

#### **SOUTH PARK LAKE**

## Community ...

**Schuyler's 91-acre South Park area** includes a golf course, swimming pool, picnic and playground areas, softball and baseball diamonds, and a campground. The 13.6-acre lake is directly south of Schuyler's historic Oak Ball Room. The lake had its beginnings as a federal Work Projects Administration (WPA) project in the 1930s as a dredged borrow pit. A bathhouse and clubhouse were built at the park in 1937.

# Challenges ...

For more than 20 years, stream overflow that once fed the lake no longer reached it, requiring a city well to periodically supplement lake water. Overflow in times of heavy precipitation meant discharges to Lost Creek. Over the years, lake water quality had continued to degrade, evident by the odor and color of the lake and occasional fish kills.

#### Solutions ...

With help from CLEAR, Schuyler set about returning the lake to its former glory. The focus of the lake restoration project targeted water quality, identifying the lack of water circulation, lack of fishery habitat and shallow depths as primary problems. The city also worked with local schools to promote educational activities centered on the lake. Water quality was improved by installing a new 800-gallon-per-minute well near the west end of the lake. Also, rock riprap was placed on part of the lake bank for stabilization, rock reefs and fishing jetties were installed, and aeration was installed in the lake to

improve dissolved oxygen concentrations. Riprap waterfalls were created in a narrow portion of the lake to help with aeration and bank stabilization. After the project was complete, phosphorus levels dropped dramatically, as did algae densities. Nitrogen levels were still high, due to high groundwater concentrations of nitrogen in well water used to feed the lake. The project was completed in 2006.

### Results ...

Total cost of the eight-month project was approximately \$143,280. Of that amount, funding via CLEAR totaled \$115,280 and \$28,000 in cash and in-kind services came from the community. Schuyler Public Schools co-sponsored the project. Engineering services were provided by JEO Consultants.





