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The Everglades: Brief Background and Policy Proposals for its Preservation

Forming a policy proposal for the restoration of the Everglades is like creating a law to restore the soul of south Florida. Indeed, Jeb Bushed even characterized the Everglades as a "treasure for our country (Grunwald, 3)." The Everglades is among the most fragile ecosystems in the world, and nearly two centuries of attempts to restructure its water flow and impose mankind's demands upon it have left the Glades unrecognizable. Honorable individuals and organizations have passed laws over the last three decades to protect these treasured wetlands, but they have been stymied under bureaucratic jargon and political standoffs. Here, this paper will provide a brief background to mankind's interactions with the Everglades, and offer practical policy proposals to lead the conservation efforts of the twenty-first century. Through an increase in the state's regulative authority, promotion of economic incentives to encourage environmentally-friendlier practices, and state and local cooperation by government officials to promote water conservation, we can ensure the vitality of the Everglades for a new generation.

Historical Background of Human Interference in the Wetlands

The story of the Everglades is a complex back-and-forth struggle between "the pursuit of paradise and the ideal of progress", and the attitudes which once inspired its ruin that now inspire its restoration (Grunwald, 4). To the outside observer, the Everglades seemed like a vast, empty, useless, mucky, and weird place. Nature lovers and ecologists, however, understood that "there was always more to the Everglades than met the eye (Grunwald, 13). The Everglades was subtle and original, not concerned with flashy demonstrations like Niagara Falls or the Grand Canyon. It was a quiet jewel, and subsequent exploration would soon find out the very potential the wetlands stored.

Emboldened by nationalism and the thrills of discovery in the mid-nineteenth century, the nation sought to explore and conquer nature. As the Florida Wars ended in the late 1850s, Manifest Destiny reached its apex. Individuals and businesses alike set out to capitalize on the lush forests, flourishing swamps, and vast prairies around the nation. From virtually the moment when Americans began to visit the Everglades, they began dreaming of modernizing it, starting by draining its surplus water (Grunwald, 57). For these optimistic people, the drainage of the swamp seemed "as inevitable as the torrent of the Niagara" (Grunwald, 63). The nutrient-rich wetlands were prematurely set aside in their minds for use in a future production of sugar, cotton, coffee, and other products. They would only have to drain the land (Grunwald, 56).

Fortunately for them, Henry Flagler arrived to Florida. His railroad launched south Florida's first major growth period, bringing tourists and future residents to the new cities of West Palm Beach, Miami, and Fort Lauderdale (Grunwald, 102-106). This influx of people brought about courageous individuals with deep pockets who stopped at nothing to attain the goal of a dry Everglades, one in which city life could prosper and endure.

Countless men attempted to conquer the Everglades—William Gleason, Napoleon Broward, and John Gifford, among others—but none entirely succeeded (Grunwald, 196). The Glades fought back every time, launching floods, storms, and destroying communities in retaliation. The Everglades frustratingly seemed unconquerable.

That is, until 1928, when the U.S. Army Corps of Engineers took over the war against the Everglades. The Corps were "the bureaucratic embodiment of the nation's land ethic", eagerly setting out to make wilderness serve people's needs, whatever the cost may be (Grunwald, 57). Indeed, more than 99 percent of wetland development applications were approved under the ambitious leadership of

the Army Corps (Grunwald, 293). Over the next decade, over $20 million would be spent on a new dike, and the Everglades "would never be the same" (Grunwald, 199).

By 1910, the growing population was "making their presence felt on the land" by filling streams and estuaries with toxic sewage and chopping away mangroves (Grunwalf, 172). The declining water table as a result of these drainage projects increased fires in the wetlands. The 1926 and 1928 hurricanes that ravaged South Florida made it "fatally clear" that the natural cycle of fires and floods in the Everglades would only worsen as drainage projects expanded (Grunwald, 196).

