Frequently Asked Questions

What is the best way to provide feedback and stay informed about potential White Rock Lake dredging?

If you were able to attend the community meeting on January 28, please make sure to turn in your comment card before you leave. In addition, please use the QR code to join the live survey during the meeting. Additional opportunities to provide feedback are through our web-based survey or by contacting City staff. The web-based survey is a Google Form available at tinyurl.com/white-rock-dredging. Google Form will be active until February 11, 2020. Comments can also be provided to our designated City of Dallas project contact:

David Phan, P.E., CFM
Dallas Water Utilities, Floodplain Management
Office: 214-948-4682
E-Mail: David.Phan@dallascityhall.com

If you are interested in staying informed, please provide your contact information at this meeting, via the web form, or reach out to the contact provided above.

What is dredging?

Dredging is the removal of accumulated sediments in a lake. There are two different mechanisms employed to remove the sediment: hydraulic or mechanical dredging. The appropriate dredging mechanism for a project is dependent on several factors, including volume of the lake, budget, type of material to be removed, amount of material to be removed, availability of land nearby, and usage of the lake, among others.

It is anticipated that a hydraulic dredging mechanism will be employed at White Rock Lake. Hydraulic dredging involves the use of a dredge that floats on the surface of the lake, with a cutter to dislodge the sediment and a pump to suck up a mixture of water and sediment. Hydraulic dredging is faster than mechanical dredging and is typically the most cost-effective method for large dredging projects. It does not require the lake to be drained during construction.

Where would all that sediment go?

There are several factors that determine where sediment can be disposed of. In some cases, sediment can be pumped directly to the disposal site. In other cases, temporary dewatering sites are set up around the perimeter of the lake to minimize the volume of material to be hauled off-site and to allow water to be returned to the lake. Evaluating appropriate disposal mechanisms and identifying potential disposal sites is part of the feasibility study.

Why is dredging being considered for White Rock Lake?

Natural and human-influenced processes including streambank erosion, construction, and urban and agricultural runoff contribute to sediment in waterways. Over time, stormwater flows from the upstream portions of the White Rock Creek watershed have carried sediment downstream and deposited it into White Rock Lake. Since 1937, the Lake has been dredged every 20-25 years to remove portions of the sediment from the Lake.

The functions of White Rock Lake have changed over time. Currently, the only approved use of White Rock Lake is recreation. The primary purpose of dredging would be to enhance recreational use opportunities for a variety of White Rock Lake users.

What does a feasibility study seek to accomplish?

A feasibility study is a formal way to determine if a proposed action is practically achievable. In this case there are a combination of engineering considerations, stakeholder concerns, environmental regulatory requirements, and dredging operation costs that must be considered to determine a course of action. The goal of the feasibility is to evaluate these factors to help the City decide about practical near-term achievability of a project to dredge White Rock Lake.

What is the timeline of the feasibility study?

January 2020 – Data Gathering, Site Visit by Freese and Nichols, PKR and DWU, Community Meeting to gather input.

February/March 2020 – Analysis – Look at methods, alternatives, risk factors, regulations and cost.

April 2020 – Funding – Research funding sources, requirements and timelines.

April/May 2020 – Findings – Draft results, Community Meeting to report findings and gather input.

May 2020 – Final Recommendations and Final Feasibility Study Report.

When will the dredging be done? How long does it take? How much does it cost?

The City is currently evaluating the feasibility of dredging the lake, and the decision to dredge has not yet been made. Details about a potential dredging project including schedule, cost, and construction details will be refined through the feasibility study and final design process if the City decides to pursue a dredging project.

Based on prior White Rock Lake dredging efforts, the dredging work could range from 6 to 12 months. A cost estimate is not yet available because the details associated with the amount of sediment, how the work would be performed, and permitting costs are not yet available.

What would be the aesthetic impacts during a dredging operation?

Dredging equipment and materials will be temporarily stored onsite. Increased traffic flow, including construction traffic, is also anticipated. Other temporary impacts typical of a dredging operation include noise, vibration, and smell.

Would sediment be visible in the water?

Yes, some sediment may be visible during dredging activities. However, the extent and duration of visible sediment at any time is expected to be minimal, and likely less than normally observed immediately after a storm event.

What are the environmental considerations?

The dredging process increases turbidity in the water and has the potential to impact wildlife habitats. In addition, if sediment depositions contain pollutants, the work associated with dredging may spread these pollutants throughout the waterbody. Whether contaminated or not, the appropriate disposal of dredge material is also an environmental consideration. The dredging work will include sediment testing and appropriate coordination with environmental resource agencies to prevent adverse impacts to the environment.

How would dredging affect users of the lake during construction?

The City and its engineer would work to minimize effects on lake user activities. Temporary access limitations to some locations would be expected, but no work plan with specific details has been developed yet. Specific details would be developed during the design of a dredging program.

What will happen to the shoreline and surrounding areas of the lake?

Temporary disturbances to the shoreline and surrounding areas are a part of any major lake construction project. The feasibility study will consider opportunities to minimize these disturbances and any future dredging programs should include provisions to restore preconstruction conditions and mitigate any long-term impacts.

Does dredging change the lake level?

There is no intent to permanently lower the normal water surface of the lake. However, dredging operations require water be removed with sediment, so there may be temporary impacts to the lake level. These impacts will be dependent on dredging mechanism and weather during project construction and will be considered as part of the feasibility study.

Would dredging the lake provide flood control benefits?

No. White Rock Lake does not currently function as a flood control reservoir, and dredging would not change the lake's function.

Are there any other improvements that will be made to the lake?

Although one of the main purposes of dredging is to enhance recreational use of the lake, no other White Rock Lake Park improvements are anticipated to be included with the potential dredging work at this time.