

Shell Key North Pass and the Grand Canal

History and Background Information

SHELL KEY MANAGEMENT PLAN – The Shell Key Preserve, including the island and surrounding waters, covers 1828 acres and has been managed by Pinellas County since 2000 (Figure 1). The management plan focuses on balancing public use with habitat preservation particularly for nesting and migratory shore birds. The original plan was approved in 2000 by the Florida Department of Environmental Protection, Acquisition Restoration Council. The first plan update was approved by the County Commission in October 2007. The latest plan update was drafted in 2018. View the draft of the [2018 plan update](#) .

2013 DREDGING PROJECT – In June 2011, waterfront residents adjacent to the Preserve became concerned about the closing of the pass located between Shell Key and Collany Island referred to as the Shell Key North Pass (SKNP). Many of these residents depend on this pass for boating access to open waters. Since this channel only served residents along the pass, these residents collectively designed, permitted, and funded a private dredging project to address the steadily shrinking pass. The work was done in 2013, but the dredged channel quickly refilled with sand following completion of the project.

2015 PASS AND MONITORING PRESERVE CONDITIONS – By early 2015, SKNP had completely filled in and closed. In October 2015, Tampa Bay Watch held a public meeting where concerns about water quality, predation on shorebird and sea-turtle nests, access to open water, and shoaling in of the Grand Canal were discussed. Predation on shorebird and turtle nests was known to be an issue prior to SKNP closure; however, data showing changes in predation since pass closure is lacking. Likewise, County assessments suggest that the overall water quality conditions in the Preserve have remained good and seagrass coverage has been improving. Therefore, County staff recommended waiting for the results of a related study by the University of South Florida (USF), in which these issues could begin to be evaluated with a science-based approach.

2016 DUAL-INLET STUDY – In May 2016, Pinellas County contracted USF to complete a dual-inlet study of Bunces Pass and Pass-A-Grille Inlet, which included the Shell Key Preserve and adjacent coastal waters. The study was conducted by experts with a background in coastal geology and coastal management. The study utilized numerical modeling to simulate coastal processes in the Preserve and surrounding areas and evaluated the duration between dredging events (maintenance dredging cycle) for each of three dredge-cut scenarios. The estimated maintenance dredging cycle among the three scenarios ranged from 1 year for a modest least aggressive 20 meter wide cut, to 5 years for the largest most aggressive 80 meter wide cut. The science-based study was completed in 2018 and did not evaluate costs or the practicality of acquiring environmental permits. [View presentation of study results.](#)

PLANS MOVING FORWARD – A more focused coastal engineering feasibility study by the County's coastal management services consultant was initiated in December 2018 to evaluate ongoing concerns expressed by the local community. The proposed methodology is focused on developing an alternatives analysis to identify the pros and cons for feasible options to re-open SKNP and avoid, and/or mitigate, the potential for closure of the southern opening to the Grand Canal. Public input will be sought at key stages in the study to solicit feedback and local knowledge in developing and evaluating potential alternatives.

The outcome of the study will be available to private and public interests, as applicable and appropriate, from which alternatives may be implemented.



Figure 1. Map of Shell Key Preserve and Grand Canal