CONTINUOUS WATER-QUALITY MONITORING TO IMPROVE LAKE MANAGEMENT AT LAKE MATTAMUSKEET NATIONAL WILDLIFE REFUGE

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The U.S. Fish and Wildlife Service has partnered with U.S. Geological Survey to establish 2 continuous water-quality monitoring stations at Lake Mattamuskeet. Stations on the east and west side of the lake measure water level, clarity, dissolved oxygen, pH, temperature, salinity, and conductivity. The west side is classified as hyper-eutrophic and is dominated by cyanobacteria, while the east side is classified as eutrophic and has a declining population of submerged vegetation. The lake is an important wintering habitat for migratory waterfowl on the Atlantic flyway. Managers are concerned about submerged vegetation declines due to poor water quality. Project objectives include collecting continuous-monitoring data, assisting with a cooperative assessment of the lake by collecting monthly water-quality samples, and providing input on the development of a comprehensive lake monitoring plan. Lake Mattamuskeet provides one example of how multiple agencies can work in partnership to improve understanding of the lake's water-quality dynamics.

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