PFAS in Starkweather Creek, Yahara Lakes and Badfish Creek

We've known that for many years PFAS chemicals were released into Starkweather Creek from fire-fighting training at Dane County Regional Airport and that Wisconsin DNR measurements showed high levels of PFAS in the creek. The Wisconsin DNR also posted warning signs and established advisory limits for folks to limit their fish consumption in the creek and the downstream Yahara Lakes.

You can wade in the creek and lakes without much threat to your health if you avoid drinking the water and wash off afterwards. But eating fish from these waters will provide a much larger dose of PFAS. The WI Department of Health explains the dangers of PFAS here.

What are the PFAS levels in these waters? Are they safe? Of over 14,000 types of PFAS chemicals, health standards have only been established for a few and vary widely across the world. The US EPA standards for safe drinking water are 4 parts per trillion for two types - PFOS and PFOA. The Wisconsin DNR standards for surface water are 8 ppt for PFOS and 95 ppt for PFOA. You can compare those numbers with our results below.

In the Fall of 2024, Friends of Starkweather Creek began measuring levels of PFAS chemicals in Starkweather Creek, the Yahara Lakes, Madison Metro Sewage District (MMSD) outfalls and other Dane Co locations. You can view those results here. We decided to sample annually to show current levels and any possible trends.

We repeated sampling in Fall 2025 for the creek, Yahara Lakes and MMSD outfall. We used Cyclopure samplers which measure 55 PFAS chemicals.

In **Starkweather Creek West Branch**, we found extremely high levels (up to 1704 ppt PFOS and 139 ppt PFOA) just below the Airport, well above WDNR standards, although slightly lower than 2024. Levels got lower as we measured downstream. The **West Branch above the Airport**, as well as the **East Branch**, tested well below the WDNR standard for PFOS and PFOA, similar to last year.

Levels of PFAS in the **Yahara Lakes downstream of Starkweather Creek** (Monona, Waubesa, Kegonsa) were also similar to last year (8-12 ppt PFOS, 2-3 ppt PFOA), barely above the WDNR standards for PFOS and well below the PFAS standards. **Lake Mendota** water tested nearly PFAS-free both years.

The Madison Metro Sewage District now only discharges into **Badfish Creek**, where we measured PFAS levels (6 ppt PFOS, 5 ppt PFOA) close to last year's results, just above the EPA drinking water standards for PFOS and below WDNR surface water standards.

Future Thoughts: We hope future sampling will continue to show a decline of PFAS levels in Starkweather Creek and the downstream Yahara Lakes. In 2025, Dane County Regional Airport began a process to reduce PFAS in some highly contaminated areas. Their recent report on results so far is very promising, showing greatly reduced PFAS levels in test wells near the remediation project. We hope this indicates their process is truly breaking down PFAS chemicals into harmless substances.

PFAS SAMPLING RESULTS – Data is shown for **(2024 / 2025)** samples in parts per trillion (ppt). Samples below 1ppt are shown as N/A. Samples were collected in July-August 2024 and in Sept-Oct 2025. Total PFAS includes 55 PFAS types measured.

Starkweather Creek	**TOTAL PFAS**	**PFOS**	**PFOA**
West Branch above Dane Co Airport, Corbin Ct	20 / 10	10 / 2	NA / NA
W Branch below Airport, Anderson St	5527 / 4134	1961 / 1704	200 / 139
W Branch, N of Milwaukee St	760 / 493	368 / 185	26 / 22
Creek before entering Lake Monona at Olbrich Park	331 / 365	148 / 145	12 / 15
East Branch, OB Sherry park	16 / 19	4 / 4	2 / 2

Yahara Lakes

Lake Mendota, Tenny Park	1 / 5	NA / 1	NA /NA
Lake Monona, Graham Park	21 / 34	9 / 12	2 / 2
Lake Waubesa, Babcock Park	24 / 30	11 / 9	2 / 3
Lake Kegonsa, Kegonsa Park	19 / 28	9 / 8	2 / 3

Madison Metropolitan Sewage District

Badfish Creek Outfall	30 / 44	7 / 6	5 / 5