Conservationists became emboldened by the intensification of nature's wrath and petitioned the federal government to intervene in the Everglades protection. In 1923, the National Park Service proposed an Everglades national park. Botanist David Fairchild fully supported this proposal and warned that the next generation would "revile the greedy and myopic generation that lost the Everglades" if a park were not created to preserve what remained (Grunwald, 206). Certainly, Ernest Coe's dedication to creating an Everglades park proved to be stronger than Napoleon Bonaparte Broward's obsession with draining the Everglades and Thomas Will's desire to develop the wetlands (Grundwald, 207). Everglades National Park was formally dedicated under the Truman administration on December 6, 1947.

Curiously enough, however, Truman never stated that the Everglades should be preserved for the sake of nature. Rather, he supported saving the swamp for "the enjoyment of the American people" and "the conservation of the human spirit" (Grunwald, 215). Here was the first major event that launched the division between people-first conservationists and nature-first conservationists.

Unsurprisingly, business interests continued to prevail, despite growing concern in South Florida about the health of the ecosystem. By the early 1950s, the integrity of the Everglades was almost unrecognizable. Sugarcane fields dominated the northern Glades, suburbs controlled the eastern Glades, and reservoirs made up much of the central Glades (Grunwald, 240).

The late 1960s, nevertheless, witnessed an "extraordinary awakening" in the American psyche, as the nation embraced conservation efforts. The Nixon administration formed the Environmental Protection Agency and passed laws including the Clean Air Act and the Endangered Species Act (Grunwald, 240-242). The future was looking bright, but it would soon—yet again—take a turn for the worse.

During the 1980s, the Reagan administration and fellow Republican supporters condemned environmental regulations as "handcuffs on free enterprise" and belittled environmentalists as "tree huggers" who wanted to control people's lifestyle choices (Grunwald, 274). The political environment surrounding the environment grew even nastier in 1994, as the new GOP majority sought to undo environmental regulations. Graphic and tense words frequently occurred in bipartisan conversations. Tom DeLay, the House Majority Whip, likened the Environmental Protection Agency to the Gestapo, and President Clinton chastised Republicans for being "anti-environmental zealots (Grunwald, 307)."

Now, in the twenty-first century, the political arena has not significantly improved. With every election, efforts that were made in the previous administration are undone or altered, to the extent that long-term planning is made difficult within the state legislative system.

Modern-day Crises in South Florida

An educated and motivated public, along with dedicated conservationists and politicians, have rallied to the conservation cause within the last two decades. In December 2000, President Clinton passed a $7.8 billion plan to protect the Everglades; meant to span over various decades, this law would remove parts of the canal infrastructure and clean the polluted runoff from nearby sugar and other agricultural farms. The ultimate goal was to conserve excess water during rainy seasons and "reestablish a healthy sheet flow" in the wetlands (Merrill). Unfortunately, unforeseen events like the terrorist attacks of September 11, the invasion of Afghanistan and Iraq, and the 2008 recession lowered the

priority for Everglades restoration projects (Merrill). This was a devastating blow to the future of the Everglades and the health of the millions of Floridians who depend on the wetlands for their survival, particularly for their fresh water.

According to the Tampa Bay Times, Florida is "the nation's second-fastest growing state behind Texas" with an expected population of 26 million by 2030 (O'Donnell). These new residents will require housing and water, along with jobs and access to transportation. In a strange twist of perspective, the 2006 real estate collapse and 2008 recession---which had devastating effects on millions around the nation—"derailed thousands of development projects" and decreased national appetite for long trips and vacations. The end of the recession, however, combined with low gas prices and unemployment rates have seen a spike in tourism and relocation trends, according to the Center for Urban Transportation Research (O'Donnell).

Big Sugar's demands on the environment have taken a toll on the Everglades; droughts have intensified, water conservation areas have been polluted by their runoff, and the ecosystem's natural rhythms have run amok (Grunwald, 282-283). In its pristine nature, the Everglades had extremely low nutrient levels. However, the Everglades Foundation reported that runoffs from fertilizers on agricultural farms have changed this delicate balance, inundating the streams with excess phosphorus, nitrogen, and sulfur that stimulate plant overgrowth and poisons the native plants and animals. In addition, invasive species like Burmese pythons and Australian pine have wreaked havoc on the ecosystem, displacing natives and disrupting the food chain (Everglades Foundation).

