



# TOWN HALL MEETING

## Lake Summerset 2018 Dredge Program Update for Members

Presented By

Lake Planning Committee  
Lake Summerset Operations



# Agenda

- Introductions
- Brief Overview of Dredging Program
- Progress Update on Dredging Program
- Details of Areas to be Dredged
- Boating Operations
- Q & A





# Introductions

- Ken Malten (Co-Chairman) \*
- Steve Harting (Co-Chairman) \*
- Bob Page \*
- Steve Marshall \*
- Mark Metzler \*
- Jeff Folkerts \*
- Marty Beierwaltes \*
- Brian Bandoili — (Operations Manager LSA)



# Agenda

- Introductions
- **Brief Overview of Dredging Prog.**
- Progress Update on Dredging Program
- Details of Areas to be Dredged
- Boating Operations
- Q & A



# L.S. Hydraulic Dredging Programs

- ~1977 Contracted to Beloit Pipeline & Dredge
  - ❖ ~12 Years between dredge programs
- 1989 C&C Dredging & Const. — Lake Zurich, IL
  - ❖ 3 Years between dredge programs
- 1992 Completed by LSA w/ Leased Equip. (Mud Cat)
  - ❖ 26 Years between dredge programs
- 2018 Contracted to Frentress Lake Marine
  - Permitting Completed
  - Detention basin reconstruction completed



# Frentress Lake Marine's –

High Pressure Cutting Dredge  
Operational Photo from Galena Territories





# Hageman site for silt disposal





# Hageman Site Ready for Silt

(View looking East toward L.S.)

Dredge Discharge  
Into Basin (East End)



Berm restoration  
(West End)





# Agenda

- Introductions
- Brief Overview of Dredging Program
- **Progress Update on Dredging Prog.**
- Details of Areas to be Dredged
- Boating Operations
- Q & A



# Dredge Program Update – April 28th

- Permits Updated – 4Q 2017
- Siltation Basin Recon. – 4Q 2017
- Silt Studies Updated & Dredge Areas Defined – April
- Frentress Lake Marine Mobilization – Feb. thru Mar.
- Dredge, Piping & Aux. Equip. Assem. – Mar thru Apr.
- Dredge Operations Started – April 24<sup>th</sup>



# LPC Siltation Studies

LPC & LSA staff have worked to monitor silt levels periodically, major projects listed below:

