Lake Decatur Basins 1 through 4 Dredging Project Fact Sheet



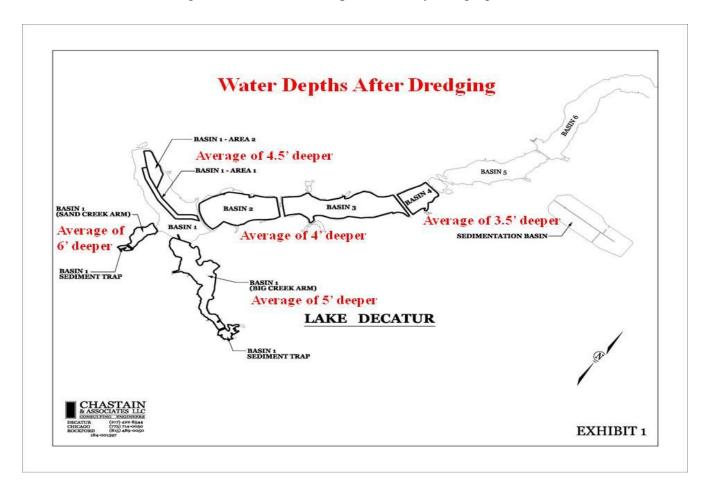
Background

Lake Decatur was constructed on the Sangamon River as a public water supply reservoir in 1920-1923. Since then natural and human caused erosion severely reduced the lake's storage capacity. The lake is separated by bridges into six large basins. Basin 5 was reclaimed by dredging in 1993-1994 and Basin 6 in 2004-2011. The dredging of Basins 1 through 4 began in 2014 and was completed in December 2018. Dredging equipment demobilization, lake access sites restoration and the dewatering of the sedimentation basin was completed in 2020.

Project Details

Great Lakes Dredge and Dock Company operated a cutter head suction dredge named "LW" that hydraulically removed Lake Decatur accumulated sediment. The dredge produced a slurry of 10 to 15% sediment and 85 to 90% lake water that was pumped through a 24 inch diameter pipeline and pumping station system to the City's Sedimentation Basin located in Oakley Township east of Basin 5. In the basin, gravity caused the sediment to settle out of the lake water. Clean lake water was then returned from the storage basin to Lake Decatur by an unnamed creek.

The project increased the lake's storage capacity by 30% (11.1 million cubic yards, 6,880 acre feet or 2.24 billion gallons). This is equivalent to the volume of over 60 Willis (formerly Sears) Tower skyscrapers located in downtown Chicago! Sediment traps were created in Big Creek and Sand Creek to capture incoming sediment before it reaches the main body of the lake. A sediment trap was previously constructed in Basin 6. Below is a map outlining the areas dredged in black with the average increases in water depth created by dredging.



Schedule

February 2014	Dredging contract approved by Decatur City Council	
March 2014	Contractor began rehabilitating the Oakley Sedimentation Basin	
April 2014	Contractor began dredging equipment mobilization and assembly	
November 2014	Basin 1 dredging began	
2015	Big Creek dredging began	
2016	Sand Creek and Basin 2 dredging began	
2017	Basin 3 dredging began	
2018	Basin 4 dredging began	
December 2018	Dredging completed	
August 2020	Project completed	1

Cost & Funding

Design	\$	1,132,478
Construction	\$ 8	39,156,838
Construction Administration	\$	1,211,549
Miscellaneous Expenses	\$	40,000
Total Cost	\$ 9	91,540,865



The project was funded by the sale of drinking water and raw Lake Decatur water by the City of Decatur and financed through 20 year term bond issuances. Additional funding was provided by the Archer Daniels Midland Company.

Project Partners		
Owner	City of Decatur, IL	
Contractor	Great Lakes Dredge & Dock, Oak Brook, IL	
Major Subcontractor	Terra Contracting Services, Kalamazoo, MI	
Design Services & Construction Administration	Chastain & Associates, Decatur, IL	
Geotechnical Services	SKS Engineers, Decatur, IL	
Primary Regulatory Agencies U.S. Army Corps of Engineers, Rock Island, IL Illinois Environmental Protection Agency, Springfield, IL		

For More Project Information

Contact the Lake Office at (217) 424-2837 or Water Production Division at (217) 424-2863.