



2019 Annual Lake Studies

Overview

The City funds annual lake projects on Marion, Lee, Orchard, East and Valley lakes.

2019 funded projects included:

- Aquatic plant surveys
- Fish stocking and trap netting
- Peripheral stormwater pond sampling
- Shoreline inventory.

These activities, coupled with fisheries and water quality monitoring, assist in diagnosing lake health and informing lake management activities. In addition, in 2019:



- ⇒ Lee Lake: Two environmental manholes were installed as part of the street reconstruction project.
- ⇒ Valley Lake: The City sponsored a swimmer's itch treatment to combat blue-green algae.
- ⇒ Lake Marion: Those locations that had Eurasian watermilfoil (EWM) treated with a method said to have lasting effects of 2-3 years in 2018 did not produce nuisance EWM populations.
- ⇒ East Lake: Common carp were confirmed to travel freely between the lake and North Creek, leading staff to begin considering carp management options.

Practices

- ◆ Water quality monitoring
- ◆ Vegetation and habitat monitoring
- ◆ Fisheries enhancement

Benefits

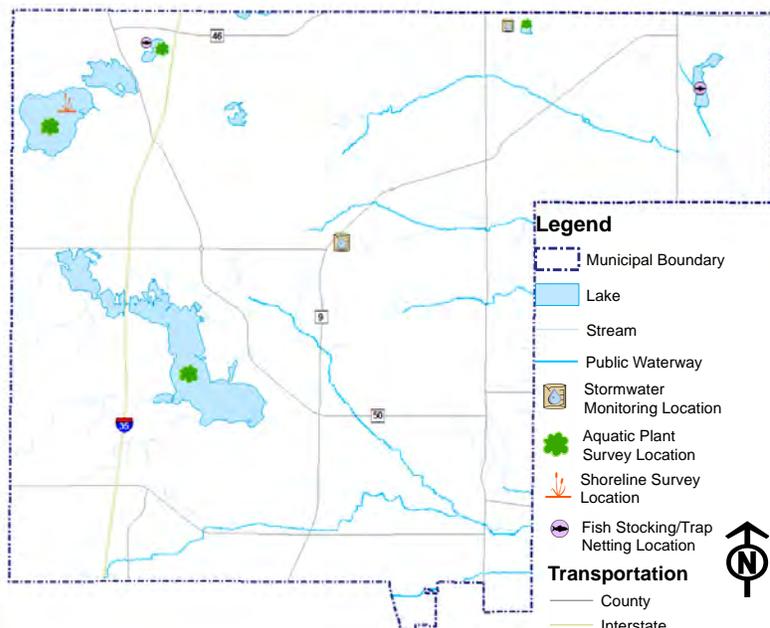
- ◆ Water quality enhancement
- ◆ Long term monitoring database
- ◆ Aquatic invasive species rapid response

Contractor

- ◆ Blue Water Science

Timeline

- ◆ Aquatic plant surveys: early and late summer
- ◆ Reuse ponds: once monthly May—Sept.
- ◆ Fish stocking: Sept.



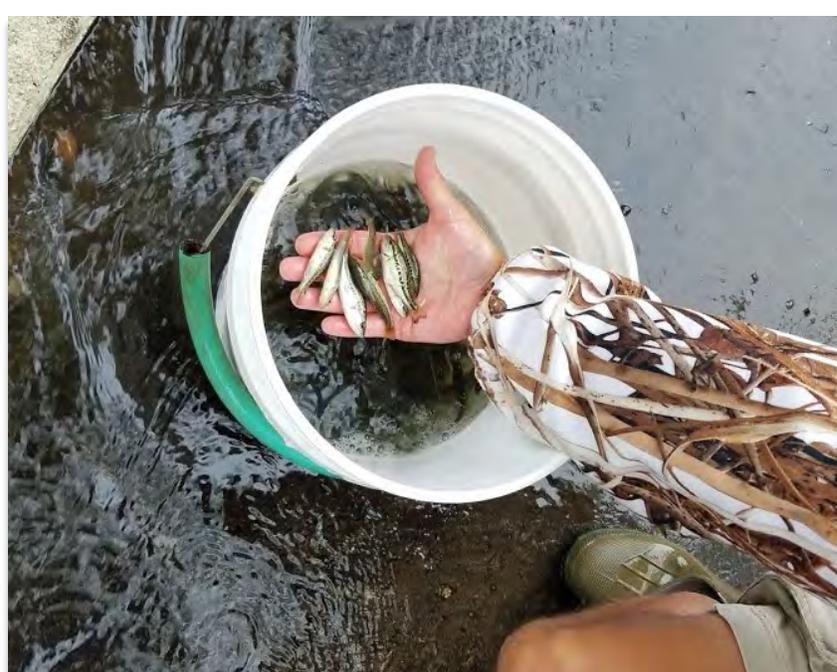
Native species are increasing in Orchard Lake

Water quality in Lee Lake is improving

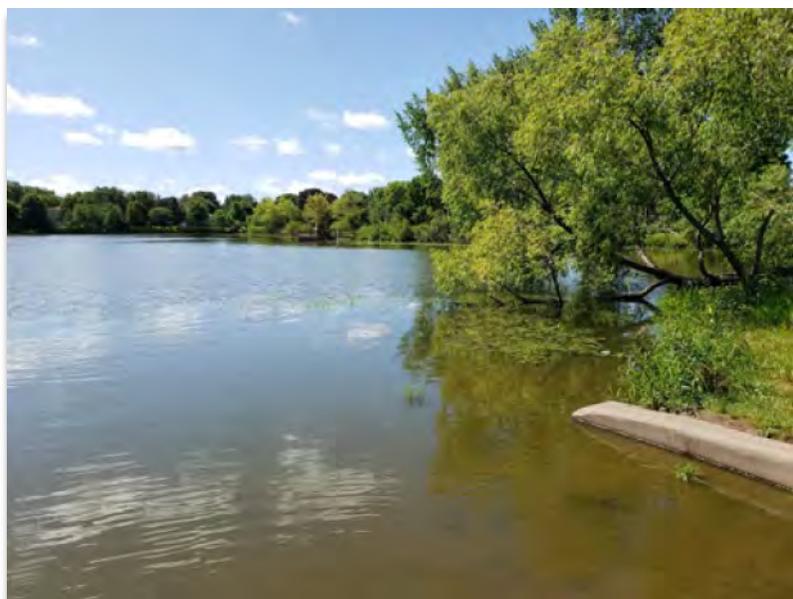
Funding

Project Cost: \$36,300

(Left) 1,000 fingerling largemouth bass were stocked in Lee Lake in an effort to lessen species that degrade water quality.



(Above) Trap nets were placed in four ponds around East Lake to assess carp nursery habitability. Pond species included bullheads, crappies, bluegills and sunfish; no carp were found.



(Above) Valley Lake has seen poorer water quality in recent years, leading to staff adopting new management tactics.



(Above) Native sago pondweed found in East Lake.



(Above) A shoreline inventory on Orchard Lake compared shoreline data from 2006 to 2020.



(Above) Water lilies on Lake Marion.