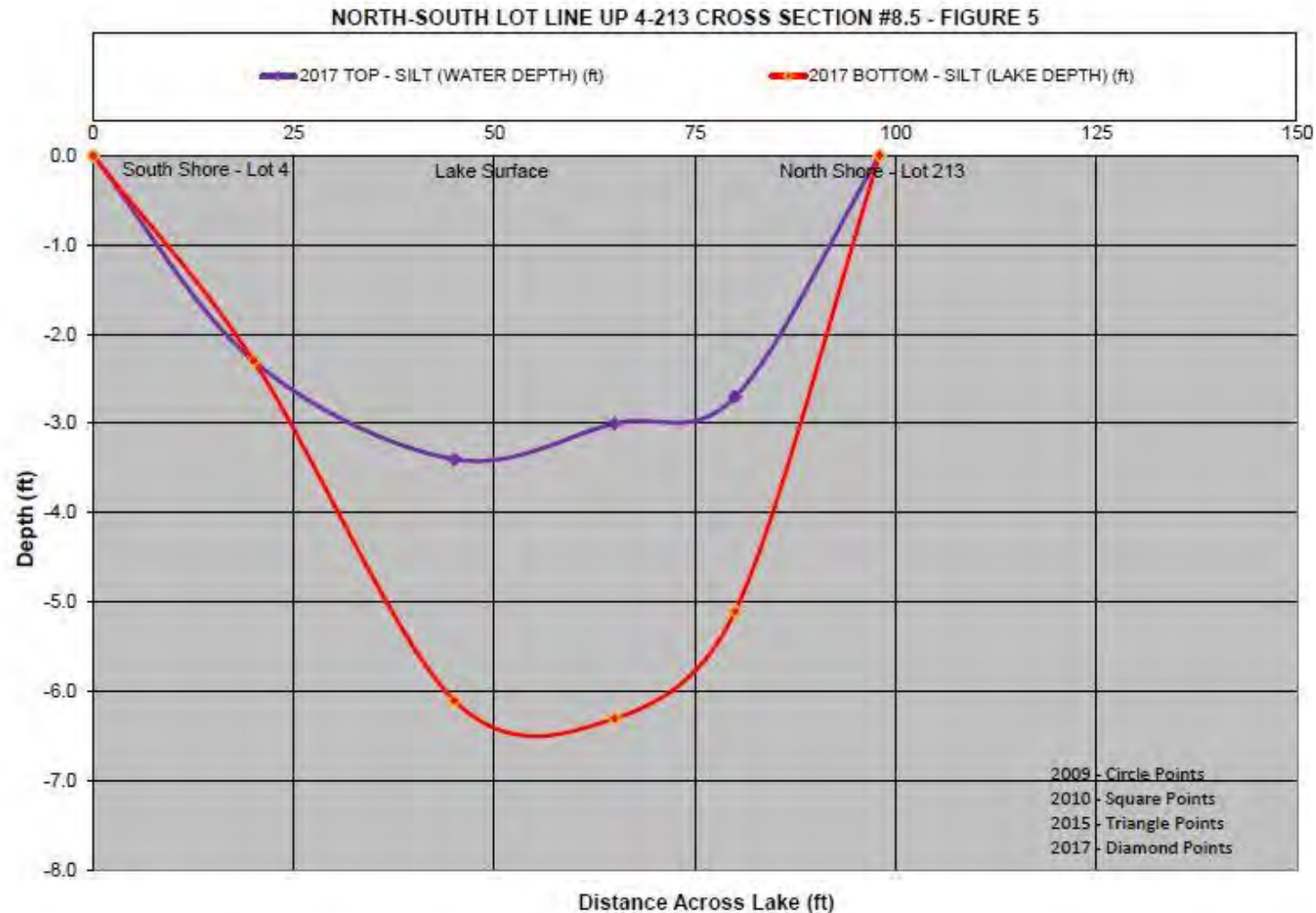
- 2009 - 2010 Full survey
- 2011 – Birch & Tamarack Bay
- 2015 – West End (50%) & Tamarack Bay (50%)
- 2107 – West End Full
- **2018 - Birch & Tamarack Bays (Completed)**

Notes: 2019 – West End, Birch Bay & Tamarack Bays will be restudied to measure silt removed



# Siltation Studies (typical)

## Cross Section Lot 4 to 213





# Dredge Main Power Unit —

Delivered to L.S. (2/21/18)



