



**Charlotte County Vessel Traffic Study
Alligator Creek/Buckley's Pass Punta Gorda Florida**



EXECUTIVE SUMMARY

The Florida Fish and Wildlife Conservation Commission (FWC), has the authority to establish by rule, pursuant to chapter 120, restricted areas on the waters of the State for any purpose deemed necessary for the safety of the public, including, but not limited to, vessel speeds and vessel traffic, where such restrictions are deemed necessary based on the requests from the users, visibility issues, boating accidents, hazardous currents and/or water levels, vessel traffic congestion, or other navigational hazards. With this authority also comes the responsibility to ensure that any regulation of State waterways is performed based solely on those criteria stipulated in section **(FAC) 68D-23.105 and Florida Statutes 327.46**

The City of Punta Gorda recently created a new channel that opened a large swath of the Punta Gorda Isles community to Alligator Creek, this was never an access point previously to Alligator Creek until Buckley's Pass was created. Once this new pass was opened to the boating public the City of Punta Gorda and Charlotte County started to receive frequent requests from the boaters who use Alligator Creek and Buckley's Pass. The City of Punta Gorda and Charlotte County staff identified the need for a data-driven approach to evaluate the requests from these residents and users of the waters in Alligator Creek and Buckley's Pass area. As a part of the data-driven approach, Charlotte County staff performed video data collection during the period of May 8th thru May 13th between dawn to dusk except where noted.

The total vessels counted over these dates are shown below:

Friday	5/8/2020	Total 53 vessels in 4 hours 30 minutes
Saturday	5/9/2020	Total 583 vessels in 14 hours 10 minutes
Sunday	5/10/2020	Total 35 vessels in 12 hours 30 minutes
Monday	5/11/2020	Total 121 vessels in 12 hours
Tuesday	5/12/2020	Total 158 vessels in 12 hours
Wednesday	5/13/2020	Total 52 vessels in 9 hours 15 minutes
Total Vessels 1002		Combined Total of Average Vessel per hour 14

Based on the activity levels summarized in the above table, the City of Punta Gorda and Charlotte County staff feel that the installation of the needed signs extending the existing slow speed minimum wake zone will greatly enhance the boating safety in this area.

INTRODUCTION

An important element of the FWC Division of Law Enforcement's duties include: Providing safe boating enforcement while educating the boating public and related industry; providing public safety for citizens on the lands and waters of the state; coordinating with local, state and federal entities on enforcement issues and development of regulations.

To perform the enforcement duties on the water, FWC, with the help of local agencies install regulatory markers per the guidelines set in **Florida Statutes 327.46**, "Boating restricted areas". This procedure addresses aspects such as the evaluation of inquiries regarding boating safety criteria, boating safety risk and local government applications for vessel traffic and/or public safety management zones. Due to frequent requests from the boating community the City of Punta Gorda and Charlotte County wish to extend the current slow speed minimum wake zone along Alligator Creek in Charlotte County. Charlotte County staff initiated the vessel traffic study in the existing waterway to assess features and conditions pertinent to the following three boating safety situations identified in the Rule:

- Within 300 feet of a confluence of water bodies presenting a blind corner, a bend in a narrow channel or fairway, or such other area if an intervening obstruction to visibility may obscure other vessels or other users of the waterway.
- Subject to unsafe levels of vessel traffic congestion.
- Subject to hazardous water levels or currents or containing other navigational hazards.

GOALS AND OBJECTIVES

The study goals are to calibrate and apply this data-driven, standardized approach to assess factors affecting risk to vessel collision, public safety, and maritime property using best available data in accordance with the requirements and specifications of the rule. The following supporting objectives were pursued to extend the current limits along Alligator Creek within the boundaries of Charlotte County.

- Evaluate section FS 327.46 to determine safety situations, risk criteria, risk levels, and safety zone options along the subject waterway;
- Consult with Charlotte County and the City of Punta Gorda law enforcement and officials with knowledge of the local boating environment to identify relevant risk issues and problems;
- Inventory, compile, and map relevant waterway features that include physical characteristics, existing infrastructure, signs and other management zones, accidents and citations;
- Compile complaints from the local boating residents who observed close calls and/or accidents within the waterway since the new pass was created;
- Summarize public feedback along with the enforcement official's observations with respect to boating safety improvement recommendations.

