



DREDGING WONDER LAKE

ARE WE THERE YET?

The WL dam was created in 1929 and the lake has accumulated 3 million cubic yards of sediment over that last 80 years, in some areas it's 4 to 6 feet thick.



HISTORY OF WONDER LAKE

- Dam construction completed 1929.
- Private Lake - twice as big as planned.
- 830 acres of water, 62,500 acre watershed
- A weekend getaway for Chicago Area.
- Depression - big plans become small.
- Small cottages, small lots w/well & septic.
- Small cottages become year-round homes.
- No lake maintenance or watershed plan.
- Estimated 30,000 cy sediment per year.
- 1994 - Is dredging the lake even feasible???

NIPPERSINK CREEK WATERSHED PLAN

- Planning committee started 1995
- 19 regional, state and county staff & volunteers identify natural resource problems.
- USGS begins monitoring flows.
- In-lake sediment samples analyzed.
- First watershed plan published 1998.
- 2005 – 2007, 319 Grant awarded for plan update.
- Revised plan w/implementation projects identified.
- **Dredge the lake & help fund identified watershed-wide natural resource protection & enhancement projects.**

The Benefits of Sediment Removal as a Lake Restoration Alternative

- 1) Increase Water Depths and overall Storage Capacity lost to Sediment Deposition;
- 2) Provide improved Fish Habitat by creating deeper pockets (>10 feet) for Overwintering and Improved Dissolved Oxygen;
- 3) A restored Wonder Lake will also allow for an improved and more balanced fish population
- 4) Improve and Expand Recreational Opportunities by increasing water depths for safe boating;
- 5) Improve Water Quality and Clarity in addition to reducing Internal Nutrient Recycling;

OPPOSITION TO LAKE NEEDS

- I never use the Lake.
- I bought my house because it was cheap, NOT because it had deeded lake rights.
- This benefits lakefront property owners.
- This is only the beginning of more taxes.
- The sediment is contaminated.
- The lake will just fill with sediment again.
- Next up will be a sewer tax.
- The Lake has always been shallow.
- Stop the sediment flow and fix the dam.
- I can't afford it!
- Make Lake public, then State will dredge it.





























