Conserving the Everglades CEO University Forum, Miami/3/16/05 (As prepared for delivery)

"The Everglades are a test," Marjory Stoneman Douglas used to be fond of saying. "If we pass it, we get to keep the planet."

Author of "The Everglades: River of Grass," Douglas was an extraordinary woman. One third Victorian Grande Dame, one third Eleanor Roosevelt and one third Barbara Stanwyck, to paraphrase one of her admirers. She had both manners and mettle. And her life was remarkable, both for its breadth and for its length—she lived to be 108.

"River of Grass" was a seminal work when it was first published in 1947. Until Douglas came along, most folks had dismissed the Everglades as little more than a pestilent swamp. But "River of Grass" had a transformative effect similar to that of a later environmental classic, Rachel Carson's "Silent Spring."

Douglas understood the importance of the Everglades, evocatively described their beauty and, during the second half of her long life, became their principal and most passionate advocate. Science has since confirmed the ecological importance of the Everglades. But that they are seen today as one of America's greatest natural treasures has much to do with the tireless and eloquent advocacy of Marjory Stoneman Douglas. So, where do we stand today, seven years after her death?

Before attempting to answer that question, it might be useful to step back and take a brief look at the history and hydrology of what truly is one of the most unique ecosystems in the world.

If, as most people do, you tend to think of the Everglades as the area bounded by the national park just west of here, then you're missing 75 percent of the picture. As Mother Naturenot the Army Corps of Engineers-built it, the Everglades originally comprised more than 4,000 square miles-an area four times larger than the present-day Everglades National Park. The system began just outside the gates of what is now Disney World in Orlando, where from May through November rising water in the rain swollen Chain Lakes was siphoned southwards by the Kissimmee River, which in turn fed into Lake Okeechobee.

The easiest way to imagine what happened next is to think of a large saucer sitting on a kitchen table and filled to the brim with water. As long as the table remains level, the water remains in the saucer. But lift one end of the table ever so slightly and the water will begin to spill over. Now think of the 100-mile long expanse of territory from Lake Okeechobee to Florida Bay as the table. To the naked eye, it appears level. But it is not. The ground surface slope between the lake and the bay is actually about 20 feetjust enough to tip our saucer.

During the rainy months, a sheet of water, 50 miles wide in places but rarely more than two feet deep, flowed slowly southwards over sawgrass prairies, sloughs, tree islands, cypress stands and hardwood hammocks towards the mangrove estuaries and coral reefs of Florida Bay and the Gulf of Mexico.

Then, in November, the rains stopped and a six month dry season ensued, giving the flora and fauna that had adapted to these alternating wet and dry cycles time to reproduce and raise their young. The extraordinary thing about this was the vast expanse of diverse habitats over which these cycles occurred, nurturing, in the process, an incredible variety of life-from Florida panthers and Key deer to crocodiles, egrets, herons, sea trout, shrimp and some 12,000 other mammal, bird, fish, and plant species.

The Everglades, you might say, was Nature's very own version of Disney World.

Today, most of this is gone. Some 50 percent of the area historically occupied by the Everglades has been permanently lost to development, while the ecological integrity of the rest of the system has been seriously compromised by the massive network of levees, canals and dikes constructed during the 20th Century to control flooding and render southern Florida hospitable to agricultural and urban development. I do not mean to suggest here that this was all a bad thing. On the contrary, the systematic destruction of the Everglades was undertaken with the best of intentions. And there's no doubt that it helped to bring prosperity to this part of the state.

But, as we now know, it was also more than a tad short-sighted. The disruption of the Everglades' natural hydrology has all but wiped out the great populations of wading birds that once thrived here, while the man-made system that replaced it has failed to meet the expanding needs of southeast Florida's rapidly growing human population.

Today, we have a much better understanding of the nature and value of ecosystem services provided by the Everglades than we did when we first took it upon ourselves to "improve" the place. The early architects of that effort thought they were draining a swamp. But what they really did was to dismantle one of the largest and most efficient natural freshwater filtration systems on earth.

While clearly there have been many human benefits, the unintended consequences of this remodeling job are now becoming increasingly apparent.

Southern Florida, historically one of the wettest places on the planet, now faces a looming water shortage because of the intrusion of saltwater caused by the diversion of freshwater for drainage and flood control.

More than a million acres of the Everglades has been poisoned by mercury, while Lake Okeechobee is contaminated by agricultural runoff.

