

Lower Fox River Basin Volunteer Monitoring Program

Lower Fox River Basin TMDL

2025 Annual Report



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WDNR Contacts

Grace Hiley, Project Coordinator – WDNR

(920) 296-5126

Grace.Hiley@wisconsin.gov

Katherine Rynish, Previous Project Coordinator – WDNR

Keith Marquardt, NEL TMDL Project Manager – WDNR

(920) 717-8031

KeithA.Marquardt@wisconsin.gov

Andrew Hudak, East District Water Resources Field Supervisor – WDNR

(920) 662-5117

Andrew.Hudak@wisconsin.gov

Eric Evensen, Water Quality Biologist – WDNR

(920) 240-5058

Eric.Evensen@wisconsin.gov

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Project Summary

Project Location

The Lower Fox River Basin (LFRB) volunteer monitoring program is in support of the Lower Fox River Basin Total Maximum Daily Load (TMDL). Specifically, the volunteer program includes 20 monitoring sites on 16 streams within the LFRB in Northeast Wisconsin. These tributaries and streams in the basin contribute nutrients and sediment directly to the Fox River, Lower Green Bay, and Fox River Area of Concern (AOC). The LFRB is approximately 640 sq. miles and extends from the outlet of Lake Winnebago to Green Bay and includes portions of four counties (Outagamie, Brown, Winnebago, and Calumet) and Oneida Nation (Figure 1).

The LFRB volunteer monitoring program relies on citizen volunteers to collect surface water samples from 20 monitoring sites throughout the LFRB. The streams and monitoring sites are displayed in Figure 1 and more detailed location information can be found in Appendix A.

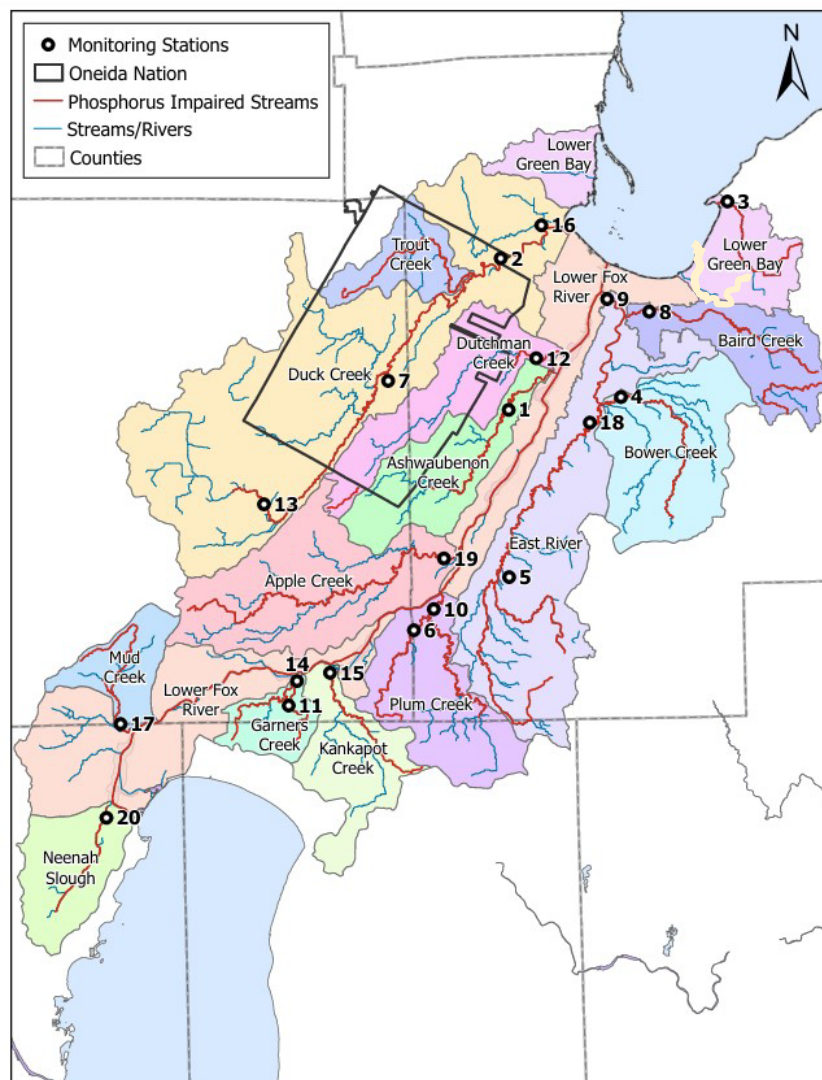


Figure 1: Lower Fox River Basin volunteer monitoring site locations.

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Project Background

The Lower Fox River Basin TMDL was approved by the U.S. Environmental Protection Agency (EPA) in 2012. The goal of the TMDL is to improve water quality by reducing total phosphorus (TP) and total suspended solids (TSS) in the LFRB. The TMDL identifies and quantifies the sources and necessary phosphorus and sediment reductions to meet water quality goals. To facilitate TMDL implementation, smaller sub-basins were identified within the LFRB to help target high phosphorus and sediment loading watersheds. As TMDL implementation progresses, one objective is to evaluate long-term water quality trends within the entirety of the LFRB.