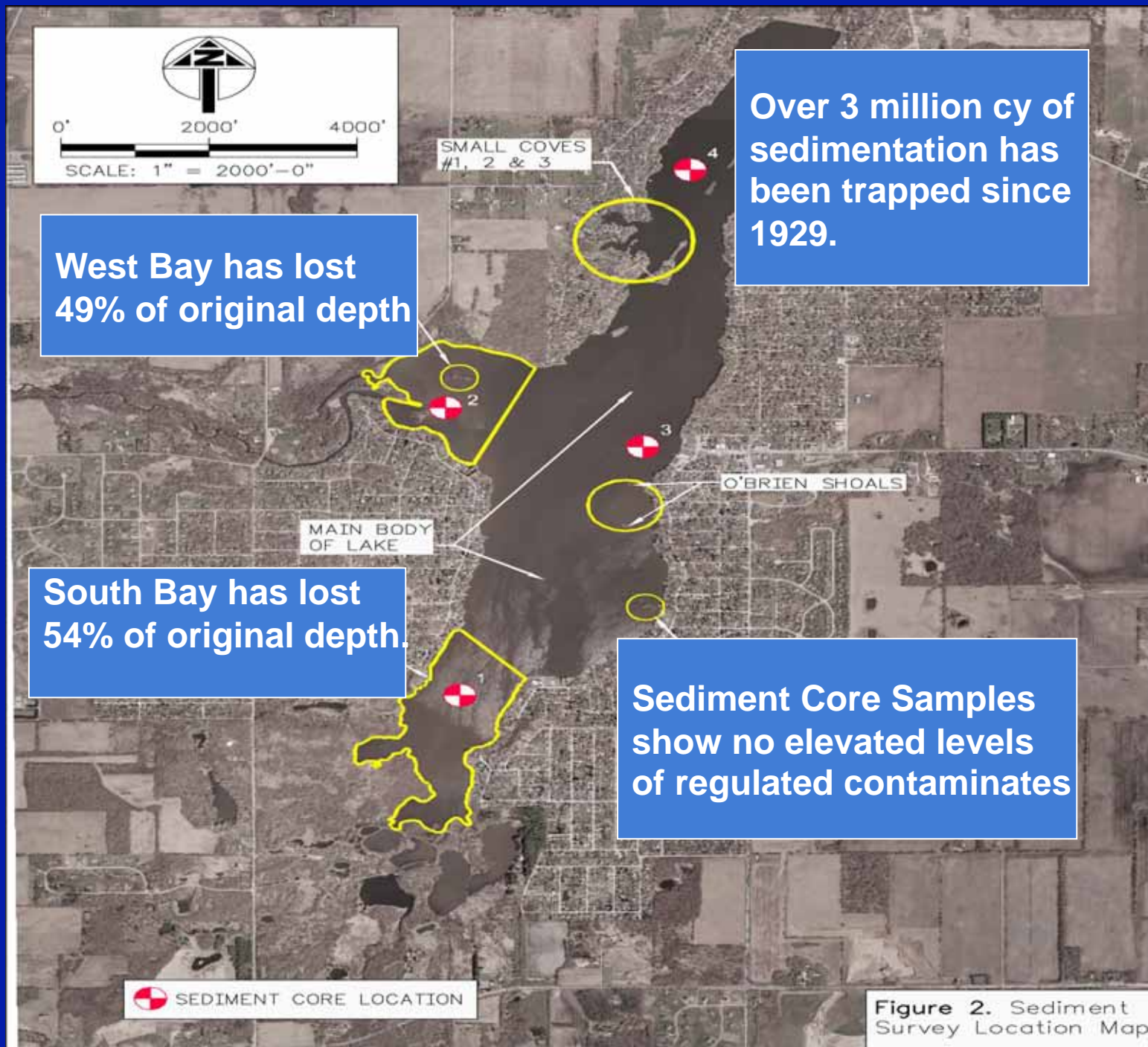


Figure 2. Sediment Survey Location Map

Affordable Dredging

Remove approximately 1 million cubic yards of sediment.

Mouth of Nippersink Creek

South Portion of West Bay

South Bay

Coves in White Oaks Bay

Small Cove at Lookout Point

Restore O'Brien Shoals & Wickline Island

Establish long-term Maintenance Plan

Add 50 – 75 acres of navigable lake surface

Now is the time – We Will Do It!

1. Developer is making approximately 80 acres of land available for sediment storage. That land will not be available in the future.
2. We applied for a SSA before the end of 2007 and it was finally established late in 2009.
3. Recovery Act bonds will be sold in 2010.
4. It will never be less expensive to save our lake.
5. Total cost to pay off 20 year bonds is \$5,932,730 plus interest.

**POTENTIAL OVERALL COST \$13 million
(the additional \$7.1 million to come from sale
of sediment for beneficial reuse.)**

Preliminary Project Requirements

- Complete a Bathymetric Survey that includes water depth and sediment thickness measurements
- Determine optimum dredging limits, target depths and total quantity of sediment to be removed
- Characterize and analyze physical and chemical properties of sediment to be removed
- Determine dredging method (Hydraulic or Mechanical)
- Locate site for Sediment Storage and/or Dewatering
- Obtain Regulatory Permits from Army Corps of Engineers, Illinois EPA, Illinois DNR, Illinois Historic Preservation Agency, Local and/or County