The polluted and inadequate water flow into Florida Bay is causing sea grass to die and algae to bloom so extensively that parts of the once crystalline bay have become a murky green soup. Coral, sponges and mangroves are dying and the sea trout, red fish, shrimp and spiny lobster fisheries are all declining.

Today, the connection between the health of the ecosystem and the vitality of the multibillion dollar fishing, tourism and recreational industries upon which southern Florida depends is no longer in dispute.

Indeed, by the early 1990s, this connection had become so obvious that the late Lawton Chiles, then governor of Florida, created a commission to save the Everglades. Debbie Harrison, who directs WWF's South Florida program, served on the commission, which recommended that the Army Corps of Engineers undo the damage of 50 years earlier by developing a plan to restore the hydrology of the Everglades. That plan, involving the removal of more than 240 miles of canals and levees and the creation of massive reservoirs to restore the water's "sheet" flow, is the biggest and, at nearly \$8 billion, most expensive restoration project in US history. Along with our partners in the Everglades Coalition, we helped convince Congress to pass, and President Clinton to sign, the Everglades Restoration Act. And ever since then, our work has focused on insuring that both the state and federal governments live up to their commitments under that law.

Which brings us back to the present... to the verge of what we hope will be the rebirth of one of the richest natural treasures in the world.

This re-birth, however, is not happening without some major labor pains. Technical uncertainties abound. The Comprehensive Everglades Restoration Plan-CERP for short-has a bewildering number of moving parts. No fewer than 12 Federal agencies, seven state offices and commissions, 16 county governments and scores of municipalities are involved in its implementation. Add to this the multiple election cycles over which the 30year plan will be implemented--along with what are bound to be shifting economic and political priorities during that time-and Everglades restoration is guaranteed to remain a source of controversy for many years to come.

So, what, if any, lessons can we learn from this experience? To me, at least two stand out.

The first is that an ounce of prevention, as the saying goes, is worth a pound of cure. It is far easier and far less expensive to conserve an ecosystem that's relatively intact than it is to rehabilitate one that's severely degraded. Getting it right the first time is much more cost effective. I want to come back to this point in a moment. But first I want to say something about the second lesson the Everglades teaches us. And that has to do with the power of partnerships.

Something so ambitious as the restoration of the Everglades would never have been possible had it not been for an extraordinarily broadbased public-private sector partnership. It is a partnership that was many years in the making, but it is by no means unique. Indeed, as the world has grown both seemingly smaller and more complex as a result of globalization, the need for such multi-sectoral alliances has become absolutely critical to conservation.

Gone are the days when we could simply erect a fence, post a no hunting sign and call a place protected. These days, the forces driving biodiversity loss are large, complex and global in scope. And they require solutions that are equally complex and usually beyond the ability of any one group, or even government, to provide.

The Everglades are a good example of the power effective partnerships have to attain solutions previously considered out of reach. But I'd like to depart from the Everglades here to give you a couple of other examples, drawn from WWF's experience around the globe. Tesso Nilo is a lowland forest in Sumatra that has the richest concentration of vascular plants in the world. It's also home to several highly endangered species such as orangutans, Asian elephants and the Sumatran tiger. Until a few years ago, however, it was being so systematically devastated by illegal logging that most conservationists had given up any hope of saving it.

It took a truly international effort to turn the situation around. Experts from WWF offices around the world got involved. Because Tesso Nilo's lumber is mostly used to make office supplies and other paper products, we identified the supply chain and approached the customers and creditors of the logging company concerned, Asia Pulp and Paper.

There were no demonstrations, no threats, no sitting in the tops of trees or ramming into things with rubber dinghies on the high seas, I might add. That is simply not the way WWF works.

In our globalized environment, corporations collectively have a much vaster impact on the world than governments and we believe that the best way to manage that impact, and mitigate its effects on nature, is through constructive engagement.

So in the case of Tesso Nilo, we worked closely with companies like Staples and Home Depot in the US and Ricoh in Japan. We also approached APP's international creditors, such as DeutscheBank in Germany. With their assistance, we were able to open discussions with APP, which initially had refused to even speak to us. In the end, APP agreed to stop purchasing illegally logged timber and to set aside 85,000 acres of their concessions in Tesso Nilo as a strictly protected area.

No, Tesso Nilo is not saved yet. But, as with the Everglades, there is, for the first time, hope that someday it will be.

While I am still indulging in a bit of bragging on WWF's behalf, let me give you one other example.

