the State.

Expediting Planning to Restore the Heart of the River of Grass: The Central Everglades Planning Project (CEPP) is aimed at restoring the flow of clean water to the central and southern Everglades, the heart of the River of Grass. In November 2011, the Army Corps of Engineers initiated an expedited planning process for the third generation of CERP projects as part of a major agency effort to reduce project planning times. This expedited process shortens the planning timeline from an estimated six years to 18 months, and will include key CERP features to deliver clean water from Lake Okeechobee to the Everglades. The plan also will address the restoration of flow through the central and southern Everglades to rehydrate areas that are currently too dry and alleviate flooding conditions in areas that are currently too wet.

Studying Additional Bridging Across Tamiami Trail: The Administration completed a study of additional bridging on the Tamiami Trail, beyond the 1-mile of bridging currently under construction. Additional bridging could restore a vast majority of historic water quantity and flow to Everglades National Park when combined with other planned work in the Everglades Agricultural Area and Water Conservation Areas.

<u>Moving Forward</u>

Advancing CERP Projects: The Administration is committed to continuing progress on CERP projects that are critical to restoring more natural water flow in the Everglades.

- The President included $91 million in his Fiscal Year 2013 Budget to continue progress on key CERP projects, including Picayune Strand, Indian River Lagoon, and design for additional projects.
- The Administration also has proposed $2 million in Fiscal Year2013 for Seminole Big Cypress and Ten Mile Creek projects that are designed for water control, storage, and treatment.
- The Corps will complete the Central Everglades Planning Project so that the next suite of CERP projects is planned and ready for authorization.

Advancing Other Critical Construction Projects:

- In addition, the President's Fiscal Year 2013 Budget includes $8 million to complete the one-mile Tamiami Trail Bridge, which will help restore more natural water flow to Everglades National Park and Florida Bay.
- The President's budget also proposed $32 million for other projects important to water quality and flow, including the West Palm Beach Canal and South Dade County Canal, which will modify former flood control projects to treat storm water runoff and deliver freshwater flows, respectively.

Improving Water Quality

Agricultural and stormwater runoff has degraded water quality in the Everglades. Better water quality will support agriculture, tourism, municipal water supplies, recreation, and wildlife.

Progress to Date

Setting Limits on Phosphorous Pollution: In June 2012, the Administration reached an historic agreement with the State of Florida to reduce harmful phosphorus pollution in the Everglades, including an $879 million commitment by the State for projects that will improve water quality. The agreement for the first time establishes a science-based protective limit on phosphorus pollution discharges into the Everglades, projects to remove phosphorus to achieve that limit, a robust plan of monitoring and scientific research, and an enforceable framework to ensure compliance.

Reducing Agricultural Runoff: Since 2009, USDA has invested more than $25 million to help farmers voluntarily implement conservation practices on their lands – such as nutrient management and irrigation efficiency improvements – that are improving the quality of water flowing into the Everglades

Moving Forward

Implementing Phosphorous Pollution Controls: The Administration will monitor Florida's implementation of the historic plan to reduce harmful phosphorus pollution in the Everglades, and undertake water quality and biological monitoring to assess the rate of progress of restoration. The Administration has also proposed $1.7 million in Fiscal Year 2013 for water quality monitoring, addressing harmful nutrient pollution, and other critical Clean Water Act efforts to improve water quality.

