

Item 7**Sunfish Lake Engineer's Report for June 11, 2024**

By: Justin Messner, PE
City Engineer

Date: June 5, 2024

The following Engineer's Report reflects the Engineering activities undertaken this past month.

1. Engineering Activities Undertaken in the Month of May

- A. PFAS Testing Proposal – At the May Council meeting, the City Council requested a proposal from WSB's Water Resources and Fisheries Group to complete testing of PFAS in Sunfish Lake, Horseshoe Lake, and Hornbeam Lake. A copy of the letter proposal for the PFAS testing is included as Attachment 7A. This proposal includes a total of two (2) surface water samples and nine (9) fish to be collected from each lake.
- B. Staff met with the property owner at 2156 to review drainage concerns in their yard and pond. Staff reviewed the drainage area and made recommendations for repair.
- C. Staff corresponded with the resident at 329 Salem Church Road regarding the proposed replacement of the septic system at 295 Salem Church Road. The resident at 329 Salem Church Road was concerned about the proposed location of the system. Staff verified the proposed location was within the required setback and communicated this with the resident at 329 Salem Church Road.

2. Public Works Activities Undertaken in the Month of May

- A. Pothole and shoulder repairs were completed throughout the city.
- B. Staff coordinated the replacement of a damaged fire number sign at 369 Salem Church Road.

3. Building and Site Reviews in the Month of May

- A. None.

4. Anticipated Engineering/Public Works Activities for the Month of June

- A. Staff are scheduled to begin pavement and culvert ratings in June as weather permits. Letters were mailed to all residents within the project area to notify them of our surveyors' presence in the city.
- B. Staff will continue to coordinate cost estimates for culvert and street maintenance items and to bring them forward at future City Council meetings.

The above constitutes the Engineer's Report for the City of Sunfish Lake for June 11, 2024.

Respectfully submitted,



Justin Messner, PE
City Engineer



June 3, 2024

Honorable Mayor, City Council and Staff
c/o Christy Wilcox, City Administrator
City of Sunfish Lake
P.O. Box 18281
West St. Paul, MN 55118

Re: 2024 City of Sunfish Lake PFAS Study Proposal

Dear Honorable Mayor, City Council, and Staff:

As requested, the following work plan outlines the scope of services and the associated testing for PFAS in the City's Lakes.

BACKGROUND

Per- and Polyfluoroalkyl substances (PFAS) are a group of chemicals that are used in consumer and industrial products dating back as far as 1940. They can be found in cleaning products, nonstick cookware, water-resistant fabrics, and personal care products such as shampoo and nail polish.

PFAS break down very slowly over time and are often referred to as "forever chemicals." This means that these potentially harmful chemicals can build up in humans, animals, and the environment.

In humans, PFAS exposure has been linked to endocrine disruptions, kidney cancer, and immune system suppression. It would be very useful to the residents of Sunfish Lake to be aware of PFAS levels in surface water and fish tissue. Data collected from surface water and fish tissue could help city managers provide safe fish consumption and recreational guidance.

APPROACH AND SCOPE

The objectives of this project are:

- 1.) Assess the level of PFAS within 3 lakes located in the City of Sunfish Lake (fish tissue and surface water)
- 2.) Provide information to the community on the concentration of PFAS in surface water and fish tissue and associated health risks based on EPA and state guidance.

Surface water and fish tissue sample collection will follow the "2022 MPCA Guidance for Per- and Polyfluoroalkyl substances (PFAS): Sampling" and the "Great Lakes Consortium for Fish Consumption Advisories- Best Practice for Perfluorooctane Sulfonate (PFOS) Guidelines".

Lakes that will be sampled for both surface water and fish tissue PFAS concentrations include:

- Sunfish Lake
- Horseshoe Lake
- Hornbeam Lake

Level 1 data indicates there are no public access sites on these lakes and WSB assumes that the City will coordinate access with private riparian landowners. All three (3) lakes are planned to be sampled sequentially during one (1) event for both surface water and fish tissue samples. The MN DNR Lakefinder website does not list any aquatic invasive species for these lakes, but all aquatic vegetation will be cleaned from the watercraft and sampling gear between each lake.

A total of two (2) surface water samples will be collected from each lake for a total of six (6) samples. Samples will be placed in an iced cooler and maintained at or below 6°C until delivered to the lab.

