TESTIMONY OF
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Introduction

Good morning Mr. Chairman and members of the Committee. I am Tom Gibson, Associate Administrator for Policy, Economics, and Innovation at the U.S. Environmental Protection Agency. As EPA's representative on the South Florida Ecosystem Restoration Task Force, I am pleased to be here on Administrator Whitman's behalf to discuss progress in restoring one of the nation's greatest and most unique natural resources - the Florida Everglades.

Two years ago, Congress approved a $7.8 billion Comprehensive Everglades Restoration Plan (CERP) and, in doing so, launched what many are calling the largest restoration effort ever undertaken in the world. This ambitious and forward-looking agenda will enable progress toward a more sustainable South Florida and preserve an ecological treasure for generations to come.

EPA is a strong supporter and active participant in making CERP work. Our goal is to maximize the environmental benefits of all 68 strategic components. To that end, we are working with our sister agencies in the federal government, along with State and local governments, Indian Tribes,

agriculture, and other stakeholders to address water quality, water quantity, and a host of other issues that affect ecological conditions. We offer technical, financial, legal and regulatory assistance to tackle the many challenges that must be overcome if the Everglades are to survive and flourish. We have set up a small office in South Florida that enables us to engage more fully and consistently on issues than could ever be expected from our national and regional locales.

We also contribute to restoration efforts through ongoing responsibilities under the Clean Water Act, the Safe Drinking Water Act and other Federal laws. These ongoing tasks are not specifically referenced in CERP, but are vital to achieving progress in the Everglades and the larger South Florida region.

I'd like to discuss the progress we are making in the Everglades through our work on CERP and our national environmental responsibilities. But first I'd like to provide some background on the ecological conditions that are driving our work and that of so many others.

Conditions in the Everglades

It has been less than two years since CERP was approved. During that time we have laid the groundwork for restoration to proceed as envisioned. We are working well together and, no doubt, each agency could point out signs of progress. But the fact is we are still in the very early stages of what will be not just a multi-year, but a multi-decade effort. Indeed, it took more than fifty years to get

to where we are today, and it is reasonable to expect that it will take at least a similar time frame to achieve our restoration goals.

The conditions we observe in the Everglades today can be traced back to the middle of the last century. In 1948, the United States launched the Central and Southern Florida Project to provide water control for an 18,000 square mile area covering 16 counties. The goal was a laudable one - providing flood protection and urban and agricultural water supplies. That project fundamentally transformed South Florida, and created significant economic opportunities. But the environmental impacts have been significant.

Today there are 6 million people living in the region, and the combined effects of population growth, water diversions and other stressors are severe. Only about half of the original Everglades remain. Water flow has dropped by 70 percent, and approximately 1.7 billion gallons of water are lost to the ocean and gulf daily during the rainy season, degrading the estuaries as it passes through. There are 69 threatened or endangered species and a 90 percent reduction in wading bird populations. Water quality often violates state water quality standards, and one million acres of the ecosystem are under health advisories for mercury. High levels of nutrients are causing changes in the natural vegetation, and 1.5 million acres are infested with invasive exotic plants.

EPA Activities in Support of CERP

EPA had a major role in the development of CERP, and we will continue to play an important role in its implementation. One of our first responsibilities is to provide input on the federal regulations that will enable implementation to begin. These programmatic regulations, as they are known, will ensure that the CERP goals are achieved. Developed by the U.S. Army Corps of Engineers (the "Corps of Engineers"), in concurrence with the Department of the Interior and the State of Florida, and in consultation with EPA and other Federal agencies, they are to be completed by the end of the year and are currently undergoing public comment.

EPA is also a major partner in the development of performance targets for two-thirds of the 68 individual CERP components. We are assisting in the development of reclaimed water reuse criteria for several large wastewater treatment plants in Dade and Palm Beach Counties and in the review of individual projects under the National Environmental Policy Act.

