



TA-HA-ZOUKA AND SKYVIEW LAKES

Community ...

Norfolk's two public lakes, Ta-Ha-Zouka Park Lake and Skyview Lake, are both used extensively. Ta-Ha-Zouka was established in 1936 as part of a park development project during the Depression. Skyview Lake is a 50-surface-acre reservoir located within Norfolk's city limits. It was built in 1971 for flood control and recreation purposes.

Challenges ...

While water quality at Skyview Lake had been good historically, sedimentation and nutrient loading were degrading the lake. Trend assessments indicated lake nutrients were increasing, more algae was growing and water clarity was decreasing. Water quality problems at Ta-Ha-Zouka Park Lake had been deteriorating for years due to poor dissolved oxygen and shallow depths that contributed to excessive weed growth.

Solutions ...

In 1995, public concerns regarding the impact of watershed development on water quality at Skyview Lake led the city and Lower Elkhorn Natural Resource District (LENRD) into discussions with the USDA-Natural Resources Conservation Service (USDA-NRCS), Nebraska Game and Parks Commission (NGPC) and Nebraska Department of Environmental Quality (NDEQ). The main focus of these discussions was the construction of a two-acre wetland area above the lake. The wetland complex was

designed by the USDA and constructed by the LENRD in 1997. In 2004, the City of Norfolk leveraged funds dedicated to the renovation of Ta-Ha-Zouka Park Lake to secure USEPA/NDEQ funding to renovate Skyview Lake. Both lakes were completely drained. Over 30,000 cubic yards of sediment were removed from Ta-Ha-Zouka Park Lake and more than 35,000 cubic yards were removed from Skyview Lake. Additional work included aeration systems at Ta-Ha-Zouka Park Lake and shoreline protection jetties at Skyview. The NGPC stocked game fish in both lakes.

Results ...

The constructed wetland above Skyview Lake has reduced sedimentation by 65 percent and phosphorus loading by 45 percent. The removal of sediment and other enhancements have improved water quality and recreational opportunities at both lakes. The total cost of these projects was approximately \$401,462. Of this amount, \$200,000 was provided by the City of Norfolk, NDEQ and EPA contributed \$160,000, the NRD provided \$34,500 and \$6,963 came from the NGPC.