The LFRB volunteer monitoring program began in 2015 to achieve some of the monitoring objectives resulting from the TMDL. The program started with 14 monitoring sites across 13 tributary streams. Three new sites were added to the program in 2018, and an additional three new sites were added in 2020 to total 20 monitoring sites across 16 streams. Some monitoring sites were chosen because they represent the confluence of a tributary stream to the Lower Fox River and can therefore help represent the water quality of a TMDL sub-basin. Other monitoring sites were chosen due to implementation activities beginning in the watershed or where high phosphorus and sediment loading is occurring.

Given the time commitment and spatial location of the monitoring sites, the assistance of volunteers is vital to the success of the program. Volunteers serve the essential role of data collectors, as they collect monthly (May – October) surface water samples at 20 monitoring sites across the LFRB. Volunteers are trained on the proper sampling protocol before the sampling season by Wisconsin DNR staff to ensure reliable and accurate results are collected each month.

Problem Statement

The Lower Green Bay and waters within the LFRB are impaired due to excessive phosphorus and sediment loading. TMDL implementation focuses on restoring waters impaired by excessive sediment and/or high phosphorus concentrations. Phosphorus and sediment cause numerous impairments to waterways, including low dissolved oxygen concentrations, degraded habitat, and excessive turbidity. These impairments adversely impact fish and aquatic life, water quality, recreation, and potentially navigation.

Every two years, Sections 303(d) and 305(b) of the Clean Water Act (CWA) requires states to publish a list of all waters not meeting water quality standards and an overall report on surface water quality status of all waters in the state. Of the 16 monitoring streams, 15 are listed as impaired for TP and/or TSS on the 2024 303(d) Impaired Waters List. Appendix B includes more information about the impaired monitoring streams.

Up until 2024, the two monitored streams not on the impaired list were Lancaster Creek, a reference stream, and Wequiock Creek. Wequiock Creek was added to the impaired list in 2024 due to the high levels of TP coming from non-point sources in recent years. In addition, the downstream receiving waters of the LFRB, the Lower Green Bay and Fox River (LGBFR), are also impaired for TP and TSS and the AOC has a total of nine Beneficial Use Impairments, also known

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as BUIs (there were originally 13 BUIs in 1980 but three have been removed). The U.S. EPA approved TMDL for the LFRB identifies the reductions needed to meet water quality goals. Since phosphorus and sediment loading impacts several of the BUIs in the LGBFR AOC, the goals of the AOC and TMDL (removal of the BUI's and meeting the TMDL reductions, respectively) are closely intertwined, and effective implementation of the TMDL is critical to the restoration of the Lower Fox River and Bay.

Project Goals

There are two main goals for this project: (1) increase public awareness and involvement in water quality issues by engaging the public in citizen science and (2) the collection of reliable surface water quality data to assess long-term water quality trends/successes. The LFRB volunteer monitoring program aims to increase community awareness on local water quality issues and the impact of land use decisions around them. The focus is to raise awareness through building a volunteer base and increasing community involvement and engagement.

Through citizen science the LFRB volunteer monitoring program's goal is to collect reliable data to characterize TP, dissolved reactive phosphorus (DRP), diatom phosphorus index (every 10 years if funding is available), TSS, total nitrogen (TN), and associated chemical and physical characteristics in the Lower Fox tributary streams during the primary algae and aquatic plant "growing season" of May through October. The sampling data brings focus to which streams are affected by elevated phosphorus and sediment concentrations.

The collection of TP, DRP, and TN will help strengthen the understanding of the relationships and effects they may have on biological responses in the Lower Fox River tributaries.

Additional goals of this project include:

1. Evaluate nutrient and sediment concentrations in the tributaries discharging to the Fox River.
2. Monitor the health of the watershed overtime.
3. Provide a basis for evaluation of the long-term effectiveness of implementation of the Lower Fox River TMDL; are there water quality improvements in watersheds with the implementation of best management practices?
4. Share water quality data broadly among stakeholders to collectively assess water quality.

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Proposed Work and Sampling Procedure

2025 is the eleventh year the WDNR has led the LFRB volunteer monitoring program. Project structure remained the same in 2025 as implementation of volunteer monitoring efforts are coordinated by WDNR staff. Specifically, the WDNR:

- Continues to develop a well-trained volunteer base through various means of recruitment and community engagement:
 - o Volunteers are trained to follow Water Action Volunteer (WAV) (<https://wateractionvolunteers.org/>) sampling protocol to ensure consistency is being met in each sample.
 - o Volunteers collect and ship surface water samples in iced coolers to the Wisconsin State Lab of Hygiene (WSLH) for analysis of TP, DRP, TSS, and TN.
 - o Volunteers collect streamflow and transparency data at the time of surface water sample collection (if able).
 - o Duplicate samples are collected at randomly selected sites throughout the sampling season (Appendix K). Duplicates are collected on the same day and at the same time as the regular sample.
- Continues to provide support to volunteers as needed:
 - o Ensures safe access and suitability at each monitoring site.
 - o Orders, prepares, and maintains supplies for volunteers to successfully carry out monitoring activities and shipment of samples.
 - o Fosters an open line of communication with volunteers to ensure that all sites are being monitored at the frequency outlined in the project QAPP.
- Confirms that all 20 monitoring sites are monitored monthly from May to October for a total of six sampling events.
- Compiles monthly sampling data results to share with volunteers and stakeholders:
 - o Records data into tables and graphs for analysis.
 - o Develops an annual report complete with data and figures to share with stakeholders to assess annual water quality.

