

PLSLWD Board Staff Report

March 12, 2025


**PRIOR LAKE
SPRING LAKE
WATERSHED DISTRICT**
Subject | Goldfish in Cates Lake - Update

Board Meeting Date | March 18, 2025

Item No: W.1

Prepared By | Jeff Anderson, Water Resources Coordinator

Attachments | None

Proposed Action | No action required. For discussion only.

Background

Since 2020, staff have been aware of the presence of Cate's Lake goldfish. Our CAMP volunteer lake sampler and several other residents have also noticed an abundance of goldfish and have reached out to district staff asking what the District can do with them.

Goldfish are similar in nature to the common carp and are potentially destructive to water quality and clarity at elevated populations by uprooting plants if food sources are scarce. More research is needed in this area. Common carp have not been found in Cate's Lake.

Water clarity readings on Cate's Lake show a negative trend over the last 20 years with a decrease in Secchi readings more frequently since 2021. One possible reason for worsening clarity readings in Cate's Lake may be due to the goldfish infestation.

Discussion

In 2024, board managers received additional public comments regarding the goldfish infestation in Cate's Lake. The following questions were raised:

1. Is there any new information on Cate's Lake goldfish?

Staff reached out to the City of Savage, which contracted a population study in 2022. Although the study has been finished, the report is not formally complete. Key points include:

- **Population Dynamics:** The presence of brightly colored goldfish suggests a recent introduction, but some individuals may have been present since 2017.
- **Environmental Impact:** The lake's abundant vegetation and deeper areas support the goldfish population, allowing them to avoid hypoxia and predation. The fish sampled represent a diverse group of species and sizes. Large goldfish populations can cause ecological and water quality issues through bioturbation and competition with native species.
- **Management:** Continued monitoring is recommended to track changes in the goldfish population and assess their impact on the lake's ecosystem.

To summarize, goldfish are present in high numbers, but sampling techniques have led to inconsistent valuations (electrofishing showed high CPUE, while trap netting showed low). The lake's characteristics have allowed goldfish to survive over winter in low oxygen environments.

2. Are there alternative opportunities for management?

- Staff consulted WSB and Carver WMO about northern pike stocking related to goldfish management. A few years ago, around 24 northern pike were stocked in a chain of lakes/ponds near Chaska with a known large goldfish population. The results were inconclusive as the northern pike were not captured and studied afterward to determine if and to what extent pike predated on goldfish.
- Support from the DNR for gamefish stocking to control goldfish may be challenging due to the lack of studies supporting this management technique. Additionally, the DNR does not have available fisheries data for Cate's Lake, making a case for stocking more difficult.

Recommended Action

No action required.

Budget Impact

No budget impact.

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**PRIOR LAKE
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WATERSHED DISTRICT**

Subject 	Lake Ridge Estates Stormwater Retrofit Feasibility Study - Update	
Board Meeting Date 	March 18, 2025	Item No: W.2
Prepared By 	Danielle Studer, Water Resources Specialist	
Attachments 	None	
Proposed Action 	No action required. For discussion only.	

Background

The 2023 Fish Lake Management Plan identified projects and areas for study to reduce phosphorus loads to Fish Lake from its watershed. One of these study areas was the Lake Ridge Estates stormwater system, for which negligible historic information was available. In November 2024, the Prior Lake-Spring Lake Watershed District (District) contracted Stantec Consulting Services Inc. (Stantec) to complete the Lake Ridge Estates Retrofit Feasibility Study. Spring Lake Township committed \$7,500 to partially fund this study and it is included in the awarded 2025 Watershed Based Implementation Grant.

Stantec completed field surveys of four stormwater ponds within the Lake Ridge Estates neighborhood in November 2024 and developed water quality models and hydrologic and hydraulic models of the ponds existing conditions in February 2025.

Discussion

On March 3, 2025, Stantec submitted a first draft technical memo to District Staff, which outlined three retrofit alternatives for each of the four ponds, including phosphorus reduction modeling and cost estimates. This draft memo revealed high project costs for very low phosphorus reduction, prompting District staff to explore options on how to proceed from the technical memo task item. Discussion between District Staff, Stantec, and the Spring Lake Township Engineer revealed three viable paths forward, which staff will present for Board Manger feedback. Staff will also meet with Spring Lake Township leadership on April 10, 2025, to receive feedback on these three options.

Recommended Action

No action required.

Budget Impact

No budget impact.