

# Deep Creek Lake Cove Dredging Evaluation

## 6/29/17 Webinar: Q&A Summary

### **Question :**

What is the point of removing sediment before the sources of sediment are corrected? They include tributary stream sediment, shoreline erosion sediment and sheet flow sediment from the shoreline. The bulk of the existing sediment entered the lake in the last twenty years due to shoreline erosion from higher water levels through the summer. If the sediment is removed without mitigating the sediment sources the lake bottom will become unstable. Slumping will occur and more shoreline will be lost. The current plan seems to have the cart before the horse.

### **Answer:**

The purpose of this evaluation is to rank the coves based on the ability to implement a dredging project and successfully procure Waterway Improvement Fund (WIF) grant funding. A dredging project would include offsets from the shoreline to prevent shoreline slope stability issues.

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### **Question:**

Has a survey been completed and used in this analysis?

### **Answer:**

A bathymetric study has not yet been completed at this point in the process. A survey of the highest ranked cove will be done prior to submitting the application for the WIF grant.

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### **Question:**

Where did the boating congestion data come from?

### **Answer:**

Two sources were utilized to acquire this information, the Whitney Bailey Cox & Magnani, LLC (WBCM) 2013 report, *Deep Creek Lake: A Sediment Study*, as well as historical aerial shoreline photos. Boat slips were physically counted in the photos.

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### **Question:**

Why are the costs presented for Arrowhead Cove two to three times the cost estimate of mechanical wet dredging in the WBCM study?

### **Answer:**

A full cost analysis was not conducted for the dredging evaluation, as this would be done during the design process; the costs utilized in the evaluation were supplied from the WBCM report. The \$1 - \$2 million cost estimate stated during the webinar is a more realistic, conservative figure, which is based on the dredging engineer's previous lake dredging experience. It is important to note that the \$1 - \$2 million cost estimate is for the total project, including design, project management, construction management, and dredging work.



**Question:**

What experience does Anchor QEA have with lake dredging?

**Answer:**

Within the state of Maryland, Anchor QEA has completed design and varying stages of construction for three lakes in Howard County, two lakes in Montgomery County, and one lake in Frederick County. Anchor also has experience at many other lakes ranging from 10,000 cubic yards to 2.2 million cubic yards. According to the 2013 WBCM report, *Deep Creek Lake: A Sediment Study*, dredging projects of the ten specified coves would range from 10,600 to 119,000 cubic yards. The Arrowhead Cove dredging project would require removal of 15,625 cubic yards of material.

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**Question:**

Does Anchor QEA have any experience with lakes the size of Deep Creek?

**Answer:**

Lake size and dredging area size are different things. As a whole, Deep Creek Lake is bigger than the other Maryland lakes that Anchor QEA has been involved with; however, the area to be dredged in Arrowhead Cove is similar to the dredging areas of these lakes. Out of state, Anchor has dealt with lakes and dredging projects comparable to, if not larger than, Deep Creek Lake.

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**Question:**

How likely is it (based on previous experience) to get funds through the Waterway Improvement Fund (WIF) grant for this project? The end goal is to have all impacted coves dredged.

**Answer:**

Because this is the first time a lake dredging project will be considered during the WIF grant review, a frame of reference cannot be provided to indicate the likelihood of being awarded the grant. As the application is being assembled, the goal is to make it as competitive as possible. The choice of Arrowhead Cove is a result of finding the most competitive qualities in an area to be dredged.

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**Question:**

Has the dredging method been decided for Arrowhead Cove?

**Answer:**

Not at this time; it will ultimately be decided during the design phase of the project. Many factors (cost, staging area, etc.) still need to be examined before a method can be chosen. The cost presented, which is influenced by the dredging method, is conceptual and conservative. The cost presented is utilizing the hydraulic method.



**Question:**

Will there be more stringent enforcement of the boat operation distance rules (100 feet from shoreline, docks, moorings, etc.) which will help mitigate future shoreline erosion?

**Answer :**

The Maryland Department of Natural Resources (MDNR) enforces this regulation. The MDNR has and will continue to focus on enforcement efforts on Deep Creek Lake. Natural Resources Police officers already enforce Code of Maryland Regulations 08.18.33.03B(1) with regard to illegal boating on the lake. Maintaining a healthy buffer ensures both the protection of the public and our shared natural resources.

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**Question:**

Was boater usage accounted for as an alternative to counting boat slips in ranking the coves? Would that be a better measure of relative need for dredging in different coves?

**Answer:**

Unfortunately, available data regarding boat usage was incomplete and did not distinguish between coves in Deep Creek Lake. Data indicating boat slip count was more definitive and was therefore used in the assessment. When collecting boat slip data, there was a focus on summertime aerial photos to maximize the number of visibly used boat slips.

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**Comment:**

Boat slips are not related to boating congestion. Further, there is a difference between commercial boat slips and residential boat slips. For Type A docks, you can have up to three boats, though it may have been seen as one slip.

**Reply:**

When more than one boat was docked in a slip it was counted in the data collection. It was not assumed that there were more boats than the number indicated in the WBCM study and historical photos for data collection purposes. Commercial and residential vessels were not differentiated as both are considered when discussing boat usage.

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**Comment:**

Arrowhead Cove already has a no wake zone established, while Green Glade and Turkey Neck do not have regulations in place. Summertime traffic is high in these areas, so they may be better options; however, the costs to dredge these coves are obviously the highest, which has pushed them to the bottom.

**Reply:**

The cost of dredging Arrowhead Cove was on the low end of the costs estimated. Though dredging in Turkey Neck Cove was assessed to be less expensive than dredging Arrowhead Cove, Arrowhead Cove was also better suited to the needs of construction staging areas and accessibility. Cost was only a part of the consideration in ranking the coves.

