

Sloans Lake

Background, Long Term Issues & Trends

- Sloans Lake was created in the 1860s when Farmer Thomas Sloan inadvertently struck an artesian spring while digging a well.
- The lake has experienced a variety of uses including an amusement park and steamboat services in the 1800s, while 21st Century activities included dragon boat races and triathlons.
- Sloans is the only Denver lake large enough to accommodate water skiing.
- Long term bacteria monitoring indicates that levels are low except within 24 to 48 hours following a rain event.
- The lakes shallow depth, large surface acreage, fine sediment deposition, significant urban runoff inflows, and limited water exchange combine to make for often turbid and algae-rich conditions.
- The expansive wind exposure combined with shallow depths & fine sediments make the lake vulnerable to impacts of re-suspended sediment. These impacts include low water clarity, marginal oxygen, and elevated nutrients and metals (contaminant that are adsorbed to sediment). This is reflected in the relatively high total suspended solids and poor water clarity compared with other Denver Lakes (see figure below).



Location: Sloans Park near 25th Ave and Sheridan Blvd
Surface Area: 176 acres
Max Depth: ~ 8 ft
Primary Source Water: Clear Creek via Rocky Mountain Ditch; storm/urban runoff; ground water
Intended Lake Uses: Recreation, irrigation, storm runoff detention, wildlife habitat, aesthetics, fishing
Current Regulatory Issues^{1/}: none

1/ Conditions exceeding state water quality standards.

Updated March 2016; questions to: alan.polonsky@denvergov.org

Developing Issues

The current (2016) redevelopment of the St Anthony Hospital property south of the lake should help mitigate a portion of the urban runoff within the south side of the watershed. The marina was renovated in 2010 and included a stormwater settling component that helps mitigate water that runs off from the north portion of the watershed.

Fish, Wildlife, & Habitat

Fish: The lake typically supports a diverse warmwater fishery, but has experienced a couple fish kills over the past decade (2015, 2007) likely driven by low dissolved oxygen. The lake has been regularly stocked with a variety of warmwater fish (including walleye, muskie, and channel catfish) and trout over the past several years. However, conditions are only marginally supportive of trout due to generally warm turbid water.

Wildlife: The large surface acreage of the lake results in good water surface loafing & feeding opportunities for waterfowl that are less tolerant to disturbance (i.e., pelicans, cormorants, and western grebes). An osprey nesting structure was installed on the island in 2014 (no nesting noted yet).

Habitat: The lake is typically dominated by phytoplankton with little rooted vegetation to support aquatic life. There are some extensive cattail/bulrush stands along the south and east perimeter. The island provides loafing and nesting opportunities for waterfowl and other birds.

Recommendations

- Consider staged sediment removal to mitigate nutrients and contaminants impacting oxygen demand, turbidity problems, and algae growth.
- Vigilance with control of invasive species (i.e., quagga mussels) passed via boats. Incorporate colonization substrates in the lake to monitor for these invasive species.
- Algae treatments prior to fall to minimize impacts of organic load and potential oxygen deficits.
- Incorporate stormwater quality mitigation throughout the watershed as opportunities arise.
- Transition to low maintenance, native vegetation along lake perimeter to enhance water quality and wildlife habitat.