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2025 Sampling Season

Sample Collection Summary

2025 was the eleventh year for the LFRB volunteer monitoring program and water sampling began in May. The DNR Coordinator delivered sampling equipment and supplies to volunteers starting in April. Some sampling supplies such as sample bottles, coolers and liner bags, preservative acid, and DRP supplies were shipped to volunteers from the WSLH. In the past, lab slips and shipping labels were generated by DNR central office staff, but in recent years the volunteer coordinator took over the role. This improved consistency with the supplies and appointed the coordinator the main point of contact.

The sample collection completeness for the season was 98.33%, this was less than last season as the completeness was 100% in 2024. There were two samples missed, the June samples for Plum Creek and Upper East River (Mallard Rd), these sites are sampled by the same volunteer. There was a lack of communication with the volunteer coordinator, but it was made clear that it's important to take a sample every month. A table with the percent completeness by monitoring site is provided in Appendix C.

The shipping courier has changed throughout the years of the program; FedEx Priority Overnight was used at the beginning and transition in 2021 to US Postal Service (USPS) Priority Mail. While USPS allowed for convenient drop off, shipment reliability decreased in 2023. More samples arrived late at the lab and some shipments were lost for multiple weeks. Due to the issues with USPS, shipping changed to UPS in 2024 for their dependability and fast shipping and UPS was used again in 2025. There have been no issues using UPS, and UPS will stay the courier for the foreseeable future. All shipping labels are printed and sent to the volunteers throughout the season.

A total of 23 DRP samples, or 19% of DRP samples collected, were flagged in 2025 due to samples exceeding the 48-hour hold time. For reference, 28 DRP samples in 2024 and 57 DRP samples in 2023 were flagged. The shipping courier changed from USPS to UPS in 2024, leading to the decrease of samples flagged. There were no lost packages, and majority of the samples arrived at the lab the day after collection. Although these samples are flagged by the lab for exceeding the analysis holding time, they are still able to be analyzed and the results are used. Volunteers are reminded each sampling season to ship samples immediately after collection or as early as possible the next day. Getting samples to the lab and analyzed within 48 hours continues to be an area for improvement as shipping times can vary by carrier and shipping origin.

A group of 16 volunteers monitored the 20 sites in 2025. Most of the volunteers returned from previous seasons, there was only one new volunteer in 2025. Prior to 2020 a large volunteer training event was held each year, but due to the large number of returning volunteers and COVID concerns there has not been a training event like this in recent seasons. Starting in 2020, new volunteers are trained individually at their site by the DNR coordinator where they collect the first sample of the season together. This style of training was used in 2025 and will continue

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to be used in future seasons due to the flexibility with volunteers' schedules and the assurance volunteers are taking their sample at the correct location.

Over the course of 11 sampling seasons, more than 40 volunteers have participated in the program. Many volunteers have returned to sample the same location for multiple years, while new volunteers are recruited to sample vacant monitoring sites. Table 1 details volunteer participation in the program.

Volunteers	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
New	8	11	8	6	1	6	1	1	2	0	1
Returning	N/A	1	4	8	12	10	15	15	14	16	15

Table 1: Volunteer Recruitment for the LFRB volunteer monitoring program from 2015-2024.

Volunteer recruitment is one area of the program that will continually be prioritized. The coordinator should actively recruit volunteers throughout the year to help facilitate conversations amongst stakeholders and community members. Outreach and citizen science are one of the main goals of the LFRB volunteer monitoring program.

Outreach

- The LFRB Volunteer Monitoring Fact Sheet (Appendix M) was shared broadly to DNR staff and county land and water programs to help recruit volunteers.
- Information about the program is displayed on the Lower Fox TMDL webpage and the Water Action Volunteer website.
- A presentation was given to a local Rotary Club in December 2024 to give background on water quality in the LFRB and promote the volunteer program.

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Wisconsin Listing Methodology

To evaluate stream water quality and TP reductions, the WDNR follows a standard assessment procedure which accounts for sample methods, timing, variability, sample size and statistical confidence to more confidently determine whether a stream meets water quality criteria. The LFRB volunteer monitoring program TP sampling data is compared to Wisconsin's TP water quality criteria (WQC) for streams (0.075 mg/L) by calculating a 90% confidence limit around the Growing Season Median (GSM) of the TP sample dataset. A stream is considered impaired for TP if the lower confidence limit (LCL) of the GSM (May – October) TP concentration exceeds the stream WQC. The LCL is used to ensure a stream exceeds the criteria with a predetermined level of confidence before it is listed. A stream that is impaired for TP will be de-listed if the upper confidence limit (UCL) of the GSM TP subsequently drops below, or clearly attains, the criteria.¹ See Figure 2.

