SouthRidge Golf Course, Hole 11: Phosphate Driven to Almost Zero in 14 Days From a Cold-Water Start

Fort Collins, Colorado | City of Fort Collins, Golf Division | 2026 season

A 30-gallon inoculation in 55 F water brought phosphate from 0.25 ppm to almost zero and lowered ammonia within two weeks on a municipal golf course pond, showing the culture can establish early in the season.

1. Site overview

Water body	Golf course pond at Hole 11, SouthRidge Golf Course, one of three City of Fort Collins courses.
Size	One of three ponds on the course, which measure about 1 acre, under 1 acre and 0.34 acre. The Hole 11 pond is the largest of the three, about 1.1 surface acres, measured from the pond outline on satellite-based mapping (OpenStreetMap). Average depth not recorded.
Water source	Raw (untreated) irrigation water. Fossil Creek and the Mail Creek Ditch both run through the course. The City of Fort Collins irrigates its parks and golf courses with raw water from the Cache la Poudre River and Horsetooth Reservoir system.
Use	Golf course pond.
The problem	The City of Fort Collins asked Hydralife to evaluate the pond as part of its broader attention to water quality in city-owned lakes. Nutrient levels were moderate, and the inoculation went in early in the season, when cold water slows phytoplankton growth.
Site lead	Scott Phelps, CGCS, Senior Manager, Parks, Golf Division, City of Fort Collins, and a member of the City's Urban Lakes Water Quality Management team

2. Approach

- May 22, 2026: baseline recorded and an inoculation of 30 gallons of Hydralife Compete, concentrated phytoplankton, applied in 55 F water.
- June 5, 2026: a follow-up sample was delivered to the Hydralife facility at 14 days.
- No algaecides or other chemical treatments were used during this treatment period.

3. Results

Date	NH4	NO2	NO3	PO4	Notes
May 22 (baseline)	0.25	0	0	0.25	Inoculation day; water at 55 F.
June 5 (14 days)	under 0.25	0	under 5	almost 0	Phosphate barely detectable.

SouthRidge Golf Course, Hole 11 pond, Fort Collins, 2026

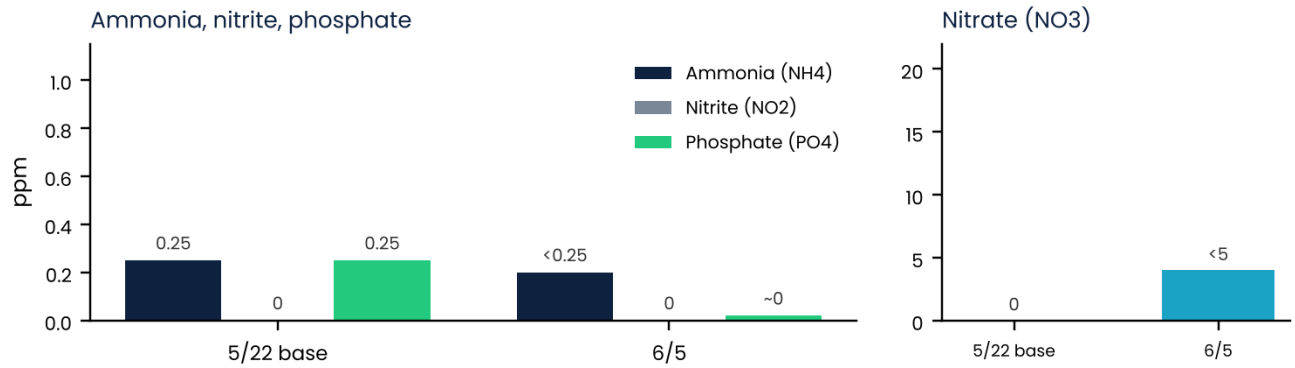


Figure 1. Nutrient readings in ppm, SouthRidge Hole 11 pond, 2026. Source: Hydralife field testing; values match the 2026 U.S. Symposium on Harmful Algae poster.

Field readings are taken on site with a color-comparison freshwater test kit and reported in parts per million (ppm). Text readings such as "under 0.25" or "almost 0" are shown as recorded; in the charts they are drawn at an approximate height and labeled with the recorded wording. Weather, water temperature and irrigation schedules influence individual readings. The trend across the season is the measure of the work.

In 14 days, phosphate fell from 0.25 ppm to barely detectable and ammonia dropped below 0.25 ppm, even though the inoculation went in at 55 F, below the 60 F range where Hydralife prefers to inoculate. Nitrate read under 5 ppm at the follow-up.

Hydralife's report to the City in June summarized the Golf Division's ponds and lakes as having excellent water chemistry.

4. Takeaways for similar sites

- Early-season starts work although Hydralife recommends administering Hydralife Compete above 60 F water temperature. The culture established and consumed phosphate within two weeks and a spring start gets ahead of summer nutrient loads.
- Moderate-nutrient ponds can benefit too: driving phosphate to almost zero early in the season is prevention, not reaction.
- Municipal golf divisions are natural partners. Courses already monitor water closely, and a preventive biological program aligns with city water quality goals.
- Smaller doses suit smaller ponds, lower-nutrient ponds, or earlier inoculation dates.

5. About Hydralife Solutions

Hydralife Solutions Inc. is a Denver, Colorado company that grows and ships live, multi-species beneficial phytoplankton for lakes, ponds, reservoirs and irrigation water. Hydralife Compete, concentrated phytoplankton, works by competitive exclusion: the excess nitrogen and phosphorus that feed nuisance algae and cyanobacteria become the food source for a beneficial culture that consumes them 24-7 and outcompetes bloom-forming organisms for the nutrients they need. It thrives in high-nutrient water, where most alternatives struggle, and it feeds the zooplankton and fish that depend on a healthy food web.

Hydralife was founded by Ryan Philipsborn, who brings nearly 30 years of work in aquatics, from reef keeping and coral propagation to commercial phytoplankton, copepod and macroalgae production.

To discuss a water body of your own: service@hydralifesolutions.com, 303.219.0623, hydralife.org.