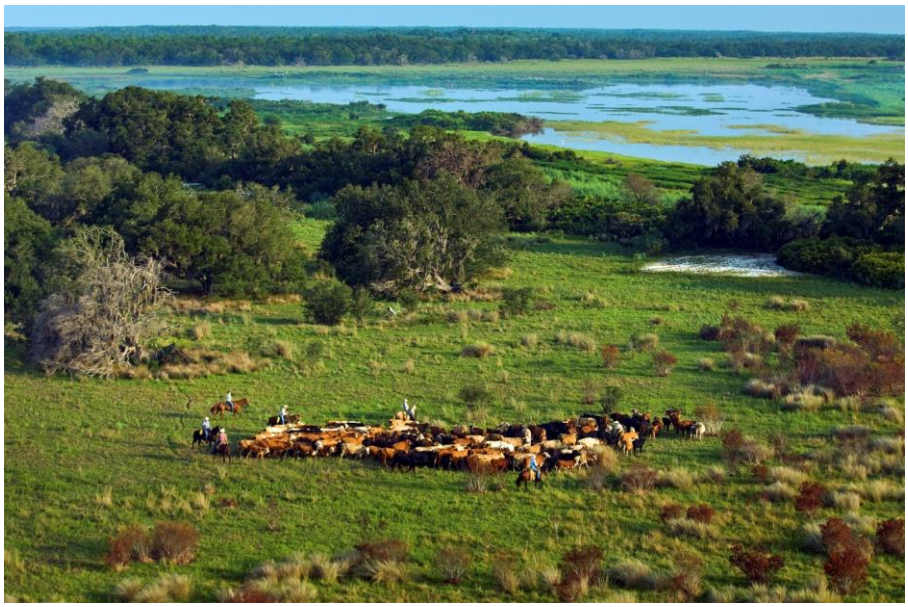
Investing in Florida's Agricultural Lands: USDA will continue to help farmers voluntarily implement conservation practices to improve water quality and availability on their lands.

Credit: National Park Service

Supporting Working Lands and a Way of Life

Environmental degradation and rapid development threaten the way of life to those who depend on working lands. We must focus on expanding partnerships and providing assistance for conservation practices that help farmers and ranchers maintain their way of life.

Credit: Carlton Ward, Jr./ CarltonWard.com



Progress

Partnering with Farmers and Ranchers: The Administration has developed partnerships with Florida's ranchers and farmers as the cornerstone of our efforts to improve water quality and protect habitat in the Everglades watershed. These partnerships support Florida's $100 billion agricultural economy and proud ranching heritage. Since 2009, the U.S. Department of Agriculture has invested more than $370 million to support voluntary conservation activities on private working lands in the Everglades ecosystem. Progress includes:

- Enrolling nearly 100,000 acres in wetland conservation easement programs. These projects enhance wildlife habitat, improve water quality and availability, and help eradicate invasive species in the Everglades watershed.
- Enrolling more than 4,500 acres in South Florida into the Grassland Reserve Program, a voluntary conservation program that emphasizes support for working grazing operations.
- Providing approximately $25 million through the Environmental Quality Incentives Program to agricultural producers to help install conservation practices on working agricultural lands in the 16-county South Florida Water Management District.
- Enrolling more than 7,000 acres of farm and ranch lands into Wildlife Habitat Incentives Program (WHIP) contracts, in which farmers and ranchers voluntarily implement conservation practices that improve wildlife habitat on those acres.

Moving Forward

Taking an "All Lands" Landscape Approach: The Administration will continue to partner with farmers, ranchers and other land owners in the larger Everglades landscape to protect and restore habitat in the Everglades ecosystem, including its headwaters.

- USDA will build on recent investments in its easement and other conservation programs, working with private landowners to target investments that will improve water quality, water use efficiency, and wildlife protection and helping ensure that Florida's ranchers and farmers remain productive today and for future generations.
- USDA and the U.S. Fish and Wildlife Service will continue working with other Federal and State partners across private and public lands within the Everglades watershed to increase wildlife corridor connectivity and improve water quality and availability in the basin.

Restoring Wildlife Habitat



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Invasive species and habitat destruction have stressed the natural ecosystem of the Everglades. More than 60 species found in the Everglades are on the federal threatened or endangered lists, and many more are rare, species of special concern, or included on state lists. We must restore essential habitat and eradicate nonnative species to allow the ecosystem to recover and thrive.

Progress

Implementing Key Habitat Restoration Projects: By partnering with local landowners, conservation stakeholders, and state, tribal and local governments, the Administration has made significant gains conserving essential habitat in the Everglades headwaters region. Following extensive public engagement, the Administration has launched projects fundamental to restoring the natural habitat that serves as the home to native species within the Everglades.