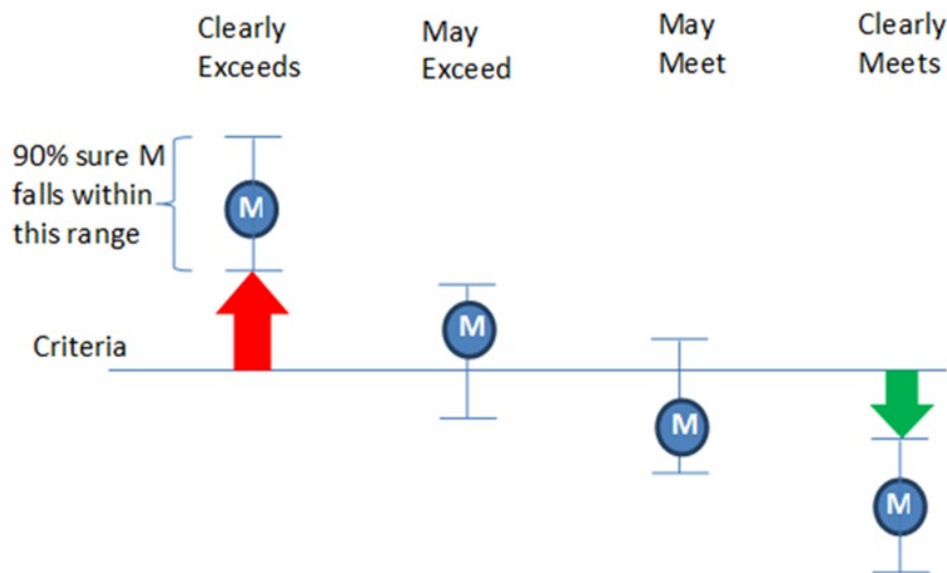


Figure 2: Wisconsin's TP criteria confidence table. Criteria line indicates the 0.075 mg/L WQC limit and M represents the Median value.

90% confidence limits were calculated for each monitoring site each year of data collection. A minimum of six samples, one per month from May – October, are needed to calculate the confidence limits. In years with less than six data points at a location, a data point from the same month from the most recent year of a full dataset was used instead. For example, in 2020 all monitoring sites had less than six data points collected. Data points from 2019 were used to fill in the months of May – July to calculate confidence limits. In 2025, the confidence intervals for Plum Creek and Upper East River (Mallard Rd) were calculated using the 2024 August TP results. A confidence interval table is provided in Appendix E.

¹ WDNR 2020. Guidelines for Monitoring for Watershed Restoration Effectiveness. Wisconsin Department of Natural Resources, Bureau of Water Quality. Madison, Wisconsin. EGAD#3200-2020-26

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Lancaster Creek continues to be the only site that consistently “May Meet” (2015, 2017, 2023, 2024) or “Clearly Meets” (2019, 2021, 2022) the State WQC. Currently, Lancaster Creek is not impaired. In 2025, there were two sites that “May Meet” the TP WQC, Lancaster Creek and Neenah Slough. Mud Creek was the only one stream that “May Exceed” the WQC in 2025, this is less than last season which had four sites that “May Exceed”. All other sites (excluding Lancaster Creek and Neenah Slough) “Clearly Exceeds” the TP WQC.

Despite the monthly TP concentrations exceeding the WQC for most of the monitoring streams, the confidence limits and GSM TP values of 13 of the 20 monitoring sites show an overall decline and improvement towards the WQC since the start of sampling. These sites include Apple Creek, Ashwaubenon Creek, Baird Creek, Dutchman Creek, East River (CTH G), Garner’s Creek, Kankapot Creek, Lancaster Creek, Lower Duck Creek (Pamperin Park), Neenah Slough, Plum Creek, Upper Duck Creek (CTH S), and West Plum Creek. Confidence interval graphs can be found in Appendix F. Some sites also show the UCL, LCL, and GSM value trends narrowing together indicating less sample variability and a truer median value. Despite some sites showing a narrowing trend, there were sites in 2025 with high variability and a larger gap between the UCL and LCL. This could be due to variability in rainfall events throughout the season, volunteers are not expected to avoid sampling around these events and there could be higher than average nutrient concentrations due to increased runoff.

Although the confidence limits calculated for some monitoring sites indicate water quality improvement, TP continues to exceed the TP WQC across the monitoring sites each year. As implementation of the TMDL continues across the LFRB, this sampling will be useful for detecting changes in water quality and will provide insight into the proper timing for more rigorous watershed wide monitoring.

Water Quality Data

Total Phosphorus Analysis

Total phosphorus is a key indicator of water quality. It is an essential nutrient for plant growth however, when excess amounts are introduced to a waterbody, water quality can decrease and lead to excess algae growth and harmful algal blooms. The TP median value was calculated for all monitoring sites, the median is calculated instead of the mean in accordance with Wisconsin Consolidated Assessment and Listing Methodology (WisCALM) protocol for streams and rivers. The median value is used for datasets with high variability to ensure results are not skewed by one extremely high or low value; streams and rivers tend to have higher variability in concentrations. The median values were calculated from the samples collected during the sampling year compared to the GSM calculated for the TP assessment, which used data from previous years if a monthly sample was missed during the sample year. The medians for two of the sites, Plum Creek and Upper East River (Mallard Rd) were calculated with five data points instead of six due to the missed sample in August. Appendix G breaks down the median TP value for each monitoring site, red cells indicate years with less than 100% sample collection. The median value for years with missing data may not

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be a proper representation of the median TP value at that monitoring site for the specific year. All sampling data from 2015 – 2025 is provided in Appendix D.