In addition, EPA is working with the State on the evaluation and permitting of Aquifer Storage and Recovery (ASRs) wells. These wells provide underground capacity for water storage, and can help replace the natural capacity that has been lost in the Everglades through years of draining and ditching. Restoring at least a portion of this storage capacity is essential to accommodating the region's water needs. To this end, CERP calls for use of more than 300 ASR wells.

However, there are some issues we have to work through first. One relates to Federal requirements under the Safe Drinking Water Act. The waters being considered for storage are either surface waters or shallow ground waters, and they may not meet all of the required drinking water standards. This is problematic because state regulations, consistent with Federal regulations for Underground Injection Control, require standards to be met prior to injection. Given the volumes of water proposed for storage - 1.7 billion gallons a day - the treatment potentially required to meet those standards would be fairly expensive.

In light of the potential environmental benefits associated with ASR well storage and the high costs of treating the water prior to injection, EPA agreed to utilize a "risk based" approach to permitting ASR wells in South Florida . Consideration is provided if the contamination in the waters is limited to coliform and similar microorganisms that could be expected to "die off" underground and not pose a risk to human health. EPA will work with the State to demonstrate how this approach meets the "no endangerment" language of the Safe Drinking Water Act and achieves the goal of the ASR storage effort. The Underground Injection Control program in the State, which has been approved by EPA, may have to modify its regulations before this new permitting approach could be used.

The Corps of Engineers and the South Florida Water Management District are co-sponsoring pilot tests of ASR wells with EPA support. These wells are in various stages of development, with some having already been constructed. Our co-sponsors have also launched a regional study to

evaluate the potential widespread impacts that a network of ASR wells could have on the region's surface waters, groundwater, and aquifers.

Other Contributions to Everglades Restoration

As a member of the South Florida Ecosystem Restoration Task Force and through the normal course of running its national programs, EPA is working with its sister agencies and other stakeholders on additional issues that will enhance and accelerate restoration.

Phosphorous Reductions

One priority is reducing phosphorous loads which can overload and overwhelm aquatic ecosystems. In compliance with the Florida Everglades Forever Act (the "EFA") and a 1992 Consent Decree between the Federal Government, the South Florida Water Management District and the Florida Department of Environmental Protection (the "Federal Consent Decree"), the State must propose a numeric phosphorus criterion by the end of 2003. The proposed criterion must be submitted to EPA for review and approval. In order for EPA to grant approval, we must find that the proposed criterion will provide adequate protection for Everglades waters.

The Florida Department of Environmental Protection has initiated their rule-making process, proposing a new criterion of 10 parts per billion (ppb) to their Environmental Regulation Commission (as required by State law) prior to submitting it to EPA. We anticipate this process will extend into 2003. EPA's Region IV office in Atlanta is actively working with the State to provide support and input regarding Federal Clean Water Act requirements for water quality standards adoption and approval.

In addition, EPA is working with the South Florida Water Management District and the Corps of Engineers as they build and operate approximately 46,000 acres of wetlands, required by the EFA and the Federal Consent Decree, that can be used to reduce phosphorus and other contaminants from urban and agricultural runoff. The phosphorous concentrations from the already completed, but not yet optimized, Stormwater Treatment Areas ("STAs"), are in the 20 to 25 ppb range. EPA is funding research to find ways to lower those concentrations further and to investigate chemical-based treatment technologies.

Under the Clean Water Act, EPA must review all NPDES permits issued by the State of Florida for STAs. While earlier permitting actions have been challenged, EPA, the State and many stakeholders have reached agreement on language that authorizes the discharges through 2006, and since then, challenges have been limited.

Wetlands Protection

Loss of wetlands remains one of the biggest threats to the Everglades. The South Florida region is one of the fastest growing in the country, with numerous large residential and commercial developments in various phases of planning, permitting and construction. Because major portions of the region are composed of wetlands and critical habitats for endangered species, wetlands permitting has been receiving a great deal of attention by the regulatory agencies and other stakeholders.

