



# Everglades Coalition

1000 Friends of Florida  
Arthur R. Marshall Foundation  
Audubon Florida  
Audubon of Southwest Florida  
Audubon of the Western Everglades  
Audubon Society of the Everglades  
Backcountry Fly Fishers of Naples  
Caloosahatchee River Citizens Association/  
Riverwatch  
Center for Biological Diversity  
Clean Water Action  
Conservancy of Southwest Florida  
Defenders of Wildlife  
“Ding” Darling Wildlife Society  
Earthjustice  
Environment Florida  
Everglades Foundation  
Everglades Law Center  
Everglades Trust  
Florida Conservation Voters Education Fund  
Florida Defenders of the Environment  
Florida Keys Environmental Fund  
Florida Native Plant Society  
Florida Oceanographic Society  
Friends of the Arthur R. Marshall  
Loxahatchee National Wildlife Refuge  
Friends of the Everglades  
Hendry-Glades Audubon Society  
International Dark-Sky Association,  
FL Chapter  
Izaak Walton League of America  
Izaak Walton League Florida Division  
Izaak Walton League Florida Keys Chapter  
Izaak Walton League Mangrove Chapter  
Last Stand  
League of Women Voters of Florida  
Loxahatchee River Coalition  
Martin County Conservation Alliance  
Miami Pine Rocklands Coalition  
Miami Waterkeeper  
National Audubon Society  
National Parks Conservation Association  
National Wildlife Refuge Association  
Natural Resources Defense Council  
North Carolina Outward Bound School  
Ocean Research & Conservation Association  
Reef Relief  
Sanibel-Captiva Conservation Foundation  
Save It Now, Glades!  
Sierra Club  
Sierra Club Florida Chapter  
Sierra Club Broward Group  
Sierra Club Calusa Group  
Sierra Club Central Florida Group  
Sierra Club Loxahatchee Group  
Sierra Club Miami Group  
Snook and Gamefish Foundation  
South Florida Audubon Society  
Southern Alliance for Clean Energy  
The Florida Wildlife Federation  
The Institute for Regional Conservation  
The National Wildlife Federation  
The Urban Environment League of  
Greater Miami  
Tropical Audubon Society

## **Resolution in Support of the Protection of Biscayne Bay and Biscayne National Park from the Impacts of the Turkey Point Cooling Canal System**

**WHEREAS**, Biscayne National Park is a national treasure, protecting some of the only living coral in the continental United States and the longest stretch of mangrove forest remaining on Florida’s east coast, providing habitat and nursery grounds for important commercial and recreational fish, shellfish, and crustaceans, and offering refuge to many endangered species;

**WHEREAS**, Turkey Point, owned and operated by Florida Power & Light (FPL), is located directly on the shores of Biscayne Bay and Biscayne National Park;

**WHEREAS**, a system of unlined cooling canals covering approximately 5900 acres are used to cool water from Turkey Point operations;

**WHEREAS**, the plant’s cooling canal system experiences heating and evaporation, which concentrates salt and other chemicals in its waters, and has created three issues of concern to the Coalition:

### **1. Biscayne Aquifer Contaminated by Hypersaline Cooling Canal Water**

**WHEREAS**, the porous limestone geology of South Florida enables direct interaction between cooling canal system water and the underlying Biscayne Aquifer, resulting in the movement of dense hypersaline water from the canals into the Biscayne Aquifer and the loading of approximately 600,000 pounds of salt a day into the Aquifer;

**WHEREAS**, a massive hypersaline plume is now spreading through the Biscayne Aquifer in all directions, including west toward our wellfields and east under Biscayne National Park;

**WHEREAS**, the Biscayne Aquifer supplies drinking water to more than three million people in South Florida and provides freshwater recharge to Biscayne National Park through freshwater springs;

**WHEREAS**, FPL and the Florida Department of Environmental Protection have been aware of the fact that water from the cooling canals has been contaminating groundwater for more than six years, yet a long-term solution to the problem has not been identified;

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## **2. Cooling Canal Waters Interacting with Ground Waters that Feed into Biscayne Bay Surface Waters**

**WHEREAS**, a recent report from Miami-Dade County definitively shows that water from the cooling canals is now seeping into Biscayne Bay, impacting ground waters that feed surface waters tidally connected to Biscayne National Park;

**WHEREAS**, the County report states that surface waters fed by ground water in Biscayne Bay have tritium levels more than 200 times higher than normal, and elevated levels of ammonia,<sup>1</sup> phosphorus,<sup>2</sup> and sodium;

**WHEREAS**, tritium is a radioactive isotope that is used as a tracer to identify the presence of water originating from the cooling canal system;

**WHEREAS**, the addition of hypersaline water and excess nutrients into Biscayne Bay ground waters and interacting surface waters threatens the ecological health of the Bay and could trigger toxic algal blooms due to its low nutrient and phosphorus-limited environment;

**WHEREAS**, FPL entered into a Consent Agreement with Miami-Dade County's Division of Environmental Resources Management (DERM) to remediate the landward migration of the hypersaline plume and is currently implementing the requirements of that agreement, however this agreement does not address the spread of the plume to the east under Biscayne National Park or the use of alternative, sustainable water sources for plant operations;

## **3. Fresh Surface Water Needed for Full Restoration Diverted Away from Biscayne Bay**

**WHEREAS**, hypersalinity and excessively high temperatures in the cooling canals resulted in the emergency redirection of up to 100 million gallons of water a day of fresh surface water from the L31-E canal that will be needed for the full restoration of Biscayne Bay and Biscayne National Park;

**WHEREAS**, such a practice is neither sustainable nor compatible with the hundreds of millions of dollars being invested by Miami-Dade County, the State of Florida, and the federal government to restore Biscayne Bay and Biscayne National Park through the Biscayne Bay Coastal Wetlands project, with the goal of increasing desperately needed freshwater flows to coastal areas;

**WHEREAS**, the redirection of fresh water away from Biscayne Bay, the introduction of hypersaline water from Turkey Point cooling canals into the Biscayne Aquifer and Biscayne Bay ground and interacting surface waters jeopardizes critical restoration efforts and ecological function.

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<sup>1</sup> Levels of ammonia were detected at up to 3.29 milligrams per liter, well above Miami-Dade County water quality standards of 0.5 milligrams per liter.

<sup>2</sup> Elevated levels of phosphorus were identified above the state numeric criteria of seven (7) parts per billion, typically ranging from three (3) to 230 parts per billion.

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**THEREFORE BE IT RESOLVED** that the Everglades Coalition, with its 61 member organizations committed to the full protection and restoration of America's Everglades, calls on local, state, and federal government agencies, including but not limited to the Environmental Protection Agency, U.S. Department of Interior, Florida Department of Environmental Protection, South Florida Water Management District, Miami-Dade County and Monroe County, to protect the surrounding ground and surface waters. We encourage them to work with FPL to identify a sustainable, long-term solution to the cooling canal crisis occurring at Turkey Point in order to protect the natural resources of Biscayne Bay and Biscayne National Park and safeguard Everglades restoration efforts and drinking water supplies.

The Everglades Coalition asks local, state, and federal agencies to conduct additional monitoring of the groundwater plume and hydrological connections to Biscayne Bay. Finally, we urge FPL to discontinue further use of water from the L-31E canal to freshen the cooling canals and withdraw their request for permitted withdrawals, as this water is vital to the ecological health and full restoration of Biscayne Bay and Biscayne National Park.

Adopted April 19<sup>th</sup>, 2016



Cara Capp  
National Co-Chair



Michael J. Baldwin  
State Co-Chair

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