1. Provide maintenance updates from Dallas Water Utilities
2. Provide background and objectives of dredging feasibility study
3. Gather input from community and user groups
White Rock Lake Dam Maintenance Improvements

- Decommission existing and install new piezometers
- Repair existing upstream (lake-side) dam slope protection and hardening
- Harden downstream earthen slope
- Repair dam spillway concrete cracking and spalling

Dallas Water Utilities Announcements
White Rock Lake Dam Maintenance Improvements

- Inspect existing stoplogs for repair or replacement
- Manage vegetation at multiple locations
- Address 2019 inspection observations (minor changes since previous 5-yr inspection)
  - Does not address increase of spillway hydraulic capacity
- Timeline:
  - Spring 2020 - Advertise Construction
  - Winter 2020/2021 – Begin Construction
  - Fall 2022 - Complete Construction*

*weather dependent
Background Information
What is a Feasibility Study?

Feasibility studies are conducted primarily to determine:

- Key goals of the project.
- Alternative solutions and associated costs.
- Potential project roadblocks (risk factors).
- Project requirements and expected timeline.
• Dallas Park & Recreation Department partnering with Dallas Water Utilities on high-level feasibility study including:
  • Approaches for dredging
  • Regulatory requirements for dredging
  • Costs associated with design and dredging activities
  • Potential funding sources for dredging projects

• Freese and Nichols hired as engineering consultant
• Brownstone providing environmental consulting

Background
Feasibility Study
Timeline
Feasibility Study

Data Gathering
- Historic Dredging
- Site Visit
- Community Input
- Project Goals

Feb-Mar/2020
Analysis
- Methods
- Alternatives
- Risk Factors
- Sediment Testing
- Regulations
- Costs

Apr/2020
Funding
- Sources
- Requirements
- Timelines

Apr-May/2020
Findings
- Draft Results
- Community Input

May/2020
Reporting
- Incorporate Feedback
- Final Recommendations
- Final Feasibility Study Report

Start
Dec/2019
Jan/2020
End
Summary
Feasibility Study

Identify Project
Gather Community Input
Analyze Alternatives
Determine Feasibility
Engineering Plans

9
1. Presentation with interactive survey questions (1 hour)

2. “Come & Go” feedback stations (1 hour)
Meeting Information

Opportunities for Feedback

• Online Google Form
• Comment Cards
• Interactive Survey*
• Feedback Stations

* Interactive Survey Results are from a small population sample and cannot be considered statistically significant.
Meeting Information

Opportunities for Feedback

- Online Google Form
  tinyurl.com/white-rock-dredging

- Form will be active until February 11, 2020
• Comment Cards
Meeting Information

What is Mentimeter?

- Interactive Survey
- Uses Your Smartphone
- Results* Displayed Real-Time

* Interactive Survey Results are from a small population sample and cannot be considered statistically significant.
Meeting Information

What is Mentimeter?

- Go to www.menti.com
- Use code 75 56 46
- Scan QR code (on screen and on FAQ card)

*Interactive Survey Results are from a small population sample and cannot be considered statistically significant.*
Test Question: What is your favorite lake in Dallas?

Bachman Lake

Lake Cliff

White Rock Lake
• Feedback Stations

• City of Dallas, FNI, and Brownstone staff available to answer questions

Meeting Information
Opportunities for Feedback
• Go to [www.menti.com](http://www.menti.com)
• Use code **75 56 46**

  or

• Scan QR code (on screen and on FAQ card)

*Interactive Survey Results are from a small population sample and cannot be considered statistically significant.*
Question 1: What is the primary use of White Rock Lake?

- Flood Control: 0
- Hydropower: 0
- Recreation: 0
- Water Supply: 0
Recreational Lake

- 9.33-mile hike and bike trail
- Picnic areas
- Rental facilities: Winfrey Point and Big Thicket
- Fishing piers
- Sailing and rowing facilities
- Meeting and event facility: White Rock Bath House Cultural Center
- Dallas Arboretum
- Audubon Society-designated bird watching area and wetlands site

Background
Use of White Rock Lake Park
Question 2: What is your primary use of the Lake?

- Business Owner: 0
- Cultural/Entertainment Activities: 0
- Cycling: 0
- Hiking/Jogging: 0
- Home Owner: 0
- Passive Recreation (ex. bird watching, dog park): 0
- Rowing and/or Kayaking: 0
- Sailing: 0
Question 3: How often do you visit White Rock Lake?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>A few times per year</td>
<td>0</td>
</tr>
<tr>
<td>Monthly</td>
<td>0</td>
</tr>
<tr>
<td>Weekly</td>
<td>0</td>
</tr>
<tr>
<td>Daily</td>
<td>0</td>
</tr>
</tbody>
</table>
Question 4: What is your preferred time of year to use the lake?
• Removing sediment from lake
• “Hydraulic Dredging” for White Rock Lake would use cutter suction head pump
• Restores water depth

Background
What is Dredging?
• Cost
• Noise
• Smell
• Water Quality
• Sediment Dewatering & Disposal
• Site Disturbances
• Temporary Closures
• Suspended Sediment
• Wildlife Impacts

Background

Construction Considerations
• Improve conditions for water activities
• Water quality impacts
• Improve shoreline maintenance (i.e. trash and debris)
• Project will not provide flood control benefits
History of White Rock Lake Dredging

