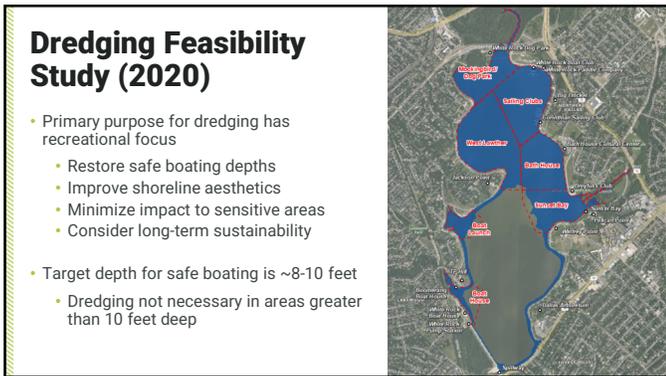




1



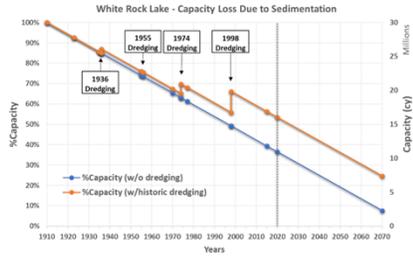
2



3

Dredging Feasibility Study (2020)

- Review of past dredging operations and sediment surveys
- Four previous dredge activities, about every ~20 years
- Approximate annual lakewide sediment load = 170,000 CY



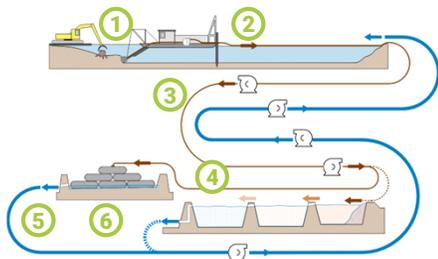
4



5

Dredging, Dewatering & Disposal Process

- Hydraulic Dredge
- Slurry Line to Lakeside Staging
- Slurry Line to Dewatering Site
- Dewatering Process
- Return Water (to Lake via Pumps or Stream via Gravity)
- Final Use of Materials (Applied Onsite or Truck Away)



6

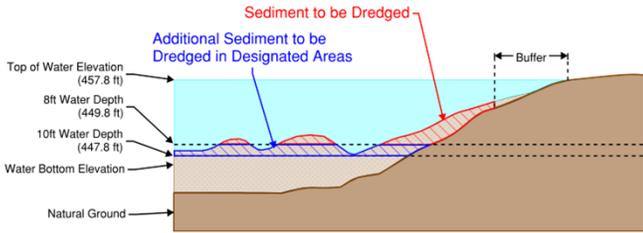
Lakeside Dredging Operations

- Hydraulic dredging
 - Dredge barge with cutter head and suction hose
 - Floating slurry line to dewatering site
- Target dredge depth of 8 feet with priority areas up to 10 feet



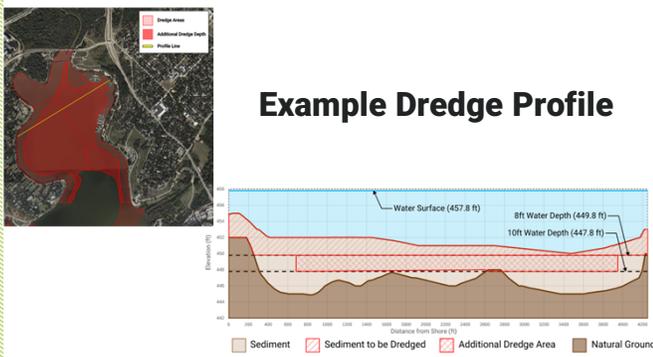
7

Lakeside Dredging Operations



8

Example Dredge Profile



9



10

Project Findings to Date

- Updated Bathymetric Survey**
 - Overall dredge quantity to meet lakewide target depth is 1.7M CY
- Geotechnical Investigation & Sediment Characterization**
 - Dredge materials found to be suitable for land application
 - No chemicals of concern above acceptable thresholds
- Environmental Permitting**
 - Preliminary framework established
- Dewatering & Disposal Site Analysis**
 - Determined preferred methods based on project scale
 - Identified potential sites with sufficient land area
- Preliminary Dredging Design**
 - Developed conceptual dredge, slurry pipeline, dewatering site drawings

11

Project Findings to Date

Lakewide Dredge Summary

Approx. Dredge Volume:
1,690,000 CY

Approx. Project Cost (2025 \$):
\$54M - \$80M

- Project Assumptions:**
 - Hydraulic dredge with 20" slurry line
 - Approx. 11-mile pipeline
 - Geotube dewatering (or similar methodology)
- Dewatering/Disposal Location:**
 - Dredge material is acceptable for beneficial reuse as daily cover at McComas Bluff Landfill

12

Sediment Distribution

Location		Sediment Volume (CY)
A	Mocking Bird	192,100
B	Sailing Club	352,600
C	West Lawther	818,500
D	Bath House	130,900
E	Sunset Bay	112,200
F	Boat Launch	61,700
G	Boat House	22,000
Total:		1,690,000

13

4 Next Steps

Dallas Park & Recreation

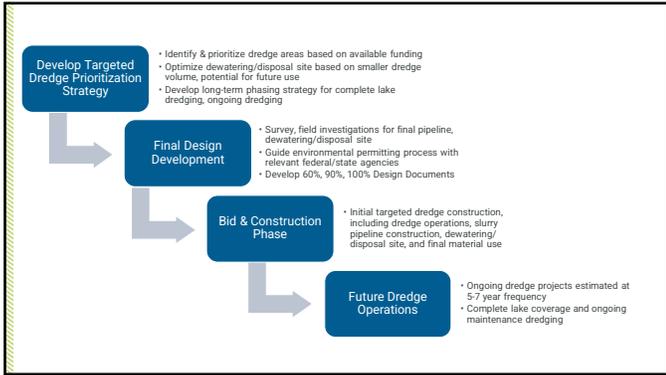
FREESSE NICHOLS

14

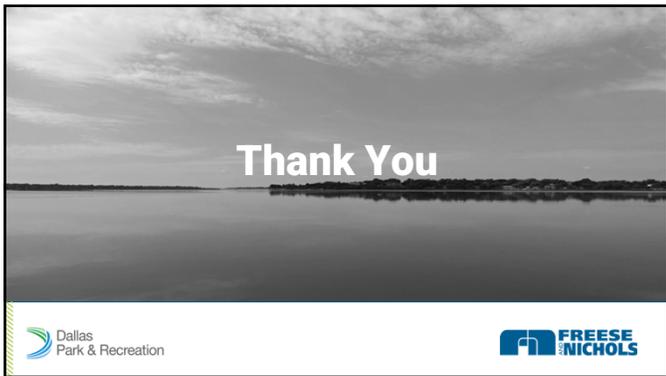
Targeted Dredge Program

- Approximate Cost for Lakewide Dredge Project (1.7M CY)
 - \$54M – \$80M
- Available City Budget
 - Approx. \$20M
- Targeted Dredge Program to be Scaled to Available Budget
 - 300k – 600k CY (focused on prioritized areas)
 - Dredge volume depends on dewatering/disposal site optimization (immediate next step)
 - Establish phased dredge program to address lakewide needs (approx. every 5-7 yrs)

15



16



17