Phil Compton, a senior representative for National Sierra Club, lamented that "if we continue to grow the way we have, we will lose every reason why people come to Florida (O'Donnell)." This is why the state of Florida must prioritize the Everglades restoration projects—the future of state industries,

the health of its citizens, and the survival of important species depend on a timely response to this ecological emergency.

Current Policy in the State Legislature

Some people have questioned "whether the creation of a man-made paradise" in South Florida was worth "the destruction of a natural one (Grunwald, 5)." Fortunately, many of those who have posed this question have dedicated part of their professional careers to defend the Everglades from further destruction.

In April 2016, Governor Rick Scott signed a law that guaranteed $200 million in annual funding until 2024 for Everglades conservation projects. In addition, Amendment 1, which set aside a percentage of tax funds on real estate documents for land preservation, was estimated to contribute $10 billion over the next two decades (Sweeney).

A caveat within the amendment, however, permitted the use of these allocated funds to pay salaries and operating costs for those employees involved in land preservation. Not surprisingly, the 2015 state Legislature exploited this stipulation and used Amendment 1 funds to pay the entire operation and salary costs of various agencies. The Sun-Sentinel reported that less than $59 million of the funds were used for restoration projects in 2015, while funds for salaries and operating costs tallied at $227 million (Sweeney). The 2016 law signed by Scott requires that the Legislature must spend either 25% or $200 million of the total Amendment 1 funds on the swampland restoration, whichever is lesser (Sweeney). This change is significant because it ensures that funds will be allocated for the appropriate causes, and not squandered on operative and salary costs.

Policy Recommendations for a Greener Florida

While opinions abound on ways to fix the Everglades, applicable solutions are hard to find (Merrill). Fred Sklar, a respected scientist in South Florida, has professed that the most effective way to protect both the safety of the Everglades and of South Florida's citizens is to "appeal directly to concerns about things that matter most to their lives" (Merrill).

More than one-third of Florida's population, approximately seven million people, depends on the Everglades as their primary source of drinking water. Dropping the Everglades from the list of national administrative priorities also impacts the state's fundamental industries. The Everglades are an integral part of South Florida's "$67 billion tourism industry, $13 billion outdoor recreation economy, and $100 billion agricultural sector" (Graham).

South Florida's population wants to control water levels—in other words, it desires the ability to drain water during the wet season and replenish water during the dry season. However, the natural ecosystem of the Everglades does not operate in accordance to man's ideals. Over millennia, the various types of plants adapted to the changes in seasons in the swamp, and they would not survive if this control is fully implemented within the state (Merrill). Last summer, Florida saw a semblance of the dangers of blocking water levels, particularly as nutrient levels continue to grow.

In July 2016, toxic green slime covered Florida's beaches and rivers, leading four counties to declare a state of emergency. Excess nitrogen and phosphorus in Lake Okeechobee created the massive algae blooms, and it spread using man-made canals into the Atlantic and Gulf coasts. National Geographic predicts that the slimy green beaches from last year's summer in Florida will become a "regular occurrence" if swift and effective action is not taken at the legislative level (Parker).

If Florida is known for subpar water quality, the tourism industry could come crashing down. National news coverage of the toxic slimes could also impact Southern Florida's agricultural industry, as the country will become weary of purchasing produce irrigated with algae-infested water (Parker).

Perhaps the most crucial threat to the Everglades, far beyond Big Sugar and excess nutrients, is unchecked development. The rapid growth of communities is destroying wetlands and increasing demand of water supplies. Indeed, sugar farming is a "relatively benign" use of the swampland, compared to large complexes that house thousands of families Everglades, 364).

With this being noted, Everglades activists must prioritize the prevention of community growth, even if it means ensuring that sugar farms stay intact and profitable. Growth management measures have been enacted in Florida since 172, but environmentalists lament that "there has been a lot more growth than management" (Grunwald, 262).