- 1937
- 1955-56
- 1974
- 1996-98
History of White Rock Lake Dredging

• 1937
  – Completed in 3.5 years
  – 400,000 cubic yards of sediment removed
  – 90 acres of land reclaimed

• 1955-1956
  – 15,000 cubic yards of sediment removed

• 1974
  – 1,350,000 cubic yards of sediment removed
  – Sediment used to rebuild marshy areas
  – Creation of Mockingbird Point
History of White Rock Lake Dredging

- Last dredging completed in 1998

- Last study that preceded the dredging was in 1994
  - Study found that sediment impacted oxygen levels in the summer, which could threaten the fish population

- Approximately 3,000,000 cubic yards of sediment removed
History of White Rock Lake Dredging

- Bond-Funded Project
  - 1995 Bond Funds - $9M
  - DWU Revenue Bonds - $9M
    - Reimbursed with stormwater revenues

- Cost savings realized when a landowner needed his gravel pit filled in Hutchins, Texas
  - Dredge boat pumped sediment from the bottom of the lake through 24-inch pipes straight into the pit for 9 months
Question 5: What are your main concerns regarding lake dredging? (Please rank all in order of importance)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Aesthetics Impacts</td>
</tr>
<tr>
<td>2nd</td>
<td>Business Impacts</td>
</tr>
<tr>
<td>3rd</td>
<td>Environmental Impacts</td>
</tr>
<tr>
<td>4th</td>
<td>Expenditure of Tax Dollars</td>
</tr>
<tr>
<td>5th</td>
<td>Recreation Impacts</td>
</tr>
<tr>
<td>6th</td>
<td>Water Quality Impacts</td>
</tr>
</tbody>
</table>
Question 6: How would your usage of the lake be affected during dredging activities?

Question 2: What is your primary use of the Lake?
- Business Owner
- Cultural/Entertainment Activities
- Cycling
- Hiking/Jogging
- Home Owner
- Passive Recreation (ex. bird watching, dog park)
- Rowing and/or Kayaking
- Sailing

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>0</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would continue using the lake as I normally do</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would reduce my visits to the lake</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would completely avoid visiting the lake</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Question 7: How concerned are you about the following impacts during dredging?

<table>
<thead>
<tr>
<th>Very Concerned</th>
<th>Not Concerned At All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dredging equipment noise</td>
<td></td>
</tr>
<tr>
<td>Reduction in recreational opportunities</td>
<td></td>
</tr>
<tr>
<td>Road and/or trail closures</td>
<td></td>
</tr>
<tr>
<td>Visual impacts (aesthetics)</td>
<td></td>
</tr>
<tr>
<td>Visible suspended sediments in lake</td>
<td></td>
</tr>
</tbody>
</table>
Question 8: What are the most important goals of this dredging project? (Please rank all in order of importance)

1st | Improving fish & wildlife habitat
2nd | Improving lake aesthetics
3rd | Providing for long-term lake maintenance
4th | Restoring lake depth for recreation
5th | Improving water quality
Question 9: At this preliminary point, do you agree or disagree with the following statements?

- Dredging White Rock Lake is absolutely necessary.
- Dredging White Rock Lake will mostly result in positive impacts.
Question 10: At this preliminary point, are you in favor of dredging White Rock Lake?
Dallas Parks and Recreation
WHERE DO YOU LIVE?

PLACE A STICKER ON THE MAP WHERE YOU LIVE

PLACE A STICKER IN THE BOX BELOW IF YOU LIVE OUTSIDE THE AREA SHOWN ON THE MAP
### Dallas Parks and Recreation

**WHAT AREAS OF THE LAKE DO YOU COMMONLY VISIT?**

Select one or more areas you visit by placing a sticker in the appropriate box below.

<table>
<thead>
<tr>
<th>WINFREY POINT</th>
<th>SUNSET BAY/PELICAN POINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Sample Photo]</td>
<td>![Sample Photo]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BIG THICKET</th>
<th>DREYFUS CLUB</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Sample Photo]</td>
<td>![Sample Photo]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BATH HOUSE CULTURAL CENTER</th>
<th>CORINTHIAN SAILING CLUB</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Sample Photo]</td>
<td>![Sample Photo]</td>
</tr>
</tbody>
</table>
Dallas Parks and Recreation
WHERE IS DREDGING APPROPRIATE?

PLACE A COLOR COORDINATED STICKER ON THE MAP WHERE...

[Image of map with stickers indicating dredging is appropriate or not appropriate]
Dallas Parks and Recreation
HELP US IDENTIFY AREAS OF CONCERN
PLACE A STICKER ON THE MAP TO IDENTIFY AREAS OF CONCERN
### Dallas Parks and Recreation

**What do you do when you visit the lake?**

*Pick your activities by placing a sticker in the appropriate box below*

<table>
<thead>
<tr>
<th>Boating &amp; Sailing</th>
<th>Cycling</th>
<th>Fishing</th>
<th>Rowing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Running &amp; Walking</th>
<th>Sightseeing</th>
<th>Bird Watching</th>
<th>Dog Park &amp; Other Park Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*If you use the lake for other purposes please tell us in the box below*