

**Audubon Florida * Everglades Foundation * National Parks Conservation
Association * Tropical Audubon Society**

Joe Collins, Chairman
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, Florida 33406

March 14, 2013

Dear Governing Board:

The undersigned organizations welcome the South Florida Water Management District's (SFWMD) recent focus on improving the health of Biscayne Bay. The ecological and economic importance of Biscayne National Park and Biscayne Bay cannot be overstated. The National Park Service recently released a study that shows Biscayne National Park brings over \$34 million in visitor spending to the communities around the park.¹ Small business owners, such as dive boat operators, restaurant owners, hoteliers, and fishermen, among others, depend on Biscayne National Park and Biscayne Bay for their livelihoods.

Today you are asked to consider Agenda Item #38, which requests publication of Notice of Proposed Rule for a water reservation to protect water in Nearshore Central Biscayne Bay for the Biscayne Bay Coastal Wetlands restoration project. The development of an adequate water reservation is important for restoration to satisfy cost-share requirements under federal mandate from the Comprehensive Everglades Restoration Plan for Phase 1 of the Biscayne Bay Coastal Wetlands project. We have appreciated the opportunity to participate in the rulemaking process and discuss the rule with staff, although several issues remain unresolved.

We recommend that the SFWMD moves forward with the water reservation, provided that language is revised in the proposed rule to:

1. Ensure groundwater withdrawals do not adversely affect existing canal flows. Currently the rule states that "withdrawals of groundwater" do not withdraw reserved water. This exclusion should be removed. Please see the Appendix for a further description of the issue accompanied by "Figure 7".
2. Provide for a mechanism to allow the reallocation of terminated or reduced uses of permitted water to the environment.
3. Include Shoal Point, Turkey Point and other coastal areas in the protected area in the near shore area. (See Appendix for Figure 1). Since the first draft rule was published in December 2012, the geographic scope has been reduced. These are regions of major biological significance and are currently at risk due to proposed uses in the area.

Please see the Appendix for further explanations and for the proposed revisions to the rule.

¹ "Biscayne National Park Creates \$34.3 Million in Local Economic Benefit", Biscayne National Park News Release, February 28, 2013.

In addition, the State of Florida and the SFWMD have a long stated goal to protect water for Biscayne Bay beyond the scope of protections enumerated in the current proposed water reservation.² This year, Biscayne Bay was removed from the SFWMD's Priority Water Body List, and there has not been a commitment or timeline on how to move forward with broader protections for the Bay. Meanwhile, the Bay suffers continued ecological degradation from lack of stable freshwater sources. Our organizations would like to work with SFWMD staff to develop a viable plan to protect the ecological health and economic sustainability of Biscayne National Park and Biscayne Bay. We recommend the SFWMD pursue the following suite of solutions to protect the future of the Bay:

1. Commit to development of a second phase of rulemaking to expand protections for a broader scope of Biscayne National Park and Biscayne Bay. For geographic scope, consider the Department of Interior's study that indicated that there is a 10,000 acre zone in the Western Area of Biscayne Bay where the re-establishment of stable estuarine conditions would provide significant restoration of the natural values of Biscayne National Park.³ The addition of the canal reaches not currently protected by other rules should be included. For example, in Figure 1 the areas circled in green appear to be without protections. If the canal reach does not connect back to the L-31N it is not protected under the current rule.
2. Set a clear timeline for development of this broader rule in the Lower East Coast Water Supply Plan 2013 Update.
3. Place Biscayne Bay on the 2014 Priority Water Body List.
4. Enhance awareness of the ecological needs of Biscayne National Park by inviting Biscayne Bay National Park representatives and Biscayne Bay hydrology expert Rene Price from Florida International University to brief the Governing Board at a workshop in April prior to final adoption of this rule in May of 2013.
5. Continue the innovative collaboration with Biscayne and Everglades National Parks to send additional flows to Biscayne Bay to benefit ecosystem's health.
6. Continue the facilitation of bi-monthly stakeholder calls to discuss seasonal agricultural drawdown operations to enhance the sharing of information amongst parties interested in Biscayne Bay.

We greatly appreciate the agency's recent focus on Biscayne Bay and look forward to continuing our conversations with SFWMD staff to improve the health of this magnificent resource. Thank you for your consideration of these comments.

Sincerely,
(signatures waived to expedite delivery)

Jane Graham, Esq.
Audubon Florida

Kahlil Kettering
National Parks Conservation Association

Yvonne Gsteiger, Esq.
Everglades Foundation

Laura Reynolds
Tropical Audubon Society

² See 373.453(1)(c)(1) Florida Statutes. (In maintaining their respective priority water body lists, water management districts shall give consideration to the following priority areas: 1.The South Florida Water Management District shall give priority to the restoration needs of ... Biscayne Bay...). In 2004, the Lower East Coast Water Supply Plan stated that the Biscayne Bay reservation "will be adopted for the purpose of protecting fish and wildlife through providing freshwater inflows to prevent harm".