Nearly all sites from 2015 – 2025 had yearly median TP values exceeding the State WQC except for Baird Creek (2020), Dutchman Creek (2020), Garner’s Creek (2020), Lancaster Creek (2019, 2021-2024), Mud Creek (2024), Neenah Slough (2021, 2023), and Wequiock Creek (2020). The lower median TP values in 2020 can be attributed to only 50% sample collection at each site. In 2025 the two monitoring sites with medians below the TP WQC were Lancaster Creek and Neenah Slough.

In 2025, 14 of 118 (12%) TP samples met the WQC for streams, which is 0.075 mg/L. This percentage is slightly lower than previous seasons, as the percentage of samples meeting the 0.075 mg/L water quality target in 2022 and 2023 was 16%, and in 2024 it was 14%. This percentage has stayed within a 3% range consistently and the number of samples meeting the TP WQC has not increased by much since the start of the program.

Table 2 compares the number of TP samples each year meeting and not meeting the WQC. When monitoring sites were added in 2018 and 2020, the number of samples meeting the WQC increased, but since 2020 the number of monitoring sites has stayed the same and the number of samples meeting WQC has been consistent.

Blank	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
# Sites	14	14	14	17	17	20	20	20	20	20	20
# Samples Collected	62	72	84	101	101	60	110	115	119	120	118
# Above 0.075 mg/L	59	65	74	89	88	50	93	97	100	103	104
# Below 0.075 mg/L	3	7	10	12	13	10	17	18	19	17	14
% Below 0.075 mg/L	5%	10%	12%	12%	13%	17%	15%	16%	16%	14%	12%

Table 2: TP samples compared to TP WQC for the LFRB monitoring sites.

Dissolved Reactive Phosphorus Analysis

DRP is the soluble form of phosphorus and is readily available for plant uptake and algae growth. DRP concentrations can vary over short time periods due to plants taking it up and releasing it. Excessive amounts of DRP can lead to harmful algal blooms and poor water quality. Since the start of the LFRB volunteer monitoring program, DRP concentrations continue to make up a large portion of TP concentrations across all monitoring sites. Appendix J compares each sampling event’s TP and DRP concentrations.

Table 3 categorizes each DRP sample collected from 2015 into percent ranges. Nearly half (508 of 1058 or 48%) of TP samples collected since 2015 had 60 – 80% of their TP concentrations coming from DRP. Another 28% (293 of 1058 samples) have had 40 – 60% of their

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concentrations coming from DRP. These numbers indicate that DRP makes up a large percentage of the TP during the sampling season. The number of DRP samples in each percentage range has stayed consistent since the beginning of the season, the range with the largest difference is 80-100%, with 2% of DRP samples in that range in 2015 and it has steadily increased to over 10% in recent seasons. As sampling continues, this data will be useful for evaluating implementation progress and effectiveness at reducing DRP.

<i>Year</i>	<i># Sites</i>	<i># Samples Collected</i>	<i>< 20% DRP</i>	<i>20 – 40% DRP</i>	<i>40 – 60% DRP</i>	<i>60 – 80% DRP</i>	<i>80 – 100% DRP</i>	<i>> 100% DRP</i>
2015	14	61	4	6	21	29	1	0
2016	14	72	3	13	29	24	3	0
2017	14	84	3	9	30	36	5	1
2018	17	101	3	10	27	53	8	0
2019	17	101	2	3	35	50	11	0
2020	20	60	1	8	14	25	9	3
2021	20	110	7	7	19	59	17	1
2022	20	112	5	12	20	57	18	0
2023	20	119	3	14	36	48	17	1
2024	20	120	4	5	31	61	18	1
2025	20	118	3	10	31	62	12	0
<i>Total</i>	N/A	1058	38	97	293	504	119	7
<i>Percent of Total</i>	N/A	N/A	4%	9%	28%	48%	11%	1%

Table 3: DRP Percentage of TP (DRP >100% due to sample variance).

Total Suspended Solids Analysis by Monitoring Site

There is not a statewide TSS WQC, nor is there one defined by the LFRB TMDL for the monitored streams. A graph showing the median TSS values for each monitoring site can be found in Appendix H. For 12 of the monitoring sites, the median TSS results were lower in 2025 compared to 2024, this could be due to the increased precipitation in 2024. There is not a clear trend showing the median TSS values increasing or decreasing since the beginning of the program.

Figure 3 compares median TSS and TP values for each sample month from 2015 – 2025. Total phosphorus includes particulate phosphorus which is attached to suspended sediments and other suspended materials in the water. Figure 3 depicts a general correlation between TSS and TP concentrations. Figure 4 shows a similar trend comparing median TSS and TN values. Generally, the months with higher TSS concentrations also have higher TN concentrations. This helps illustrate these parameters have a similar patterns throughout the year, where concentrations peak in the beginning or middle of the season and decreasing from August to October.

