

Why are there so many plants in the lake this year?

Understanding the lake's recovery after the 2025 fanwort treatment

The short answer

The plants you observe this year are not fanwort. Last year's treatment controlled fanwort as intended. What has grown back is a mix of macroalgae, native pondweeds, and a different non-native plant, brittle naiad. Dense regrowth after a major disturbance is a normal stage of recovery, and the plant community is expected to keep changing over the next few seasons.

What happened in 2025

A whole-lake treatment with the herbicide fluridone (trade name Sonar) targeted fanwort (*Cabomba caroliniana*), a non-native invasive plant that had become extremely excessive. Fanwort was present, and often dense, at 80% of the monitoring locations in 2024 – a 20% increase from 2023, and 66% increase from 2022.

Fanwort was well controlled in 2025; observed at only two locations in 2025.

Weather conditions kept herbicide concentrations on the higher end of the desired range for longer than anticipated. As a result, native (non-target) plants were also reduced. This risk was identified before the treatment.

What happened in 2026

With most plants impacted by the treatment, large areas of lake bottom were left open. Combined with this year's drawdown, that bare sediment was quickly colonized by fast-growing species.

Plant coverage recovered this summer, but growth was overly dense in some areas, particularly where native pondweeds and brittle naiad were most abundant.

However, fanwort remained controlled in 2026; observed at only one location in Aug 2026.

Why is the regrowth so dense?

After a disturbance removes most vegetation, the first species to return are those that grow fast and reproduce easily from seeds, spores, or fragments. With little competition, a few species can occupy most of the available space. This is called early-stage recovery (ecologists sometimes call it *secondary succession*). As slower-growing native species return, the community typically becomes more diverse, and no single species tends to dominate as heavily.

Is this good or bad?

Mostly, it is an expected part of recovery. Macroalgae and native pondweeds provide habitat for fish and invertebrates, and the return of native pondweeds is a positive sign. The exception is brittle naiad, a non-native species that has been in the lake for some time but was less noticeable when fanwort dominated. It may need to be managed in the future.

What happens next - The lake's consultant and herbicide applicator are comparing this year's plant survey data with previous years to assess the extent of brittle naiad and the recovery of native species. LSIC will share findings and any recommended management actions once that review is complete.

Three groups are responsible for most of this year's growth



Chara

photo from TAMU AquaPlant

<https://aquaplant.tamu.edu/>

1. Macroalgae: muskgrass and stonewort

Chara and *Nitella* · Native · Not likely the plants generating complaints

These look like plants but are large algae. They have no true roots, flowers, or vascular tissue, and they anchor to the bottom with root-like filaments. They are often among the first to colonize bare sediment after a disturbance such as last year's treatment and this year's drawdown. *Chara* often has a distinctive musky or garlic-like odor. *Nitella* looks very similar and is relatively odorless.



e.g., Fine leaved pondweed
(*P. pusillus*)

photo from TAMU AquaPlant

<https://aquaplant.tamu.edu/>

2. Fine-leaved native pondweeds

Likely small pondweed (*Potamogeton pusillus*) and/or spiral pondweed (*P. spirillus*) and Sago pondweed (*Stuckenia pectinata*) · Natives

These native plants were reduced along with fanwort in 2025 and are now re-establishing. Their return is a positive sign: native pondweeds provide food and cover for fish, invertebrates, and waterfowl. They were among the species most common in areas where residents reported dense growth this summer.



Brittle naiad, Lake Shirley, 2026

3. Brittle naiad

Najas minor · Non-native

A non-native annual that peaks in late summer and spreads rapidly by seed and easily broken stem fragments. Present in the lake for years, it was less obvious when fanwort was dense. In the August 2026 survey, it was the most frequently encountered plant and was dense at many locations. Survey data are still being analyzed, and management may be needed.

How you can help

- Do not toss pulled or raked plants back into the lake. Fragments of brittle naiad can root and start new plants. Dispose of them on land, away from the shoreline.
- Clean, drain, and dry boats, trailers, and gear when moving between waterbodies.
- Report unusual plant growth to LSIC, with a photo and location if possible.

The lake will keep changing. Aquatic plant communities shift from year to year with weather, water levels, and management, and Lake Shirley is still recovering from a major disturbance. Next year's plant mix and density will likely differ from 2026, and continued monitoring will guide future management.