



The Commonwealth of Massachusetts  
Office of the Inspector General

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November 22, 2019

Daniel A. Pallotta, Chairman  
Plymouth County Commissioners  
44 Obery Street  
Plymouth, MA 02360

**Re: Plymouth County Dredge Program**

Dear Chairman Pallotta:

The Office of the Inspector General (“OIG”) reviewed the Plymouth County (“County”) Dredge Program (“program”), specifically the County’s \$212,000 purchase of excavating equipment in 2015 and its subsequent use and benefit to County communities. The OIG concluded that the program has been unsuccessful because the County did not adequately plan to effectively utilize its capital investment. Further, the County did not properly secure municipal funding that would allow it to purchase additional equipment and hire staff needed for the program. These findings, as well as recommendations for improvement, are discussed in more detail below.

**Background**

Dredging is the process of removing sediment and debris from the bottom of bodies of water, often to achieve a sufficiently navigable water depth or remediate beach and shoreline erosion. Successful dredge operations typically require skilled personnel who know how to operate dredge equipment, are familiar with dredging techniques and have the required hoisting licenses. Depending on the type of project, dredge operations often require additional equipment, such as a hydraulic or mechanical dredge machine and attachments, support vessels to facilitate the removal of dredged materials, barges, and trucking equipment to bring dredged material to its final destination.

The County formed the Plymouth County Dredge Program in mid-2013, with the goal of providing low-cost dredging services for Plymouth County municipalities. The County modeled its program after the Barnstable County Department of Dredging, which owns a complete array of dredging equipment and employs a full-time staff, thereby operating as an alternative to

private dredge contractors. The County established a working group, made up of harbormasters and other representatives of participating municipalities, to plan the program. The working group occasionally consulted with outside experts, such as Barnstable County dredging staff on program needs. In the fall of 2013 through the spring of 2014, the County gathered information on current dredging needs through the working group. The working group simultaneously discussed what equipment would be needed to carry out the projected projects.

Through the efforts of local elected officials, in April 2014, the County received \$250,000 from the Commonwealth to purchase saltwater dredging equipment.<sup>1</sup> On January 15, 2015 the County awarded a contract to Schmidt Equipment, Inc. to buy a 2015 John Deere 210GLC excavator for \$212,000.

In addition to the funding received from the Commonwealth, the County planned to fund the program's operations through annual participation fees collected from the communities involved. These fees were meant to hire program staff and purchase additional equipment needed to effectively meet the dredging needs of participating communities. The working group proposed a number of fee structures, typically accounting for the municipalities' population and projected amount of material to be dredged. At the time that the equipment was purchased, there were no formal, executed agreements between the County and the municipalities regarding these fees; nor had the respective communities approved any fee structure.

Several communities had expressed a strong interest in the program leading up to the purchase of the excavator, but subsequently decided not to participate due to concerns about lack of proper equipment, staff and funding. This discouraged other communities from providing funds to the County, as the rates were dependent on full participation of each municipality. Because the County did not collect the anticipated revenue to fund the program, it was unable to purchase additional equipment or hire program staff.

On June 30, 2015, the excavator was delivered to the town of Kingston's transfer station in anticipation of the town's dredge project, which was scheduled to begin that fall. However, this project never materialized due to local funding roadblocks and lack of necessary equipment. Therefore, the excavator sat, unused, at the transfer station until June 2019. In June 2016, the County paid Schmidt an additional \$3,594 to extend the equipment's warranty.

During the four years the excavator was stored in Kingston, the County continued to propose various uses of the excavator to multiple communities and other organizations. The County also offered the use of its excavator to municipalities that are engaged in larger dredge projects with private contractors. Again, none of these projects materialized. In May 2016, the County received another \$200,000 from the Commonwealth for the purposes of the program.<sup>2</sup> As of December 31, 2018, the County's dredge program balance was \$233,806.

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<sup>1</sup> See St. 2013, c. 38, § 2, line 1599-0026.

<sup>2</sup> See St. 2014, c. 286, § 2, line 2800-7107.