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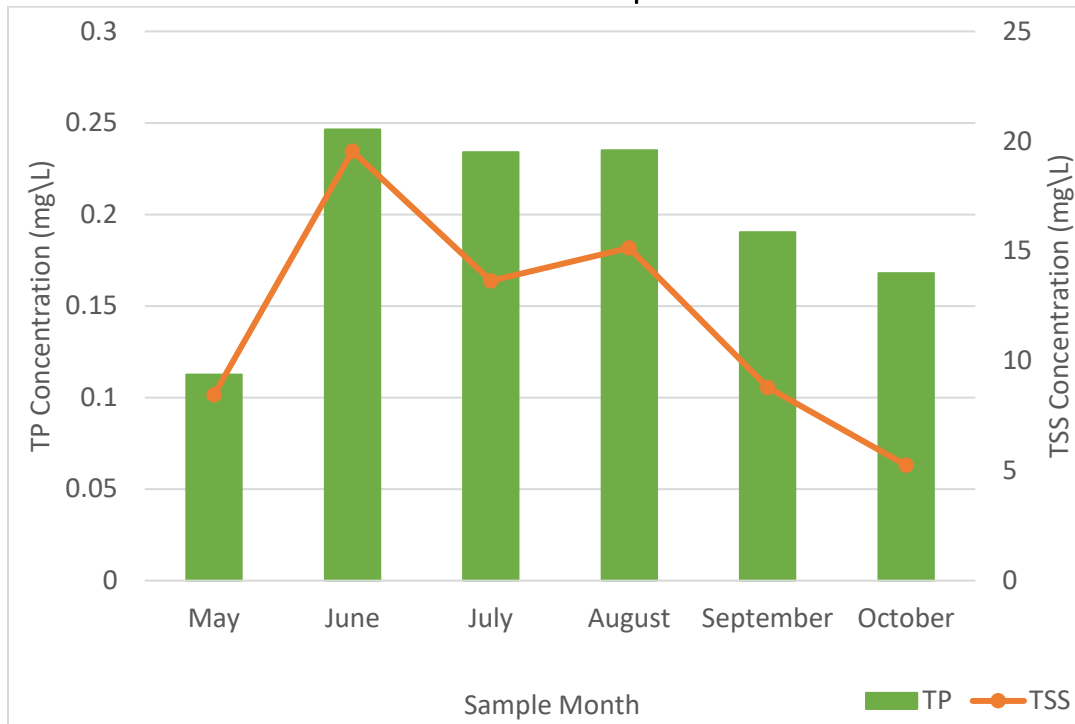


Figure 3: Median TSS and TP values compared by sample month.

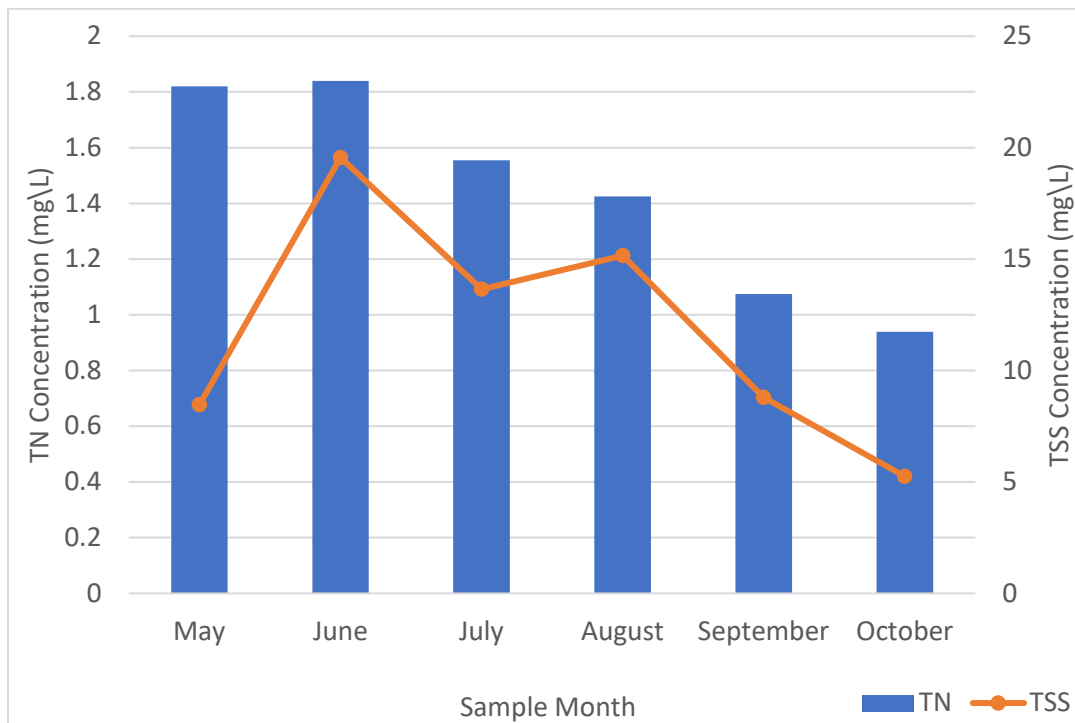


Figure 4: Median TSS and TN values compared by sample month.