**Ice Still on lake**

# Dredge Assembly Main L.S. Marina —



**Several Semi Trailer loads of Equipment were assembled on site**



# Dredge Pipeline Assembly — (~ 2 mile of 10" ID Pipe Req'd.)



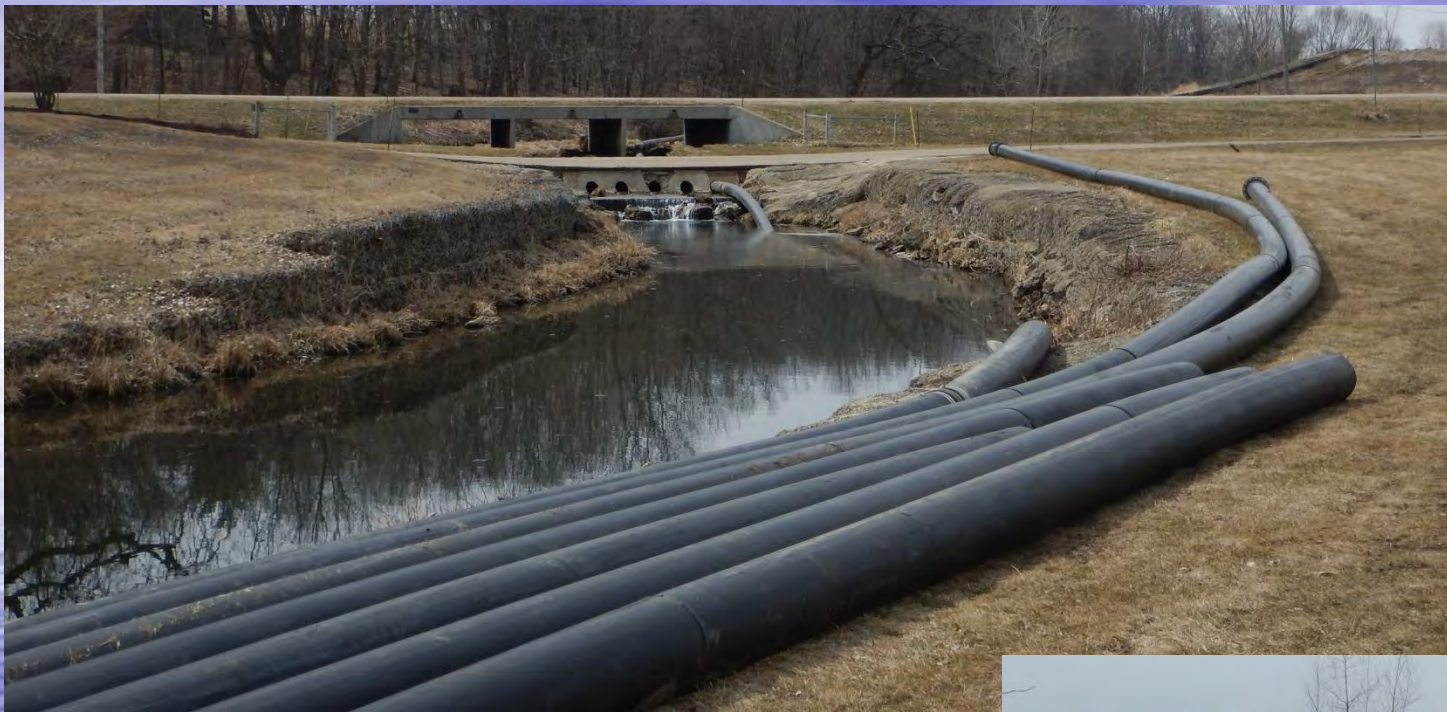
**HDPE Discharge Pipe  
(heat welded in field)**