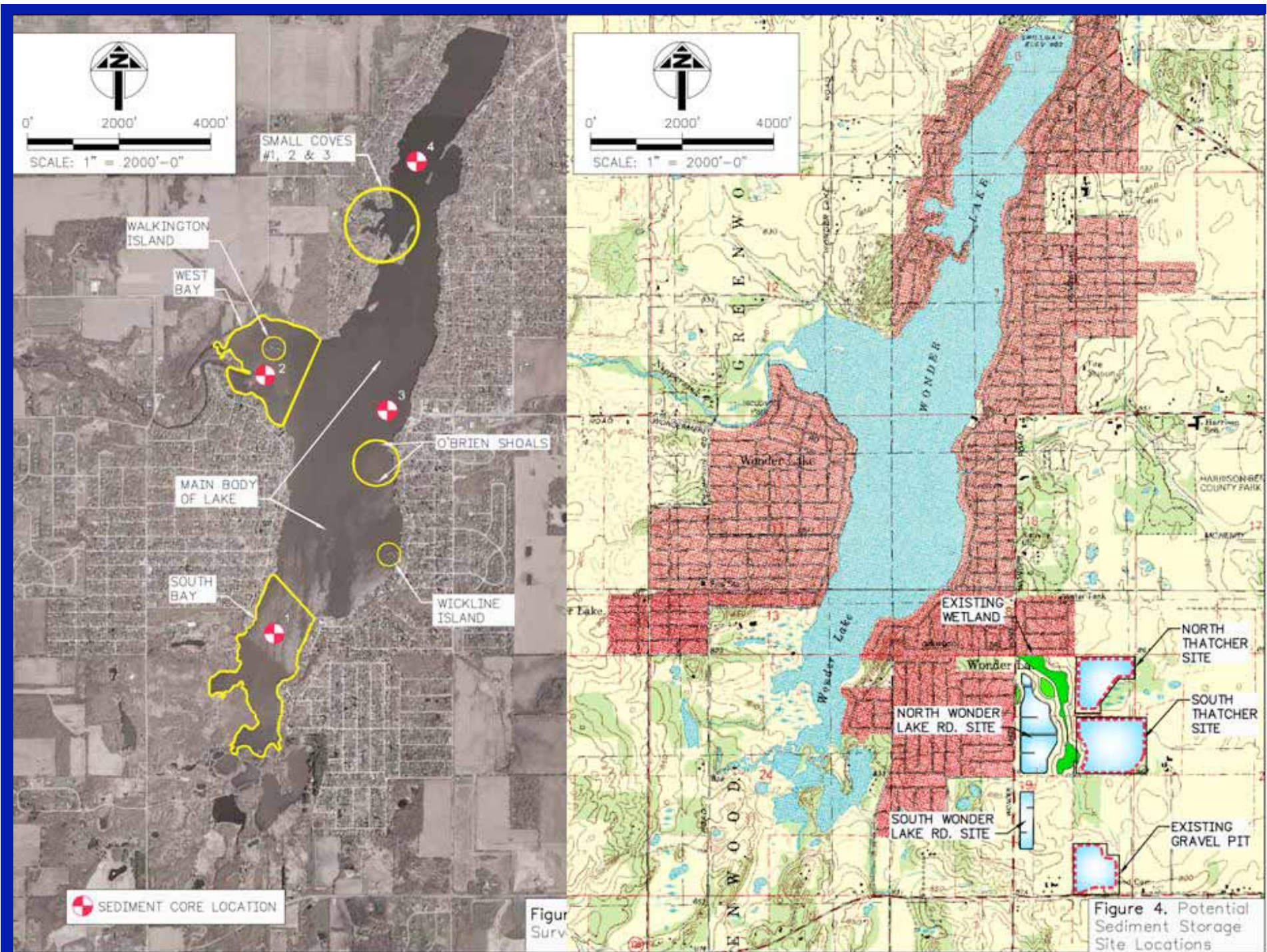


Figure 3. Sediment Core Locations

Figure 4. Potential Sediment Storage Site Locations

Advantages of SSA Funding

- No collateral requirement
- Annual payment on real estate tax bill
- Property assessments based on Equalized Assessed Value (EAV)
- Every property owner within the SSA territory will pay.
- Process less expensive and cumbersome than commercial bonds
- Private lake – all with access share in cost

PRIORITY DREDGING AREA OPTION

Restoration & Enhancement to include West Bay (South of Wickline Island), South Bay, White Oaks Bay Coves 1, 2, & 3, Lookout Point Cove and O'Brien Shoals Area AND Long-term maintenance plan.

Estimated Cost for Dredging - \$5,932,780 + Interest

Funding

- Combination of Non-taxable Recovery Act & Taxable bonds

Project

- Engineering & Permitting
- Sediment Retention Site Construction
- Dredge & Pipeline Mobilization/Demobilization
- Dredging 963,000 cubic yards
- Contingencies

Additional dredging necessary to further deepen the lake and/or enhance the project that is covered by the above expense would be funded by donations and sale of sediment for beneficial reuse.

FUNDING THE PROJECT

Bond financed over 20 years

\$5,932,730 at 5% interest = \$0.224/\$100 EAV

Market Value

Annual Payment

\$40,000	@\$0.224/\$100EAV =	\$ 30
\$100,000	@\$0.224/\$100EAV =	\$ 75
\$150,000	@\$0.224/\$100EAV =	\$ 112
\$210,000	@\$0.224/\$100EAV =	\$ 157
\$300,000	@\$0.224/\$100EAV =	\$ 224
\$450,000	@\$0.224/\$100EAV =	\$ 336

www.WorldStadiums.com

One million Cubic Yards of
silt = one football field
with 562 ft. high pile!