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Total Nitrogen Analysis

Total nitrogen has been sampled in the LFRB volunteer monitoring program since 2020. There is not a WQC for nitrogen in Wisconsin and the TMDL does not define a TN goal, but it is important to monitor TN trends over time. Appendix I depicts the TN medians for each site from 2020-2025. There is not a definitive trend in TN concentrations. However, median TN results in 2025 were lower than in 2024 for 17 monitoring sites. In 2025, four of the sites (Kankapot Creek, Mud Creek, Lancaster Creek, and Wequiock Creek), had the lowest TN median since 2020.

Streamflow and Transparency

In addition to collecting water chemistry data each month, volunteers measure streamflow and water transparency. Streamflow is affected by the amount of water within a watershed and increases with rainstorms or snowmelt and decreases during dry periods. Flow defines the shape, size, and course of the stream. Streamflow and transparency data can be found in Appendix L.

Volunteers measure streamflow using a velocity-area approach, the stream needs to be wadable and two people are required. A 20 ft. length of stream is assessed followed by measuring the width and the water depth at numerous locations across the width. Water velocity is determined by measuring the time it takes for a tennis ball to float along the stream length.

Water transparency is collected each month with a 120 cm transparency tube. Water clarity is affected by suspended sediment, dissolved material, and algae. Transparency readings range from 0-120 cm, clear water with minimal dissolved material has a reading of 120 cm. In 2025, 14 of the 104 (13%) transparency readings taken were 120 cm, this is more than 2024, where 10% of the readings were 120 cm. Transparency readings of 120 cm have stayed consistent throughout the program, with most seasons having 10-15% of the readings be 120 cm. Transparency readings will be analyzed in future seasons to determine if water clarity is increasing across the LFRB. Based on previous years data we see that as TSS concentrations increase, transparency readings decrease, and as TSS concentrations decrease, transparency readings increase.

To help visualize transparency and TSS results, volunteers were provided with a mason jar in 2024 and 2025. During their sampling each month they were asked to fill the mason jar with water from their site, take a photo of the mason jar, and take a photo of their site. They sent these photos to the volunteer coordinator to compile in a document along with the total suspended solids results from that month. This document helps give a visual representation of total suspended solids results, for example higher TSS results generally means cloudier water. A shortened version of the document can be found in Appendix N, the full version is on the volunteer monitoring webpage.

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Field Quality Assurance/Quality Control Duplicate Samples

To document the accuracy and precision of the field data collected by volunteers, two duplicate samples were taken as quality assurance/quality control (QA/QC) samples in 2025. The duplicate sample locations were randomly selected from the list of sites that are monitored. These QA/QC tests document the accuracy and precision of the data collected and look at natural variability and sampling error.

Duplicate samples are collected on the same day and time as the regular samples and are analyzed for the same parameters. Duplicate sample results were compared to the regular sample results, and an absolute difference was calculated. The absolute difference between the two sets of samples is compared to each test's Level of Quantification (LOQ) and is considered good data quality if the value falls below the LOQ. The absolute difference for all but one of the parameters for the 2025 duplicate samples were below the LOQ. The TSS result for the duplicate sample taken at Mud Creek in June had an absolute difference of 93.4 mg/l, the regular sample result was 4.6 mg/L, and the duplicate result was 98 mg/L. This high of a difference could be due to sampling error. Relative percent difference between the regular and duplicate samples was also calculated, the results are flagged if the percentage is greater than 30% as this indicates a variance between the two sample results. Again, the only parameter with a high relative percent difference was TSS result for the June Mud Creek sample. The relative percent difference for all other parameters was below 30% samples, indicating limited variance. Duplicate sample results are in Appendix K.

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Key Takeaways for 2015-2025

- Lancaster Creek and Neenah Slough had GSM TP concentrations below the Administrative Code NR 102 TP WQC of 0.075 mg/L in 2025. From 2015-2025 Lancaster Creek is the only site to meet this criteria for multiple years (2015, 2019, 2021-2025).
- GSM TP concentrations from 2015-2025 have decreased across some of the monitoring sites.
 - Some sites' LCL and/or UCL appeared to be trending closer to the GSM value indicating less sample variability.
- DRP concentrations across all monitoring sites continue to stay high. Samples are collected around the same time each month, meaning sample data does not reflect precipitation events. 48% of the DRP samples collected since 2015 have DRP concentrations that account for 60 – 80% of the TP concentrations. There has also been an increase in the number of DRP samples in the 80 – 100% range.
- TSS concentrations have a similar pattern to TP and TN concentrations across sampling months. The sampling months with higher concentrations happen at the beginning or middle of the season, and concentration decreases from August to October.
- Monthly TSS concentrations and transparency readings show that as TSS concentrations increase/decrease, transparency readings decrease/increase.
- TN medians were lower in 2025 compared to 2024 for 17 monitoring sites. There is not a trend of TN increasing or decreasing since sampling started in 2020.
- Weather conditions across the sampling season are important to note. Most of the 2025 season had below average precipitation. The LFRB received one to two inches less rain than average.