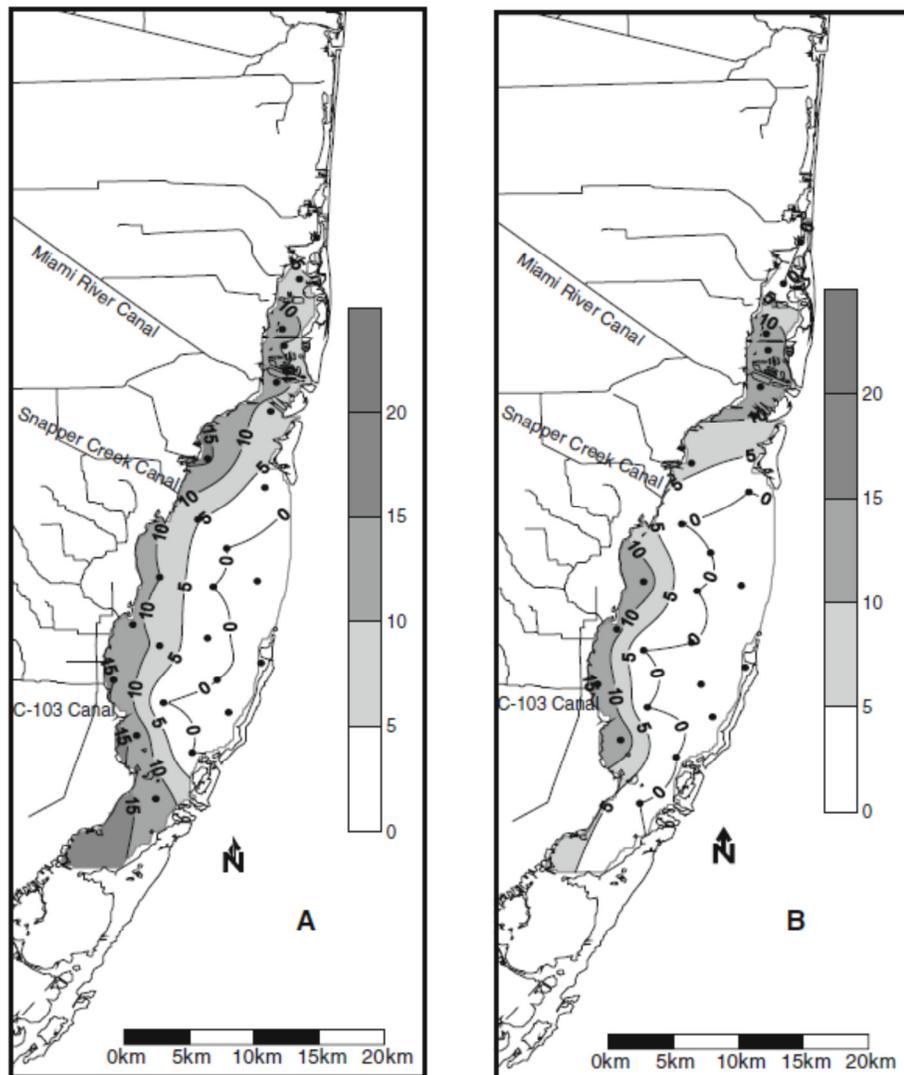
³ Estimates of Flows to Meet Salinity Targets for Western Biscayne National Park. June 2008, Department of Interior, pg 4.

Appendix

Groundwater

Groundwater flows linked to Biscayne Bay play a key role in the ecosystem's health. While yearly groundwater input percentages for the entire bay are lower compared to the other sources of freshwater, monthly groundwater input percentages can account for upwards of 60% of freshwater input at sites near the western shoreline."⁴ According to biologists from the Biscayne Bay Project Delivery Team, groundwater is the most biologically available form of inputs to Biscayne Bay, and it is a major goal of the project to create more opportunity for groundwater inputs. It is widely known that most of the surface water canals are approximately 15 feet in depth, yet the aquifer is 40-100 feet in this area. The water input from 15 feet down to the base of the aquifer is significant and should be protected as a result of this rule making effort. In addition, the percentage of groundwater input into Biscayne Bay is up to 20% by the western portions of the Bay. See figure 7 from Price et al 2008 below.