The reason for the rapid growth rates in South Florida can be attributed to a very low property tax. Some legislators have proposed raising property taxes to reduce land development and wetland intrusion, as well as enacting a tax on runoff released by farmlands. The issue with raising taxes is that it is often resented by citizens and businesses alike, which makes compromise and cooperation more difficult.

Instead, lowering taxes on individuals and businesses who contribute to Everglades conservation will be a more successful effort. That is, individuals who have membership in wildlife restoration programs are eligible for lower taxes. Similarly, businesses that sponsor events or community activities that help the Everglades can get tax breaks. Furthermore, agricultural farms who switch to organic fertilizers qualify for lower taxes, as well. Enforcing taxes on runoff—like the carbon taxes of the early 2000s—will likely drive agricultural businesses away from Florida and into states that do not have punitive taxes. To offset the decrease in tax revenue for Everglades restoration, the state legislature can

work with insurance companies to raise the costs of flood insurance, from which a portion of the profits would be allocated for environmental protection projects.

Furthermore, a policy proposal that narrowly focuses on protection of the environment and its water would be politically weak. Rather, a balanced plan is needed to make a long-lasting impact, one in which both businesses and the Everglades benefit, and which includes input from federal, state, local, and tribal officials. Such a plan would equally serve the interests of the public and of private enterprise.

A politically impractical plan, for instance, would be to spend millions of dollars on buying out farmers, filling up the drainage canals, and stopping all man-made interventions in order to allow nature to establish its original balance. This bill would surely infuriate interest groups and private businesses, as well as frustrate legislators that are sponsored by industries.

In contrast, policy proposals for the twenty-first century should grant the state regulative authority over extensive land developments and vast oversight over water and land use in growing communities. Furthermore, new growth management laws would set aside “sensitive areas” where development would not be allowed in the most vulnerable parts of the ecosystem.

On a local level, counties should encourage water conservation methods through the use of advertising and city council meetings. They should also facilitate water conservation by subsidizing water efficient toilets, faucets, showers, and other household appliances, which have proven to reduce water consumption to circa-1970 levels, according to a 2014 U.S. Geological Survey (Spear). The director of Orange County Utilities, Ray Hanson, declared that the most efficient water-conservation methods are “fines for lawn watering on prohibited days, billing rates that make heavy consumption more costly, promotion of efficient appliances, and watering lawns with cleaned-up sewage (Spear).”

A Call to Action

As we have seen above, the story of the Everglades is essentially the story of efforts to control and reroute the flow of its water. While the damage has been done, there is reason to be optimistic. The twentieth century was witness to tremendous manpower regarding conservation: Florida helped stop plume hunts, set side millions of wetland acres for preservation, organized the biggest excess nutrient cleanup in history, and legalized water flow requirements to Everglades National Park (Grunwald, 333).

Although the tense political divisions in the Florida legislature have divided the state, the Everglades "have a knack for bringing people together (Grunwald, 3)." Even John Chafee, who was "as conservative as it got in American politics", hoped that this generation would successfully overcome "partisanship, narrow self-interest, and short-term thinking" in order to protect the Everglades. He rationalized that being a conservative politician meant actually conserving things (Grunwald, 334).

In 2017, we have come to the unwavering realization that south Florida's rates and expanse of growth are not sustainable (Grunwald, 6). Arthur Marshall even described the desperate "mania" for growth as "societal suicide" (Grunwald, 246). As a bell-whether state, Florida sets the environmental model for the United States. In fact, Florida was classified as the only state where environmental concern trumped economic concerns, with approximately seventy-five percent of the state residents in favor of stricter limits on future population growth and land development (Grunwald, 262). Environmentalists predict that the Everglades restoration could propel Florida into the largest proponent of anew "international standard for sustainable development" (Grunwald, 352).

In summation, raising taxes is not the answer to the survival of the Everglades. Rather, I propose increased power for the state's regulative authority, economic incentives to encourage environmentally-friendlier practices, and a unified effort on both the local and state levels to promote water conservation. Undeniably, the Everglades' greatest enemy is further delay caused by political inertia. Florida is growing to death, and the price of decisive action is small compared to the price of inaction.

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