Notably, the first use of the excavator was in June 2019, when the town of Harwich, in Barnstable County, rented the excavator for one week to complete a dredge project in the Wychmere Channel. The total cost to Harwich for this equipment rental was \$1,400. The County anticipates additional dredge projects in Harwich, Falmouth and Chatham, all of which are municipalities in Barnstable County.

**Finding #1: The County did not adequately plan for the cost-effective use of the excavator and did not secure sufficient program funding prior to its purchase.**

Before buying the excavator, the County did not secure funding from the participating municipalities that would have made the dredge program feasible. The County understood the need for additional equipment and a staff to operate the program, but did not have the funding in place for these necessary expenses, which it estimated at \$378,000. Despite this fact, the County moved forward with the purchase of the excavator before the program was fully funded. By doing so, the County put itself in a position of owning a piece of equipment that had no operator or supporting infrastructure that would render it useful to Plymouth County communities.

Though the County surveyed participating municipalities on their anticipated dredging needs, there were no shovel-ready projects and no firm commitments for future use in place prior to purchasing the excavator. Dredging projects typically involve complex permitting and environmental considerations, and often take significant time to line up. Without having a responsible business plan, the County should not have made a capital investment in the program.

**Finding #2: The County lacks the necessary equipment and expertise to operate a financially viable dredge operation.**

Despite spending \$212,000 on an excavator, the County lacks the supplemental equipment necessary to complete many dredging jobs. The County originally planned to purchase a barge, dump scow, push boat and additional attachments for the excavator, but has not done so. Therefore, the usefulness of the County's excavator is limited to situations where sediment that needs to be dredged is within the excavator's reach from the shoreline and can be deposited on-site. If this is not the case, municipalities would have to arrange and pay for additional equipment to complete the work. Ultimately, the County's lack of equipment poses a logistical challenge to municipalities that is difficult to overcome and limits the program's effectiveness.

Similarly, the County does not have the requisite expertise to operate a fully functioning dredge program. The County initially planned to hire skilled employees to operate its dredging equipment. However, as communities began to withdraw from the dredge program, the County was left without the operating revenue to hire any staff. Therefore, the County lacks the in-house expertise to plan and build out its program, as well as to operate the excavator.

Furthermore, because the program does not have the proper staff, municipalities who wish to use the County's excavator would need to provide their own operators.<sup>3</sup> Complicating the process, dredge contractors typically prefer to operate their own equipment, which has led many communities to seek these less-difficult but more expensive options. In summary, without an experienced staff, the County is essentially operating as an equipment rental business, which provides little additional value to Plymouth County communities. This is best demonstrated by the fact that the excavator sat unused for four years after its purchase, despite relatively aggressive marketing of the "program" by County officials.

### **Recommendations**

The County should take immediate action to ensure that public funds and assets are not wasted through this program. The County should:

1. Determine whether purchasing additional equipment and hiring experienced staff would result in efficient utilization of the County's dredge program by Plymouth County communities.
2. Estimate the cost to procure the additional equipment and hire experienced staff necessary to become fully operational and cost effective, and secure written funding agreements to make these investments.
3. Absent written agreements from County communities and the acquisition of necessary equipment and staff to become a fully operational program, consider surplussing the excavator, remitting the proceeds and all other funds appropriated to the program back to the Commonwealth's General Fund, and ending the program.

### **Conclusion**

While well-intentioned, the Plymouth County Dredge Program has been poorly executed and provided little value to the communities it serves. Municipalities could benefit from a regionalized dredge service as an alternative to contracting with private vendors. However, unless the County takes corrective action to make the program feasible and worthwhile to utilize, the County will be at risk of continuing to waste taxpayer funds on this program. The OIG requests that, within 90 days of receipt of this letter, the Commissioners inform the Office, in writing, of what action(s) the County plans to take regarding this matter. Thank you for your cooperation.

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<sup>3</sup> The County explored "partnering" with a private vendor that could operate the County's excavator for communities on an as-needed basis, but this effort was unsuccessful.

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Please do not hesitate to contact my Office with any questions.

Sincerely,



Glenn A. Cunha  
Inspector General

cc: Frank Basler, Plymouth County Administrator  
Sandra M. Wright, Plymouth County Commissioner  
Gregory M. Hanley, Plymouth County Commissioner