Fig. 7 The percentage of groundwater influence contributing to salinity variation in Biscayne Bay surface water in the A) wet seasons (June–November) and B) dry seasons (December–May) from 2004–2006, determined by subdividing the isotope model ratio value for the precipitation/groundwater end-member with the $\text{Sr}^{2+}/\text{Ca}^{2+}$ model results for groundwater input. Darker shades represent higher groundwater percentages. White indicates higher percentages of precipitation and canal water influence



⁴ Stalker, J C, R. M. Price, P.K. Swart, [Determining Spatial and Temporal Inputs of Freshwater, including Submarine Groundwater Discharge, to a Subtropical Estuary using Geochemical tracers, Biscayne Bay, South Florida](#), *Estuaries and Coasts*, 32(4): 694-708, 703 (2009).

In the proposed rule, we seek to the remove exclusion of groundwater withdrawals from compliance with the rule. Groundwater withdrawals, depending on their location and magnitude, can and do adversely affect canal flows. Yet, the draft reservation proposes to exclude all groundwater withdrawals from its requirements. The stated reason for this exclusion turns largely on the idea that other rules are sufficient to protect the reservation (*i.e.*, existing canal flows) and that no large new uses are projected on in the coming years. We respectfully suggest that there are differences between the existing rules and the reservation such that the protections would complement, rather than repeat each other. We also question the need to allow groundwater withdrawals to avoid showing compliance with this rule if existing rules already ensure there will not be a compliance problem. Lastly, projections of future use are often inaccurate, and we respectfully suggest that excluding *all* groundwater consumptive uses – regardless of size – from compliance with the reservation creates the potential for significant incursions on existing canal flows. Eliminating the exclusion for groundwater uses would minimize this potential and go a long way to ensuring real protection for the small but critical amount of existing canal flows that feed the BBCW Phase 1 Project and which would be protected by this reservation.

Geographic Scope

Since the first draft rule was published in December 2012, the geographic scope has been reduced in response to comments from Florida Power and Light (FPL). The area in yellow has shrunk in size and as a result does not indicate monitoring or protections for Shoal Point or Turkey Point as indicated below in the circled green areas along the coast. In addition the canal reaches that are not connected back to the L-31N are not protected under current rules. This surface water in this area seems to remain unprotected.

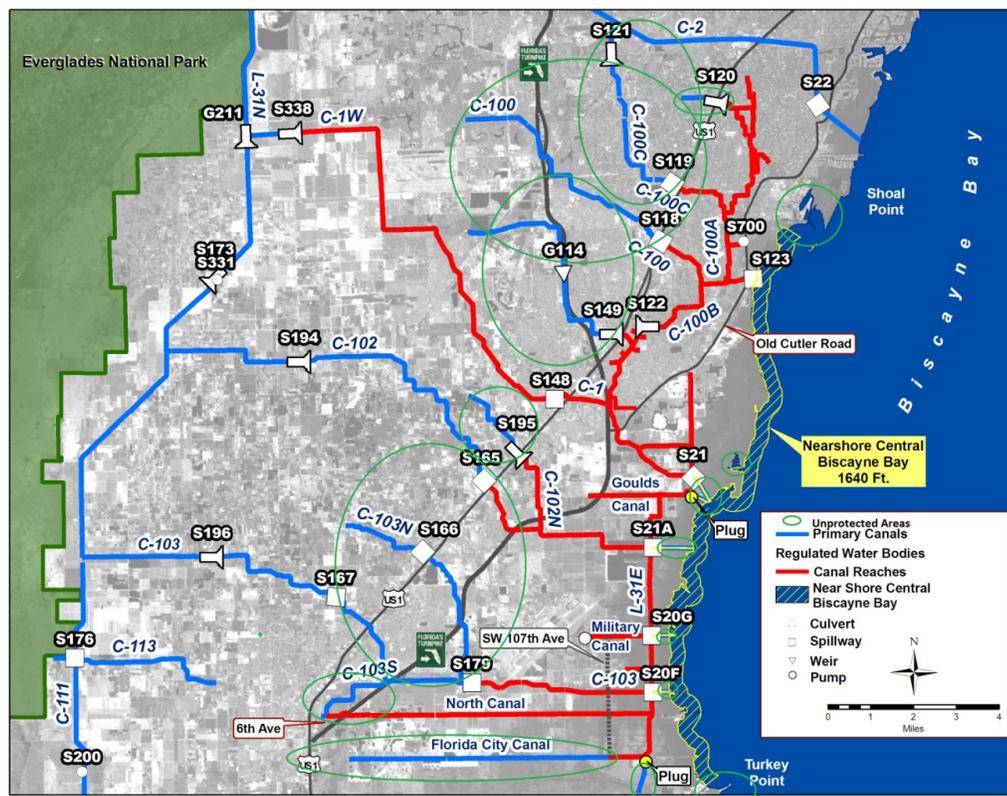


Figure 1