The inspiration for Darwin's Theory of Evolution, the Galapagos are perhaps the most unique jewel in Nature's crown. In spite of a growing human presence, the islands still retain most of their original biodiversity. With their extraordinary concentration of endemic species, they are a living laboratory for biologists to explore what Darwin, arriving there in 1835, called that, "mystery of mysteries—the first appearance of new beings on earth."

A few years ago, however, an oil spill nearly caused a disaster that could have wiped out much of this biodiversity. Fortunately, most of the oil washed out to sea. But we knew we were unlikely to be so lucky the next time.

So, in the aftermath of that near disaster, WWF has been working with the Toyota Motor Corporation to ensure there is no next time. Our vision was to turn the Galapagos into a 21st Century model of clean energy use, eliminating the need for fossil fuels altogether. Obviously, we could not do this by ourselves. But during the past three years, in partnership with the government of Ecuador and a team of engineers from Toyota's advanced technology division, we have made an impressive start.

The fuel depot at Baltra, the archipelago's aging and decrepit storage facility, has been rebuilt to state-of-the-art standards, an islands-wide recycling program is in place and the first of what will be a network of hybrid solar-wind energy power stations is already up and running.

This kind of solution, which benefits both the environment and the people of the Galapagos, would have been beyond our reach 20, or even 10, years ago. But today it is a cutting edge example of the kind of private-public sector partnerships that are not only possible but essential if we are to meet the complex conservation challenges of the 21st Century.

Now, before closing, I want to combine this idea about partnerships with the point I touched upon earlier concerning the cost effectiveness of getting things right the first time around.

No one who works in the region was unaffected by the terrible tsunami that swept across southeast Asia last December. One of our colleagues in Indonesia alone lost 100 members of his extended family! As an example of the brute destructive force of nature, the events of December 26 were as humbling as they were frightening.

But if you paid close attention to the damage assessments conducted in the wake of the tsunami, you may recall that areas with the most intact, natural coastlines—areas with undisturbed mangrove forests and healthy coral reefs—suffered far less damage than areas where those things had been removed or degraded by development. The mangroves served as buffers against erosion, while the coral reefs acted like natural shock absorbers, dissipating wave energy. The best defense against nature's wrath, it turned out, was nature itself.

Now, as emergency relief gives way to long-term reconstruction, it's vitally important that we do the rebuilding right and in ways that do not do more long-term damage to the environment than the tsunami itself did.

The signs, I must confess, are not all that promising. A study conducted by WWF Indonesia estimates that between 4 and 8 million cubic meters of sawn timber will be needed for rebuilding over the next several years in the province of Aceh alone. Of that amount, a maximum of 10 percent can be sourced legally and sustainably from within Indonesia. The rest, if nothing is done, will be sourced illegally from Sumatra's endangered rainforests. And the costs of that ultimately will be borne by people as well as wildlife, with loss of life from mudslides and flooding precipitated by the deforestation that illegal logging invariably causes.

Along with Conservational International, the Red Cross, World Vision and a growing list of corporate and other private sector partners, WWF is launching a Timber for Aceh initiative an admittedly ambitious effort to save the forests of Sumatra by supplying Aceh with enough responsibly sourced timber to meet its reconstruction needs over the next several years.

Obviously, we couldn't even consider doing something on this scale alone. Even in partnership with other conservation groups like CI, and with the logistical expertise of organizations like World Vision, the goal will be difficult to attain.

So how will we do it? By asking you to help. By getting the forest products industry to join our effort and by widening this coalition with as many private, public and corporate sector partners as possible.

Why should you help? Because, in the 21st Century, conservation is more than just the business of biologists.

Because every CEO in this room—and every person outside it—is in the deepest sense an equal shareholder in the global enterprise that is the

world we live in.

Because as CEOs, you are corporate and social leaders and with leadership comes the responsibility to care about the things that, in the long run, impact all our bottom lines.

Because this, in essence, is Marjory Stoneman Douglas' test—a test that applies not only to the Everglades, but equally to the Amazon, the Galapagos, Sumatra, the Congo and every other place else we seek to preserve for the benefit of our children and for the future of life on earth.

History, I firmly believe, looks most kindly on those generations that face and pass grave tests. For our parents, the defining trial was World War II. Today, we live in the shadow of terrorism and are being tested by events in Iraq. But conflict is not necessarily the only or, in the final analysis, most important test.

When they look back at us, 200 years from now, what will the historians of the future judge to be our greatest test?

My guess is that it will be Marjorie's test. My hunch is that we will be judged by whether we did all we could to help humanity rise above poverty, steer clear of looming disasters like climate change, and work towards a more livable and sustainable world, for the benefit this and all future generations to come. Thank you.