CHARLOTTE COUNTY WATERWAYS

Alligator Creek

Alligator Creek extends from the eastern side of Charlotte Harbor and is approximately two and a half miles in length before it travels under US41. This section of the waterway is bounded by the Coastal & Heartland National Estuary on the south and by residential areas in Punta Gorda to the north. This is a highly traveled waterway with all the residential homes, restaurants and marinas along this stretch of water. While there are variations in the width and conditions along this waterway, in general the creek is approximately 200 feet in width near the harbor and reducing to barely 10 feet in width more inland with a navigational depth of six feet mean low water level (MLW).

Along the southern end of this waterway there are numerous sharp bends, two marinas (Do It Yourself Boatyard & Ramp, and Gator Creek Marine), a waterside restaurant, and numerous docks. Along this southern part there are numerous fishing boats that fish the docks and bends in Alligator Creek causing for added congestion as well as the vessels entering and leaving the marinas.

Buckley's Pass

The City of Punta Gorda has recently created a new pass that empties out into Alligator Creek. This new pass has opened thousands of residential, condos, and commercial waterside properties that can now use Buckley's Pass to get out to Charlotte Harbor faster. Previously these boaters would have to use Ponce Inlet to access Charlotte Harbor. This has increased the number of boaters utilizing Alligator Creek. This new pass has now become a very highly congested area of multiple water users from fishing and recreational vessels to kayaks and stand up paddle boards. This is a convergence point of the 2 waterways, there are blind spots or low visibility areas due to the right angle of Buckley's Pass intersecting with Alligator Creek.

The City of Punta Gorda has recently dredged this area when they created the new pass. There is a shoal on the west side of the waterway which adds to the constriction of the boats to a small area. At times there are strong currents in this area which also creates problems. With Alligator Creek not having a slow speed minimum wake zone at this intersection it increases the danger for the boaters in this area.

This vessel traffic study centers on the regulatory controls that promote public boating safety. Alligator Creek and Buckley's Pass provide a variety of recreational boating opportunities for regional and transient boaters which attract large number of boaters to this area.

VESSEL TRAFFIC INVENTORY

All vessels in use along this section of the channel were used in the study. These include fishing, bay boats, sailboats, kayaking or similar vessels. Data collection followed established protocols from similar surveys conducted across Florida. For this traffic inventory, a single video camera installed with date and time stamp was used to record all vessels in use within the subject area of the study (see attached Video Vessel Traffic Count Location map).

The survey area included the intersection of Alligator Creek and Buckley's Pass. A complete listing, timing and number of vessels observed, and direction of travel is also attached for reference. A still image example of video footage taken from the video traffic camera system used is attached (see image titled Video Traffic Camera Footage). Each vessel in use observed on the video footage was captured for direction of travel and time.

The vessel points of origin and points of destination are outlined in the next two tables. This shows us that there is a considerable number of vessels turning into oncoming vessel traffic heading up and down Alligator Creek. The vessels on Alligator Creek can operate on plane which in this confined intersection presents significant chances for vessel accidents.

Vessels Point of Origin	
Alligator (Harbor)	461 Vessels
Alligator (Up Creek)	304 Vessels
Buckley's Pass	237 Vessels

Vessels Point of Destination	
Alligator (Harbor)	446 Vessels
Alligator (Up Creek)	313 Vessels
Buckley's Pass	243 Vessels

The vessel types and vessel sizes are in the following tables. Most of the vessels were bay boats followed by fishing boats. There are many small vessels or personal watercraft and kayaks mixed in with these other vessels as well as sailboats and large motor yachts. All these vessel types using this small intersection contributes to the necessity to have the slow speed minimum wake zone moved to encompass this intersection to increase safety for the waterway users.

