Particle by particle, sediment accumulation in this southern Illinois reservoir is filling the lake. Can local teamwork find a solution?

Kinkaid Lake's Dirty Problem

Story and Photos
By Joe McFarland

Wave erosion along unprotected shorelines washes tons of sediment into Kinkaid Lake annually. Efforts to stabilize the shoreline began in 2001.

When it was completed fewer than 40 years ago, Kinkaid Lake in Jackson County was supposed to last for centuries. After the dam was built along Kinkaid Creek and the deep ravines began filling with water in 1969, engineers felt confident the 2,700-acre reservoir would serve the water needs for thousands of people for much of eternity.

"The lake was supposed to last 1,000 years," recalled Lou Strack, a retired agricultural scientist and local watershed specialist living in Murphysboro. Like his 27,000 fellow customers receiving water from Kinkaid, Strack never imagined he'd face water-supply issues within his lifetime.

"People's grandchildren weren't supposed to have to worry about the lake," Strack said.

Unfortunately, original estimates of Kinkaid's longevity didn't pan out. Today, shoreline erosion and sediments arriving from tributaries threaten to doom the lake hundreds of years ahead of schedule. Example: The Port of Ava, a man-made lagoon where house boats once docked over 15 feet of water, hasn't floated a boat in years.

"You could mow grass there now," observed David Fligor, Kinkaid-Reed's Creek Conservancy District manager. Fligor said a study done in the mid-90s concluded a staggering 1 million cubic yards of sediment had been deposited at the port since the lake was built, much of it from sloppy agricultural practices and exposed soils in the watershed. Sediment poured into the lake so quickly after Kinkaid was completed, boaters were forced to abandon the Port of Ava after just a few seasons.

As if 15 feet of mud weren't startling enough, the entire lake faces deeper

Conveyors deliver rocks to eroding shorelines where workers arrange the final placement of the rock.

An early view of the partially filled Kinkaid Lake after the 1969 completion of the Crisenberry Dam. Shoreline erosion would later become a serious issue.

troubles. Miles of unprotected shoreline erode on a daily basis. When the lake was built 37 years ago at a cost of $1.6 million, there was no funding allocated for securing shorelines.

"We were lucky enough to be able to buy the ground and build the dam," Fligor explained. "There was no money for shoreline stabilization." As a result, with each windy day and with each passing boat, the crumbly loess soils of southwest Illinois dissolved and slumped into the lake. Without drastic intervention, Kinkaid seemed destined to fill with sediments and cease to hold a functional water supply.

But a public-private restoration effort among state, federal and local groups—including the Department of Natural Resources—is tackling the erosion problem at its main sources.

Starting in 2001, heavily eroding ditches within the public watershed were plugged. Boulders lining eroding shorelines have all but stopped bank erosion at more than 5 miles of Kinkaid lakefront. Thanks to more than $350,000 funded by Illinois' C2000 Ecosystems Program and the U.S. Environmental Protection Agency, Fligor and the Conservancy District are doing what must be done to save the lake from itself.

Strack is keeping the public involved as well. His effort to increase public awareness about the urgency of Kinkaid erosion led to the formation of the Kinkaid Area Watershed Project, Inc., Strack's grassroots mission to connect public and private problem-solvers at the lake. Much of his time is spent applying for grants, making phone calls and consulting with every watershed expert he can find.

"My job is to try to cut through some of the red tape," Strack laughed. "I try to assist the various government agencies involved in accomplishing what's best for the lake. They way I look at it, it's not their problem, it's our problem. People I talk to realize this is our lake, our resource, and therefore it's our responsibility."

Just a few years after it began, the shoreline work Strack helped initiate already is reaping clear benefits. New wetlands created between the rock berms and the shore are filled with vegetation and aquatic life where bare dirt once existed. Biologists report 121 species, including two state-threatened species, have moved in to colonize those new wetlands.

Even the view from above looks different. Conservation Police Sergeant Tony Rendleman, who flies patrols over Kinkaid, reports seeing a better lake. Until just a few years ago, much of Kinkaid looked milky after active weekends.

"If you flew over the lake on Friday, the water would look fairly normal," he explained. "On Monday, after all of the weekend boat traffic, it would look like chocolate milk."

But, today, protected areas are clearly improved. (The exposed areas, unfortunately, still get slammed by waves.) Yet, with miles of unprotected shoreline yet to be stabilized—at a cost of $63.80 per foot—it's unclear if the Kinkaid Lake Rendleman remembers from his youth will be saved in time.

"The neat thing about Kinkaid was that it was so clear you could always see your feet when you'd go swimming," Rendleman recalled. "You can't do that anymore."

After barren shorelines were protected with rock berms, vegetation-filled wetlands appeared, increasing the biological diversity.