

M E M O R A N D U M

To: Tom Harmer, Town Manager
From: Isaac Brownman, Public Works Director
Report date: March 16, 2021
Meeting date: March 22, 2021
Subject: Canal Navigation Maintenance Program Update

Recommended Action

None, informational only.

Background

At the February 18, 2020 Regular Workshop Meeting, staff presented a review of Canal Projects and the Town's history of attempting to develop a Canal Dredging Program with recommended next steps in the development of a program, summarized as follows:

1. Verify existing inventory of canals - Classify canals as public versus private
2. Determine regional (Localized) or global (Town-wide) approach
3. Establish service levels
4. Develop a financial model estimating costs annual and over the long term
5. Utilize existing funds for development

The island of Longboat Key, by definition, is surrounded by water, and as such, waterway and bay access can be considered an amenity providing both general and specific benefits to residents and visitors of the island. The Town's canal system is a complex system of varying dimensions, widths, and permitted dredge depths. Portions of the system can be considered as providing an overall general recreational amenity to the Town due to the interconnectivity of portions of the system while other portions may provide a more direct benefit to the canal fronting properties. The goal of a canal navigation maintenance program is to develop a long-term, sustainable, funded program.

In creating a canal inventory, eighty-one (81) canals were identified during the review process. This inventory depicts the location of the canal, if the canal was determined to be deemed public or private through previous legal review, associated permits with those canals, and the historic permitted depth and width of those canals.

Through the inventory process, it was determined that Town canals generally fall into one of three (3) categories:

- Access channels, generally perpendicular to the island, providing access to the Bay and Intercoastal Waterway (similar to an arterial roadway).

- Perimeter channels, generally parallel to the island, connecting to and collecting from residential canals, restaurants, and commercial marinas to the rest of the island and to the bay access channels (similar to a collector roadway).
- Local, residential canals, typically dead end, and serving a specific group of residences (similar to a dead-end local roadway).

The historic discussions regarding the development of a canal dredging program dates back to the 1990s, including private and public canal determinations made in 1996 legal reviews by Turffs, Persson, Smith and Darnell. These determinations were made by reviewing plat dedications, submerged lands ownership, and private property boundary lines. This is important in determining which of the potential funding mechanism can be utilized, specifically addressing ad valorem (property value-based) funding which can only be used on public property for the purpose of maintenance and improvements.

Canal dredge width and depth as a function of level of service have already been established for many of the canals within the system due to pre-existing permits. The last large-scale dredging project the Town undertook was in 2003.

Navigational Dredge Program Management – Localized, Town-wide, Geographic Area

It is also important to note the difference between a Localized, Town-wide and a Geographic Area approach to canal program management. In a localized approach, projects would be smaller in scale and would have various elements to contend with, including canal types, dredge widths and permitted depths. Because of the variety of small scale neighborhood canals, a localized program would require a large number of very small assessment areas and mini-projects that would make this approach unwieldy and expensive. In addition, a separate solution would likely be required to address access and perimeter channels not associated with a specific neighborhood.

A Town-Wide approach would tend to include a set standard as to the depth and width of the potential canals within the program regardless of location and type, but is an inefficient and expensive approach to canal navigation dredging. This is primarily due to logistics of dredging groups of canals across the length of the island, type of equipment used for various canals, material handling, length of construction timeframe and length of barge haul routes.

The Geographic Area program approach allows canals within a geographic area to be grouped into logical project and priority groups, which can include multiple neighborhood canals as well as the nearby access and perimeter channels as appropriate. It is expected to be the most efficient and effective way to develop a program due the type and nature of the canals along Longboat Key.

In addition, environmental impacts can be considered more strategically in both the localized and geographic area approaches. For example, some canals do not have environmental (seagrass) impacts associated with their projects and could be dredged at a much lower cost.

As a program is developed, the Town would include outreach efforts to educate residents about the specific canal system level of service (dredge width and depth) they reside in. For example, if a resident lives in a system that can only be maintained to 3-foot deep by permit, but want to own a large boat, or a boat with a keel, they would need to understand that during low tides, they would be restricted in navigation. Reasonable navigation limits are defined as having 1 foot of vertical clearance between the bottom of their boat and the seafloor. Shaping expectations on what the program can, and cannot provide, early in the process provides for future success.

Funding Strategy Assumptions

To develop an initial program start-up budget amount, existing data was utilized to develop an assumed initial dredge volume of 100,000 cubic yards as well as project cost estimates from Taylor Engineering. This estimate includes the cost a 4-acre seagrass mitigation area, and also factored in actual program costs from Charlotte County, which currently has ongoing canal navigation maintenance program.

Using values from these sources and correlating these to the canals that will likely require sea grass mitigation for permitting by State and Federal agencies yields a budgetary estimate of approximately \$11.6 million as a reasonable start-up construction and mitigation cost for the initial dredge work. This cost would be refined as the program planning is advanced. Additional cost will be incurred to develop and manage the program.

There are two funding approaches that could be used to support this program. They are ad valorem taxes (property value based) and non-ad valorem special assessments (benefit based). The major differences are as follows:

- Ad Valorem Taxes
 - Based on property value times uniform millage (tax rate) = annual tax
 - Variable across the Town as it is based on value of property: for example, it is of note that many Gulf of Mexico facing properties have high property values, but do not have direct access to a canal
 - Collected through tax bill
 - Generally Federal income tax deductible (with some exceptions)
 - Must be used on public infrastructure
- Non-Ad Valorem Special Assessments
 - Each property is assessed based on the benefit that individual properties receive
 - Assessments can be applied in a “hybrid” approach, in that, there can be more than one type of assessment, such as a broader general benefit that applies to all property owners within the Town, and those that apply only to specific property owners receiving a direct benefit along, for example, a local canal

- Collected through tax bill or prepayment
- Special assessments are not generally Federal income tax deductible
- Funding institutions may require “back-up”
- Ongoing annual administration by Town staff of the non-ad valorem assessment database

Some supplemental sources can offset costs to the citizens, especially for those canals/channels that have a Town-wide benefit. These include County infrastructure taxes, limited grant opportunities (WCIND), and other revenues.

Staff recommends a Geographic Area approach to the management of the Town Navigation Maintenance Program using a hybrid-assessment funding model that assesses all Town residents for those access and perimeter channels providing an overall, island-wide benefit as an amenity to the island and a separate, special assessment for canals designated as local, residential canals. This Geographic Area approach and hybrid-assessment funding mechanism allows all canals, whether deemed public or private, to be grouped into similar geographic and level of service areas. They would be dredged in a prioritized, need-based manner based on location, dimensions, prior permitting criteria, proximity to spoil sites and the minimization of construction duration and barge travel using access channels.

Next Steps to Move the Program Forward

The next steps to move a program forward include hiring a consultant to develop the approach and funding scenarios for a tailored program using general and special benefit criteria as outlined above and in the canal inventory. The consultant will work with the Town’s Public Works, Legal, and Finance teams to refine the program concept and develop a funding framework. The consultant will present funding options to the Commission and public as part of a public Regular Workshop Meeting and other public outreach mechanisms. The Town Commission will ultimately decide on program approach and funding methodology based on consultant and staff final recommendations.

Recommendation

None, informational only.

Attachments

PowerPoint Presentation (Available from Town Clerk’s Office)