**Pipe Heat Welding Operation**





# Pipeline Placed In Position —





# Dredge Operation Start — (April 24th)





# Silt Discharge Into Basin



**Silt discharge into basin**



**Heavy Material Accumulation after several hours operation**

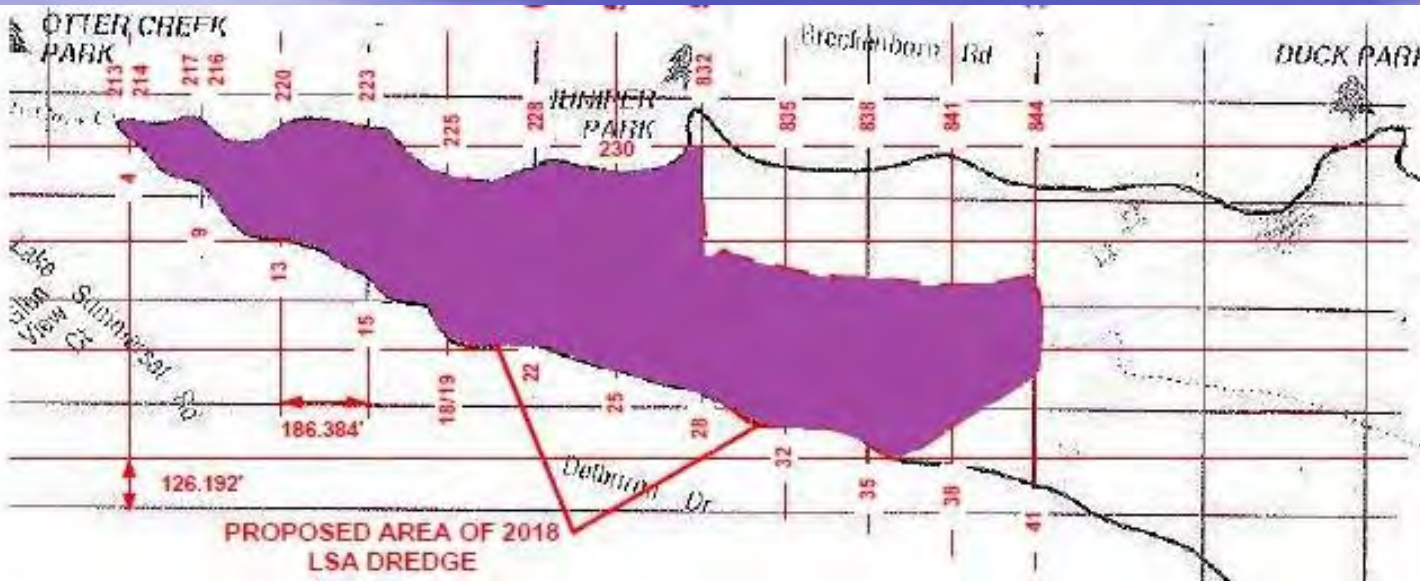




# Agenda

- Introductions
- Brief Overview of Dredging Program
- Progress Update on Dredging Program
- **Details of Areas to be Dredged**
- Boating Operations
- Q & A

# 2018 Planned Dredge Area - West End



## Projected Dredge Area:

- Purple colored area
- Inlet\* to the line between lots 843 to 41
- Projected Silt Removal ~36,000 cu. yds.

\* Dredge will proceed into inlet area as far as equipment will allow



# 2018 Planned Dredge Area Tamarack Bay



## Projected Dredge Area:

- Purple colored area
- Inlet\* to the line between lots 2243 to 1421
- Projected Silt Removal  
~17,000 cu. yds.
- Silt survey showed minimal recoverable silt beyond shaded area

\* Dredge will proceed into inlet area as far as equipment will allow



# 2018 Planned Dredge Area Birch Bay



## Dredge area:

- Inlet\* to the line between lots 47 to 524
- Projected Silt Removal ~7,000 cu. Yds.

\* Dredge will proceed into inlet area as far as equipment will allow



# Hours of Dredge Operation

- (6) Days / Week (Monday thru Saturday)
- 12 hours / Day (start time ~7:00 AM)
- Cooler Weather Operation (windows closed), operation times may be extended
- Equipment Breakdowns may effect Sunday Downtime

We have ~60,000 cu. yds. to remove, best effort to avoid interference with lake recreational activities



# Agenda

- Introductions
- Brief Overview of Dredging Program
- Progress Update on Dredging Program
- Details of Areas to be Dredged
- **Boating Operations**
- Q & A



# County Line Marina Open During Tamarack Bay Dredging



Pipe line anchored below surface in front of launch & docks at County Line Marina



# Discharge Line from Dredge

- Semi Rigid 10 Dia. HDPE Pipe (up to 1.5 miles)
- Line is marked periodically with Orange Safety Floats
- The line will float when the dredge is **not** pumping
- The line will sink when the dredge **is** pumping
- Boaters need to be aware that the pipe could surface unexpectedly (causing damage or upset a boat)



# Pipeline In Lake w/ Marker Buoys —





# Season Installation of Docks & Lifts

- Members outside of areas to be dredged – proceed to put docks & lifts in as normal
- Members in the defined dredging areas – install docks & lifts as you would normally. You may wish to remove / relocate your boat while dredge is in your immediate area.
- Members that border the creek or stream (W.E. & Tamarack) you may wish to hold off installing docks & lifts until dredging is completed. These are heavy silt areas and need maximum access for dredging



# **Frentress Lake Marine's Dredge –**

## **Cutter Head / Intake**



**The Business End of the Dredge**





# Agenda

- Introductions
- Brief Overview of Dredging Program
- Progress Update on Dredging Program
- Details of Areas to be Dredged
- Boating Operations
- **Questions & Answers**





**THANK YOU !!**

**Presentation will be posted on Lake  
Summerset's Website**