

# Dredge Program Cost

Category	Opinion of Probable Cost <sup>(a)</sup>
<b>Base Dredge Event<sup>(b)</sup></b>	
Dewatering Site & Permanent Pipeline Construction <sup>(c)</sup>	\$13.0M (\$9.1M to \$19.5M)
Dredging	\$23.0M (\$16.1M to \$34.6M)
Material Processing	\$24.9M (\$17.4M to \$37.3M)
Transportation & Disposal <sup>(d)</sup>	\$34.4M (\$24.1M to \$51.6M)
<b>Total for Base Dredge</b>	<b>\$95.3M</b> <b>(\$66.7M to \$143.0M)</b>
<b>Maintenance Dredging Events<sup>(e)</sup></b>	
Event 1 (Year 5 Post-Base Dredge)	\$46.5M
Event 2 (Year 10 Post-Base Dredge)	\$59.4M
Event 3 (Year 15 Post-Base Dredge)	\$96.8M
Event 4 (Year 20 Post-Base Dredge)	\$123.5M

Notes:

- (a) The opinions of probable cost presented herein are based on Arcadis' experience, vendor estimates, and Fairfax County staff input. These opinions of probable cost have been prepared for the purpose of comparing potential alternatives and are based on available information from site investigations and the anticipated dredge program scope. These opinions of probable cost are AACE Class 4 level and expected to be within -30% to +50% of the actual project cost. Changes in cost elements are likely to occur as a result of new information and data collected during an engineering design phase, selection of dewatering site location, and determination of final disposal location. Utilization of this cost information beyond the stated purpose is not recommended.
- (b) The base dredge event is assumed to include removal of 500,000 cubic yards of sediment from Lake Accotink and be completed over a three-year period from 2024 to 2026. Costs shown were developed in 2022 dollars and escalated to the mid-point of construction (2025) using a 5% annual inflation factor. Costs are shown to the nearest \$0.1M.
- (c) Cost assumes dewatering site constructed at the Wakefield Park Maintenance Facility location.
- (d) Cost shown assumes transportation and disposal to Luck Ecosystems.
- (e) Maintenance dredging events are expected to continue in perpetuity but only the first four maintenance dredging cycles are shown. The costs presented herein assume \$30.0M (in 2022 dollars) per maintenance dredging event and are escalated to the applicable event year using a 5% annual inflation factor and completion of the first maintenance dredge in 2031.