Fish tissue samples will be collected using a boat electrofishing unit. Available MN DNR data shows the none of these lakes have been sampled for fish previously, so we do not know what species are present nor in what abundance. Our approach will be to collect all stunned fish during the survey and prioritize bluegill and largemouth bass of legal size which would normally be kept for consumption. Lab costs are relatively expensive, so we plan to use a total of six (6) bluegill and three (3) largemouth bass to create three (3) composite samples of three (3) fish each. If this assemblage cannot be collected, then staff will use their best judgement to select a total of nine (9) fish from each lake for analysis.

Captured fish will be filleted with skin on and one (1) fillet from each fish will be combined with two (2) other fish to form the three (3) fish composite sample. This sample will be wrapped in foil and placed in a polypropylene bag, then placed in an iced cooler to maintain a temperature at or below 6° until delivered to the laboratory.

Once lab results are received, WSB staff will prepare a report detailing the results of sampling and the subsequent PFAS concentrations for each sample within each lake. Results for each medium (fish tissue and surface water) will be compared to established threshold values published by US EPA and/or the State of Minnesota.

PROJECT SCHEDULE

We plan to complete sampling in June or July 2024 based on receiving a MN DNR permit and weather.

The time period for completing the report and the project will be dependent on the lab analysis period, but we are planning to complete this report by the end of October 2024.

PROJECT BUDGET

Task	Cost
Project Management	\$525
Permitting	\$838
Sample Collection	\$3,217.5
Sample Processing and Disposal	\$468
Sample Analysis	\$7,712
Reporting	\$1,119
Project Total	\$13,879.50

Sample collection includes two (2) WSB staff for a total of one (1) sampling event that would include equipment decontamination before and after for aquatic invasive species. Sample analysis includes costs for lab samples and either shipping or delivery to a local lab by WSB staff.

This budget is proposed as an hourly and expense budget not to exceed \$13,879.50. Any additional fees would need to be approved by Sunfish Lake Staff. Additional information on

PFAS data and outreach resources can be found on the MDH and MPCA websites
<https://www.health.state.mn.us/communities/environment/hazardous/topics/pfcs.html>
<https://www.pca.state.mn.us/air-water-land-climate/minnesotas-pfas-blueprint>.

Sincerely,

WSB



Justin Messner, PE
Director of Municipal Services

Attachments

ACCEPTANCE: This letter represents our entire understanding of the project scope. If the City of Sunfish Lake is in agreement, the necessary contract documents can be provided and signed. WSB will start work upon receipt of a signed contract.

ACCEPTED BY:
City of Sunfish Lake:

Authorized Signature

Title

Date

Task	cost/unit	# of units	Total	Total	Notes
Project Management					
Dan Oneill	\$106.00	3	\$318.00		
Tony Havranek (Support)	\$207.00	1	\$207.00		
Task Total				\$525.00	
Permit					
Dan ONEill	\$106.00	4	\$424.00		
Tony Havranek (Support)	\$207.00	2	\$414.00		sample methodology
				\$838.00	
Sample Collection					
					Most likely night electro maybe set nets too? Need to detrmine # of fish per lake with a focus on species that would be consumed- LMB and BLG. Collect 9 BLG that are of eating size and 3 LMB. If we cant, then collect available species.
Dan Oniell	\$106.00	10.5	\$1,113.00		3 lakes could be done in one day. Need to figure out access. Include prep (1 hour) and decon (1 hour, plus drive time (30 min) and sampling (2.5 hours/lake)
Mary Newman	\$129.00	10.5	\$1,354.50		
Expense-electr rental	\$750.00	1	\$750.00		
Total				\$3,217.50	
Sample Processing and disposal					
Dan Oniell	\$106.00	3	\$318.00		Filleting (skin on)-1 fillet per fish, proper disposal based on permit. Total of 9 fish/lake
Expense- bags, ice, foil, bottles	\$150.00	1	\$150.00		
				\$468.00	
Sample Analysis					
Dan Oniell	\$106.00	2	\$212.00		drive time to drop samples-lab to be determined
					3 composite samples of 3 fish/composite
Expense Lab Cost (Fish)	\$500.00	9	\$4,500.00		(6 BLG and 3 LMB Or 9 fish of what can be caught)
Expense Lab Cost (Water)	\$500.00	6	\$3,000.00		2/lake
				\$7,712.00	
Report					
Dan Oniell	\$106.00	3	\$318.00		
Mary Newman	\$129.00	3	\$387.00		
Tony Havranek	\$207.00	2	\$414.00		
Total				\$1,119.00	
				\$13,879.50	