



HORSESHOE BEND MEMORIAL PARK LAKE

Community ...

Tilden's Horseshoe Bend Memorial Park has been part of the community since the early 1900s. In those days, area ponds were used as sources of ice by local residents. Original icehouse gates and pulleys used to remove ice cut from the ponds are still there, giving the park added local historical and cultural significance. Since those early days, park improvements have included a baseball diamond and trails connecting to the Cowboy Trail. In addition, 80 new trees and shrubs have been planted, and the city and volunteers built a picnic shelter adjacent to the lake.

Challenges ...

The lake wasn't deep enough to support suitable fish habitat or recreational use. The lack of depth was mainly due to water seepage through the bottom of the lake. Shorelines also were unstable, causing erosion and steep banks. Finally, there was a lack of dissolved oxygen in the water, which was another obstacle to sustaining fish populations.

Solutions ...

In 2001, the City of Tilden received funding from CLEAR to renovate the lake. Several projects were completed to make it a suitable fishery and return it to prominence as the park's focal point. First, a well was drilled nearby to serve as a water source for the lake. Trees along the banks were removed and existing banks

were restructured to decrease slope and improve water access. Bentonite was used along the water line to help seal the lake basin, and a liner covered in river rock was installed on the lake floor to prevent water seepage. More bentonite was added after the liner was installed for added protection. An aeration pump was installed in the lake to maintain oxygen levels and help keep the lake open in the winter.

Results ...

When the improvements were finished, the lake was refilled from fire hydrants and irrigation wells. Seepage was reduced by 90 percent and the new well maintained water levels. Lower phosphorus and nitrogen concentrations and better water clarity were other project benefits. The spring after the project was finished, the lake was stocked with largemouth bass, bluegill and channel catfish. The cost of this one-year project was approximately \$38,000. CLEAR provided approximately \$30,000 and the community \$8,000.

UNL Extension Educator Tadd Barrow (left), representing CLEAR, presents a project start-up check to Tilden officials.