Type of Vessel	Total
Jon Boat	8
Kayak	45
Personal Watercraft	44
Fishing Boat	269
Bay Boat	524
Sailboat	41
Catamaran	52
Yacht	18
Paddle Board	1

Size of Vessel	Total
16' under	296
17' to 25'	632
Over 25'	73

Conclusion

Based on the activity levels summarized in this document, Charlotte County and City of Punta Gorda staff feel that the installation of the needed signs extending the existing slow speed minimum wake zone will greatly enhance the boating safety in this area.

The newly created Buckley's Pass has increased the number of vessels utilizing Alligator Creek. The additional number of vessels, size of vessels, non-motorized kayakers, the sharp blind corner, the shoal on the west side of Buckley's Pass, the number of vessels cutting across the path of boaters already in Alligator Creek, the vessels on plane, the constriction of the channel at this intersection combined with the currents creates multiple safety issues for boaters to deal with.

The extension Charlotte County and the City of Punta Gorda staff is requesting of the slow speed minimum wake zone is roughly 1,800 feet.

Staff knows FWC gets numerous complaints from frustrated boaters having to proceed slowly in certain areas of Florida waters but with the attached data, it should adequately defend the extension of the slow speed minimum wake zone.

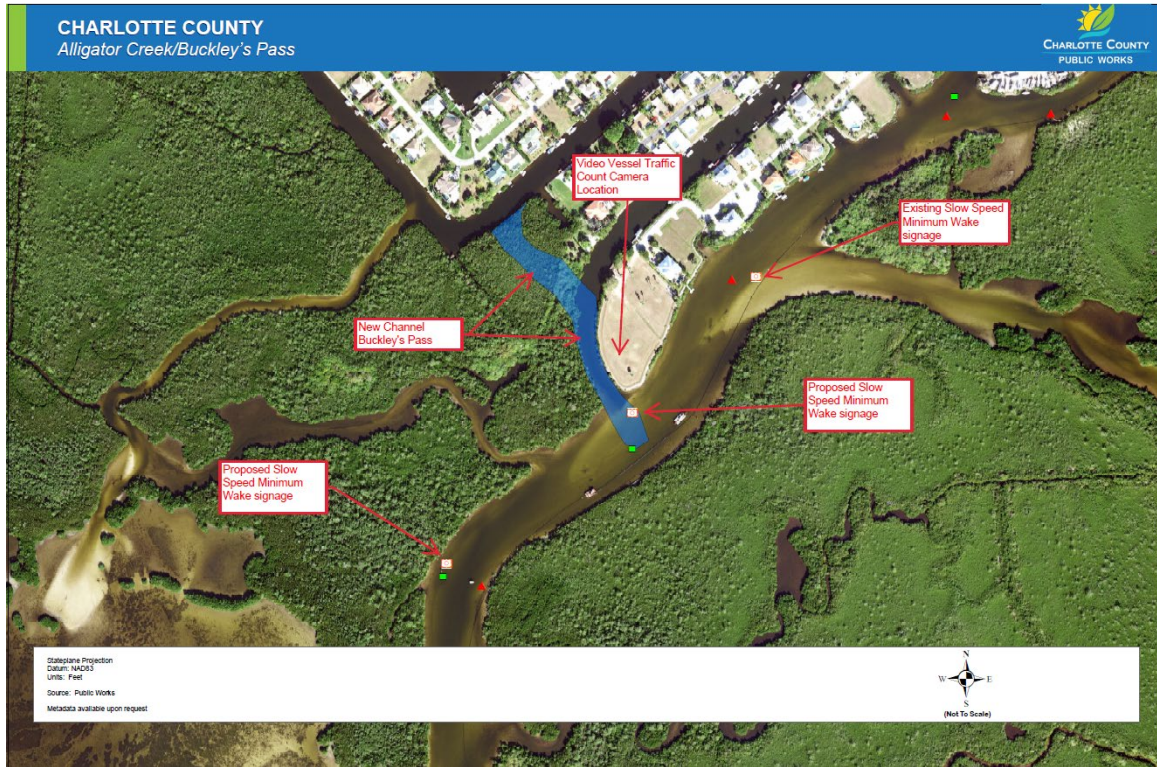
Image before Buckley's Pass was created



Image after Buckley's Pass was created



Video Vessel Traffic Count Location Map



Video Traffic Camera Footage

