## Proposal for Re-Establishment of Myakka River Critical Wildlife Area

Amy Clifton and Carol Rizkalla, Florida Fish & Wildlife Conservation Commission

### Introduction

The Myakka River Critical Wildlife Area (CWA) consists of a small mangrove island located in Sarasota County in the channel of the Myakka River approximately one mile downstream from the Highway 41 bridge (Figure 1). The island supports a large and diverse colony of nesting waterbirds. Wading bird species nesting on the island include Wood Storks (Federally Threatened), Great Blue Herons, Great Egrets, Snowy Egrets, Tricolored Herons (Species of Special Concern), Little Blue Herons (Species of Special Concern), Cattle Egrets, and Blackcrowned Night Herons. Other waterbirds that have been documented using the island include Anhingas, Brown Pelicans, and Glossy Ibis. The site was designated as a CWA on March 6, 1987 by Establishment Order CWA 87-1 due to its importance as a nesting rookery, particularly for Wood Storks. Florida Park Service (FPS) staff have performed monthly bird surveys for the island for over 15 years. As many as 283 pairs of Wood Storks have been documented nesting on the island (Meyer 2010) but this number has declined to around 100 pairs in 2016 (data provided by Audubon Florida). The apparent increase in boat traffic and approach by photographers and kayakers may be contributing to this decline.



Figure 1. Myakka River CWA is located approximately 1 mile south of the Highway 41 bridge.

The island is approximately one half acre in size and the substrate is inundated at high tide.

This portion of the Myakka River is designated as a Florida Wild and Scenic River due to "outstandingly remarkable ecological, fish and wildlife, and recreational values which are unique in the state" (F.S. 258.501). The Florida legislature designated the corridor of land surrounding and beneath a 34-mile segment of the Myakka River between river mile 7.5 (the Sarasota/Charlotte County line) and river mile 41.5 (County Road 780) a Florida Wild and Scenic River in 1985.

# Monitoring Program

FPS staff have performed monthly wildlife surveys for more than 15 years on the Myakka River including the CWA (Table 1, Figure 3) and plans to continue these surveys. In addition to the FPS surveys, local Audubon chapter members and other bird watchers conduct occasional surveys. FWRI staff has performed aerial surveys over the island since 2012.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Anhinga	12	13	11	9	9	7	10	5	12	10
Great Blue Heron	1	1	2	1	1	2	0	1	0	1
Great Egret	45	11	33	49	27	28	41	41	30	37
Snowy Egret	6	5	4	2	2	1	6	6	6	3
Tricolored Heron	0	1	3	1	0	0	0	0	0	0
Cattle Egret	7	33	14	12	5	5	8	0	0	2
Black-crowned Night Heron	3	3	2	1	2	1	1	0	0	0
Wood Stork	130	45	73	71	55	0	45	57	35	58
Total	204	112	142	146	101	44	111	110	83	111

Table 1. Annual nest counts over the last decade at Myakka River CWA (data from FPS). Note Wood Stork nest failure in 2011 due to unknown causes.

### Wildlife Disturbance

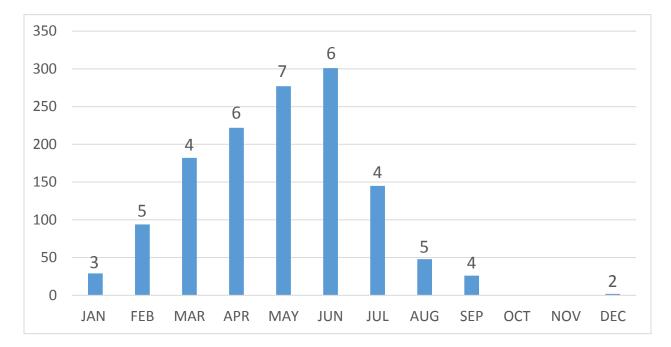
There is considerable boat traffic using the river channel, much of which passes within 50 feet of the island. This portion of the river is designated as a slow speed/no wake zone but compliance is only about 50%, with 25% of operators in blatant non-compliance (Gorzelany 1996; J. Oliver, personal communication). Since CWA establishment, there has been and continues to be increased development and therefore increased boat traffic. Sarasota County has proposed to install a rowing facility that is anticipated to contribute additional vessel traffic to the river. Photographers and kayakers have been documented approaching within 10 feet of nests which can result in disruption of breeding behavior and potential take of the nests and young (Figure 2, 4).



Figure 2. Kayakers approach the island. Photo by FPS.

The impacts of disturbance and the need for buffers are well documented in the literature. FWC generally recommends 300 feet for loafing and nesting wading birds based on the literature (Rodgers and Schwikert 2002; Rodgers and Smith 1997; Rodgers and Smith 1995). The current property boundary is the water line of the island and boundary signs are limited to the immediate island. Placement of signs on the island under the mangroves encourages boaters to approach closely to read the signs, potentially disturbing nesting birds. Thus, posting of the CWA under the current establishment order is counterproductive and logistically difficult.

The current establishment orders allow for closure to access on the island from 1 March – 1 November. Breeding behavior has been documented outside of this closure period by FPS and Audubon volunteers (Figure 3). This is particularly a problem in February, when pairs are initiating nests. Staff recommends modifying the closure dates to year-round.



*Figure 3. 2015 monthly bird counts indicates year round use of the CWA (data from FPS). Numbers above each bar represent the number of species counted. Note: Counts are conducted once a month and are not representative of the full month.* 



### Proposed CWA Buffer Area

In order to reduce disturbance of nesting and roosting birds from approaching watercraft, staff recommend that the property boundary of the CWA be re-established to a 75 foot buffer around the island (Figure 5), that the CWA be closed year-round, and that enforcement of the no-wake zone be increased to protect the island from erosive forces created by boat wakes. The width of the river precludes establishment of the standard 300' buffer but staff believes a 75' buffer will provide sufficient protection to prevent impacts to reproductive success and roosting. After re-establishment, 6 signs will be placed at the edge of the buffer zone around the island to inform boaters of the restricted area.

*Figure 4. Photographers and fisherman have been documented within 10 feet of nesting birds causing them to stand up on their nests. Photos by FPS.* 



Figure 5. Proposed 75 foot buffer and approximate sign locations for Myakka River CWA.

### Literature Cited

- Gorzelany MS. 1996. Evaluation of boater compliance with speed regulations in Sarasota county, Florida. Florida Department of Environmental Protection. West Coast Inland Navigation District. Sarasota County Natural Resources Department. Mote Marine Laboratory Technical Report no 465. 106 p. (https://dspace.mote.org/dspace/bitstream/2075/73/1/465.pdf )
- Meyer, K.D. 2010. Final Report, 2009 Wood Stork Survey Season. Avian Research and Conservation Institute. Report no. 401815M086.
- Rodgers, J.A. and Smith, H.T. 1995. Set Back Distances to Protect Nesting Bird Colonies From Disturbance in Florida. Conservation Biology 9: 88-99.
- Rodgers, J.A. and Smith, H.T. 1997. Buffer Zone Distances to Protect Foraging and Loafing Wading Birds from Disturbance in Florida. Wildlife Society Bulletin, 25(1): 139-145.
- Rodgers, J. A. and Schwikert, S. T. (2002), Buffer-Zone Distances to Protect Foraging and Loafing Waterbirds from Disturbance by Personal Watercraft and Outboard-Powered Boats. Conservation Biology, 16: 216–224.