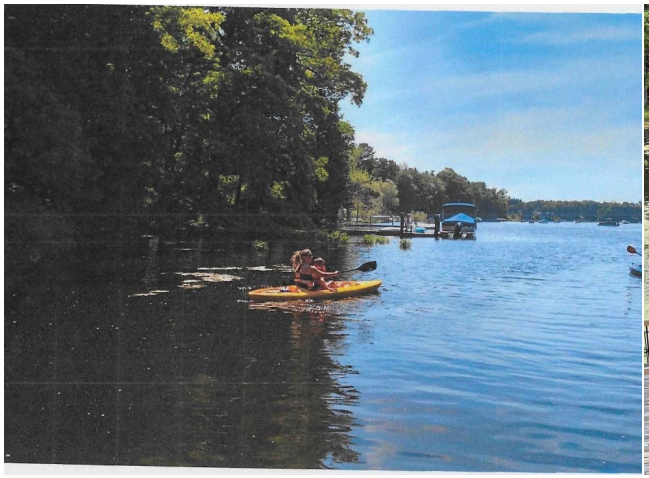
Our Bayou: What Happened, What We Found, and What We're Doing About It



~2020 — A high-water year. Spring Lake's levels rise and fall with Lake Michigan — the bayou has always lived with that rhythm.

June 2024 — When depth drops and nutrients accumulate, algae wins. The bayou needs resilience, not just water.

April 2026 — Recovery in progress. The goal isn't to freeze a moment in time — it's a bayou that can handle what comes.

THE PROBLEM

Our bayou is alive — and it's being overwhelmed

Stahl Bayou has always breathed with Lake Michigan. Water levels rise and fall by season and by year — depth across the bayou shifts naturally, and always has. That dynamic is not the problem.

The problem is what happens when depth decreases and the water that arrives carries excess nutrients, sediment, and bacterial contamination. Shallow, warm, stagnant water becomes the perfect environment for algae to take over. Current depths across the inner bayou range from zero to three feet — and conditions worsen significantly moving north toward the culvert inlet.

A healthy bayou adjusts to water level changes. Ours no longer can. The sediment load, nutrient accumulation, and bacterial contamination from upstream have pushed it past the point of natural resilience. Restoring that resilience is what this effort is about.

HOW THIS HAPPENED

Several problems compounding over many years

Upstream development — More rooftops, roads, and driveways in the Stevens Creek watershed mean more runoff moving faster — carrying sediment and pollutants directly into our bayou through the culvert.

The culvert bottleneck — A 4-foot concrete pipe under Fruitport Road funnels Stevens Creek into the bayou. Where the water slows at the outlet, sediment drops to the bottom — concentrating right at the inner end, year after year.

Copper sulfate treatments — Applied annually to control aquatic plants, these treatments killed vegetation that then decomposed in place, adding to the organic muck on the bayou floor. We discontinued this practice in 2026.

Beaver activity — Beavers periodically blocked the culvert entirely, cutting off what little flow remained. Muskegon County relocated them, but the culvert geometry creates a sediment trap regardless.

WHAT THE SCIENCE TELLS US

Three independent research programs — same conclusion

Progressive Companies has tested the bayou every year for 26 years. Their record shows the bayou has been impaired for the entire monitoring period — until 2025, when a lake-wide treatment produced the first-ever below-threshold result. Encouraging, but it does not fix the root cause.

Grand Valley State University sampled the bayou in 2024 as part of a regional study. Their results matched the 26-year record — and added something new: Stahl Bayou was the only site among 21 studied where algae growth is driven by both nitrogen and phosphorus together. The upstream contamination is not just a bacteria problem. It is also the primary fuel for our algae.

Ottawa Conservation District began sampling Stevens Creek in 2025 as part of their monitoring program for Spring Lake. What they found was serious enough to bring to the full Lake Board on May 27, 2026 — detailed below.

PUBLIC HEALTH FINDING — MAY 27, 2026

Water testing in Stevens Creek — the creek that feeds our bayou — found bacteria exceeding safe limits for water contact on every sampling date, with some readings as high as **12 times the standard**. Lab analysis confirmed **human fecal contamination is present**, most likely from failing septic systems upstream. The bayou itself has not yet been tested, but the creek enters less than **100 yards from our bayou** — and this finding has been reported to state regulators and Ottawa County Health.

RESPONSIBILITY

Two clear lanes — different parties, different funding

UPSTREAM — GOVERNMENT RESPONSIBILITY

Ottawa Conservation District — leading the Watershed Management Plan — identifying contamination sources and cleanup strategies

Muskegon County Road Commission — responsible for the culvert under Fruitport Road; enlarging it would reduce the sediment trap dramatically

Fruitport Township & Muskegon County — land use authority and enforcement of development standards

Ottawa County Health Department — authority over failing septic systems — the most likely source of the bacterial contamination

Funding: state and federal grants — not bayou residents

BAYOU — HOMEOWNER RESPONSIBILITY

Dredging — restore a navigable channel through the inner bayou — dredge material will be relocated to our shoreline as the foundation for bank restoration

Water circulation — install a system to prevent stagnation and oxygen loss that fuels algae growth

Shoreline restoration — plant native vegetation along the bank using relocated dredge material as a base — also satisfies environmental permit requirements

Mechanical harvesting — under active evaluation for this summer pending permit review and cost analysis by the Spring Lake Lake Board

Funding: shared among homeowners; grant assistance being pursued

WHERE THINGS STAND — MAY 2026

We are moving. Here is the current status.

✓ **Watershed Management Plan active**
Ottawa Conservation District is leading the WMP right now, funded by the Lake Board, with Stevens Creek explicitly in scope.

✓ **EGLE consultation complete**
Michigan's permitting agency visited in May. Response was constructive. A bayou restoration in our size range can be permitted.

✓ **Engineering underway**
Depth and sediment survey of the bayou has been proposed. This is needed for any accurate dredge cost estimate.

✓ **Monitoring approved**
The Ottawa County Health Department has been engaged on the Stevens Creek contamination findings. We anticipate immediate and ongoing water quality testing to be put in place.

▶️ **Mechanical harvesting — 2026?**
Progressive Companies is seeking EGLE and Army Corps permits. Stahl Bayou may be included. Cost review coming July.

▶️ **Permitting in progress**
Environmental engineering review of full program scope — dredging, bank enhancement, circulation — underway now.

WHAT WE ARE ASKING

What we are working to get back

Three years ago, a group of neighbors began asking harder questions about our bayou. That work led to a Lake Board seat, a Technical Committee, a Watershed Management Plan, a successful meeting with the state permitting agency, and — today — a formal board vote to begin immediate monitoring of the water quality problem upstream. None of that happened by accident. It happened because neighbors cared enough to stay involved.

The next step requires the same thing — all seven families moving in the same direction. We will reach out in the coming days to discuss the engineering scope and what the path forward looks like together. Questions are welcome anytime.

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Kayaking in Stahl Bayou — what we are working to restore.