- Since 2009, the Administration has invested more than $130 million to restore flood plains and waters that flow from the Kissimmee River, restoring more than 3,000 acres of habitat for a variety of species in that vital region of the Everglades.
- In May 2012, USDA, the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers collaborated with private partners to protect a 1,278-acre piece of land critical for wildlife passage and the natural recovery of the Florida panther. The American Prime property along the Caloosahatchee River in Glades County is a key natural landscape through which the panthers can disperse from habitats further south. The Administration is also moving forward with significant projects to restore 55,000-acres of native Florida wetlands and uplands through the Picayune Strand Project in the southwestern part of the State, which will improve water quality and benefit native species, including the endangered Florida panther.
- In January 2012, the U.S. Fish and Wildlife Service established the 150,000-acre Everglades Headwaters National Wildlife Refuge and Conservation Area in the Kissimmee River Basin. Created with the support of local ranchers, farmers and landowners, this project will support working ranches and connect existing conservation lands; create wildlife corridors; enhance water quality, quantity and storage;

protect rare species; and provide opportunities for wildlife-dependent recreation.

- In 2010, USDA worked with landowners to protect 26,000 acres along Fisheating Creek, creating the largest contiguous USDA wetlands easement in the nation. Fisheating Creek is one of the last free-flowing waterways entering Lake Okeechobee. This restoration will improve water quality and help protect 19 Federally Endangered Species including the red-cockaded woodpecker, wood stork and Florida panther. During the past three years, USDA has enrolled an additional 50,000 acres in conservation easements in the Northern Everglades, complementing the USFWS's efforts to protect wildlife and improve water quality.

Combating Invasive Species: To help restore the Everglades to their natural state, the Administration in partnership with the State of Florida broke ground on the Melaleuca Eradication and Other Exotic Plants Research Annex to focus on developing bio-controls that can help combat the threat of invasive animal and plant species. In addition, the Administration has implemented strategies for controlling invasive species across the entire 144,000 acres in the Arthur R. Marshall Loxahatchee National Wildlife Refuge, the northernmost remaining portion of the historic Everglades, where the invasion of this ecosystem by non-native species poses the most significant threat.

Banning the Burmese Python: The invasive Burmese python has caused substantial damage to wildlife in the Everglades, including threatened and endangered species. State and Federal agencies have dedicated significant resources to address the threats posed by pythons in the Everglades, and could be forced to dedicate more if they continue to spread. In 2012, the U.S. Fish and Wildlife Service finalized a rule banning

the importation and interstate transportation of the Burmese python and three other nonnative constrictor snakes that threaten the Everglades and other sensitive ecosystems across the United States. This rule shuts off one source of supply of these invasive reptiles, which have no known predators, allowing the agencies to focus efforts on eradication.

<u>Moving Forward</u>

Investing in Healthy Habitat: The Administration is committed to continuing progress on projects that restore and conserve essential Everglades habitat.

- In addition to the $91 million proposed for key CERP projects, the President's Fiscal Year 2013 Budget includes more than $27 million for the Kissimmee River Restoration Project that is focused on restoring flood plains and waters that flow from the Kissimmee River.
- The Administration has also proposed $3 million in Fiscal Year 2013 to help establish the Headwaters National Wildlife Refuge and Conservation Area. Acquisitions and easements from willing landowners would protect, restore, and conserve habitat for hundreds of species, provide the public with wildlife-dependent recreational opportunities, and directly improve water quality and quantity in the Everglades Watershed. These activities will complement CERP goals and help protect the water supply for millions of people.
- USDA will restore an additional 24,000 wetland acres in the Northern Everglades watershed using approved funding.

Enhancing National Parks and Refuges in South Florida: The Administration will invest $51 million to operate national parks and refuges in southern Florida, monitor key ecosystem indicators, and implement DOI's CERP planning and projects.

Conclusion

When President Obama took office, he made restoring the Everglades a national priority. Now, having taken some of the first tangible steps to send clean water where and when it is needed most, we will continue our partnerships with the State of Florida, local landowners, Tribes, and communities to advance restoration and build on our historic progress.

With more than $1.5 billion invested in key projects and initiatives since 2009, and an additional $246 million in the President's Fiscal Year 2013 Budget, we have demonstrated our commitment to supporting large-scale restoration projects, habitat conservation, technical and financial assistance programs, and other measures critical to the restoration of the Everglades ecosystem. After decades of delays, we still have much to do to reverse the decline of the magnificent River of Grass. But by building on our historic progress since 2009, together with our partners we can restore the natural splendor of the Everglades, and continue to deliver results for Floridians, and all Americans.