

LAKEVIEW PARK LAKE

Community ...

In 1967, Henderson used a grant to buy 55 acres on the southwest edge of town for a park. Facilities include a swimming pool, tennis courts, picnic shelters, playground equipment and trails. It was named Lakeview Park in 1978. The park lake was built a year before that by damming Galloway Creek, a small creek running through the middle of the park. The original lake ranged in depth from two to 12 feet, and was approximately 2,400 feet long and 25 to 175 feet wide. The creek feeding the lake gets most of its water from precipitation and irrigation runoff water from 2,300 acres of farmland in the watershed.

Challenges ...

Over many years, sediment carried with runoff water built up in the lake, causing depths and water quality to decline. Shallow and turbid conditions made the lake unsuitable for fish and excess nutrients in the water resulted in recurring algae blooms. The lake was dredged in the mid-1980s to remove this sediment, but by 2003 it had built up again, indicating a need for more permanent solutions. Broken concrete blocks, originally used for shoreline stabilization, had become a safety hazard for lake users and made it difficult to get near the shoreline. Displacement of the blocks also caused shoreline erosion.

Solutions ...

In 2003, Henderson received funding from the CLEAR program. About 40,000 cubic yards of sediment were excavated from the lakebed making 55 percent of the lake at least eight feet deep. Concrete rubble was removed

from shorelines and replaced with permanent stabilization structures and vegetation to prevent future erosion. Fish habitat was improved with aquatic structures for spawning at various locations in the lake. To prevent future sedimentation, a three-acre sediment basin was constructed directly upstream of the lake. An underwater berm built at the upstream portion of the lake also acts as a sediment trap. Plant growth will be allowed in this area to help keep finer sediments from reaching the lake. It also provides habitat and food for the lake's aquatic life.

Results ...

The lake is now deep enough to support fish, and eroding shoreline areas have been stabilized. Structural measures have reduced the transport of sediment to the lake. The lake is stocked with largemouth bass, bluegill and channel catfish. Several other park improvements have also been completed. They include handicap access to the park and parking pads at the lake, widened and gently sloped sidewalks and paved fishing pads. The two-and-a-half year project cost approximately \$380,000 with \$300,000 provided from the CLEAR program, \$60,000 from the community and \$20,000 from the Upper Big Blue Natural Resources District. Consulting services were provided by EA Engineering, Science, and Technology, Inc.