Under Clean Water Act Section 404, EPA will be reviewing all wetlands permits for Everglades restoration projects as well as for development in the South Florida area. EPA has been working with the Corps of Engineers on the development of special permitting review criteria to be used specifically in the Southwest Florida areas. We have also stationed two members of our South Florida office staff in Ft. Myers to work exclusively on wetlands issues.

Having this presence enables us to actively engage with local organizations that are working on wetlands protection. For example, the Watershed Enhancement and Restoration Coalition is focusing on permitting issues, and was formed as a result of community interest in addressing cumulative impacts of multiple and large wetlands impacts in the region. Our participation is already producing benefits. Lee County has expressed a strong desire to work with EPA to add water quality treatment and compliance monitoring to their current projects and long term master plan.

EPA is also working closely with the newly formed Southwest Florida Watershed Council, a partnership of public organizations and developers united to improve local and regional water quality conditions. The Council is currently focused on developing community support for a storm water utility to reduce the damaging effects of storm water discharges to coastal waters.

Mercury

Another issue that we are working on is mercury contamination. We are finding that the highest mercury concentrations occur in remote portions of the Everglades, and that the major sources of

contamination are rainfall and atmospheric dry deposition. The estimated contributions from local versus regional and global atmospheric mercury sources vary widely.

To more accurately quantify these contributions and to better understand the ecological implications of mercury contamination, EPA is participating in a multi-year, Federal-State-private monitoring and research study. From 1989 to 1999, our partners contributed about $30 million. Additional research is still underway. Not only are the results providing insight for addressing mercury contamination in South Florida, the research is providing valuable information that can help with Clean Water Act and Clean Air Act responsibilities nationally.

Florida Bay

EPA is also actively involved in research that aims to restore Florida Bay. About eighty percent of this body of water lies within the Everglades National Park, and so restoration decisions made on the mainland will affect its condition. Up until the late 1980's, those conditions were very good. Characterized by clear waters and lush seagrass meadows, Florida Bay served as the principal inshore nursery area for Tortugas pink shrimp and provided critical habitat for juvenile spiny lobsters and stone crabs. The Bay also supported an extensive sport fishery and was home to a vast population of wildlife, marine animals, and wading bird populations. But over the past decade, numerous biological, chemical and physical changes have occurred that threaten the resource and its uses.

EPA has been one of many Federal agencies supporting scientific research to advance our understanding of the ecosystem through the Florida Bay Program Management Committee. In 1994, this group developed an Interagency Science Plan that focused research efforts around a set of key issues. In 2001, a Florida Bay and Florida Keys Feasibility Study Team was organized in support of CERP. Its purpose is to determine the modifications that are needed to restore water quality and ecological conditions of the Bay, while maintaining or improving these conditions in the Florida Keys. Our interest is in coordinating scientific efforts in Florida Bay with research and monitoring in the Florida Keys, and in assuring that restoration efforts maintain or improve the Florida Keys ecosystem.

The Florida Keys

EPA's responsibilities in the Florida Keys stem largely from the Florida Keys National Marine Sanctuary and Protection Act of 1990. The law requires EPA and the National Oceanic and Atmospheric Administration to collaborate on a Water Quality Protection Program for the area, which includes the United States' only living barrier reef. As required, EPA and the State are now working to implement that plan, and most of the monitoring, research, data management, and educational initiatives are being funded by EPA.

Through 2002, EPA has contributed more than $10 million to this initiative. Many problems that hinder the Florida Keys are linked to significant wastewater treatment problems, and the price of addressing them may be quite high. Recognizing the severity of this need, we are working with our

Federal, State, and local government partners to identify funds and other support that can be used to help Monroe County address its wastewater and stormwater management needs.

Closing

In closing, EPA continues to fill a variety of roles to advance the cause of the Everglades restoration and protection. Believing that we are poised for significant progress, we are committed to working with our many partners that share the common vision of a healthy, thriving ecosystem. It is our hope that by working together we will see visible results in the near term and that our progress will lead other regions and governments to undertake ecologically significant restorations of their own.