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Data Conclusions

2025 was the eleventh year for the LFRB volunteer monitoring program, we have observed trends in water quality for some of the monitoring streams. It's important to continually monitor water quality in the LFRB while best management practices and implementation efforts are underway. Raw data may suggest that variations in weather patterns, temperature, and time of year may have an impact on the TP, DRP, TSS, and TN concentrations.

Since 2015, Lancaster Creek (our reference stream), has been the only monitoring site with GSM concentrations below the TP WQC of 0.075 mg/L for multiple years (2015, 2019, 2021-2025). In 2025 Neenah Slough was the only other monitoring site with a GSM below 0.075 mg/L. The percentage of TP samples meeting the WQC has remained between 12-17%.

The dissolved form of phosphorus is readily available for plant uptake and contributes to excessive algae growth and potentially harmful algal blooms. DRP continues to make up a large portion of TP concentrations across all monitoring sites. Appendix J provides a table representing the percentage of DRP in each TP sample and Table 3 categorizes the values into percent categories. Since 2015 nearly half of the TP samples collected had 60-80% of concentrations coming from DRP while another 28% of TP samples have 40-60% of their concentrations coming from DRP. The percentage of DRP samples in most ranges has stayed consistent, but there has been an increase in samples in the 80-100% range. 2025 had the lowest number of samples in this range since 2020.

Conservation efforts and BMPs have been installed in the LFRB TMDL area since the start of the volunteer program in 2015. Although implementation hasn't reached potential yet, DRP results remain high. The high DRP results may demonstrate that the BMPs installed are not effective at reducing DRP runoff. These results may also show the effect of other agricultural practices (e.g. tiles drains) can have as they have been shown to increase DRP and are common in the LFRB. It will be important to think about if DRP is mainly coming from point or nonpoint sources and which agricultural practices have the biggest influence on DRP.

Total suspended solids concentrations vary for each site and there is not a clear trend since the start of the program. There is not a statewide criteria or goal for TSS. The TSS median for 12 of the monitoring sites was lower in 2025 than in 2024, this could be due to the increased precipitation in 2024. When compared to TP and TN, TSS has a similar pattern throughout the monitoring season, higher concentrations happen at the beginning or middle of the season and decrease in the second half of the season.

Total nitrogen was added to the list of parameters in 2020 and currently there is not a WQC established for TN. TN trends vary by site, with some concentrations steadily going up over the four years while others are going down. Total nitrogen medians were lower in 2025 than 2024 for 17 of the monitoring sites. Four of the sites had the lowest TN Median in 2025 (Kankapot Creek, Lancaster Creek, Mud Creek, and Wequiock Creek). Appendix I shows the median TN concentration by site from 2020-2025. It is important to continue sampling for TN to determine its relationship with the other parameters and if concentrations decrease due to the installation

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of BMPs. Sampling for TN will be important for better understanding its impacts to surface water quality and helping develop a WQC for TN.

Given the consistently high levels of phosphorus and dissolved reactive phosphorus, it is recommended to continue this program at its current capacity.

Program Conclusions

One of the main goals of the LFRB volunteer monitoring program is the engagement of the public and increasing their awareness on water quality issues. In total, there have been over 40 volunteers that have collected samples for the program since it started in 2015. However, several of the 40 volunteers were part of larger organizations that are involved with the program, possibly making the volunteer contribution much higher. With the knowledge the volunteers possess, they can communicate with others and be an extension of the program reaching a larger audience.

Volunteer recruitment was carried out in several ways, including outreach to county land and water departments, local environmental groups, and publishing a press release. Presentations were also given during the sampling season to gain interest from future volunteers and to spread awareness about water quality issues in the area. These presentations garnered interest from individuals who were unsure how they could participate in improving water quality. These outreach events were successful and will continue in the future.

The use of volunteers has proved important for success. Many volunteers are involved with the program which requires constant coordination and communication by the DNR coordinator to ensure success of the program. Communication proves to be the most important aspect of the DNR coordinators position. The coordinator is the liaison between the volunteers and other DNR staff that are involved within the program. Volunteers appreciated the increased communication from the DNR coordinator in recent seasons.

This water quality monitoring data is also important in measuring implementation progress. There are ten active 9 Key Element Plans within the Lower Fox River TMDL area. These plans assess the causes and sources of pollution and prioritize restoration and protection strategies to address water quality problems. Watersheds with active 9 Key Element Plans include Plum Creek & Kankapot Creek (2015), Upper East River (2016), Upper Duck Creek (2016), Apple Creek (2017), Lower East River (2018), Mainstem Lower Fox River (2019), Garner's Creek (2019), Bower Creek (2019), Ashwaubenon Creek & Dutchman Creek (2020), and Middle and Lower Duck Creek (2022). The Lower Fox River TMDL calls for a 59% overall TP reduction and 55% overall TSS reduction from all sources to meet water quality goals. The TMDL calls for a 78% TP reduction and 60% TSS reduction from agricultural sources in the watershed. The active 9 Key Element watershed plans focus on non-point source agricultural implementation. As implementation of these plans continue, sampling data can be utilized to help track implementation progress and assist in determining where/when additional data and information is needed to track progress.

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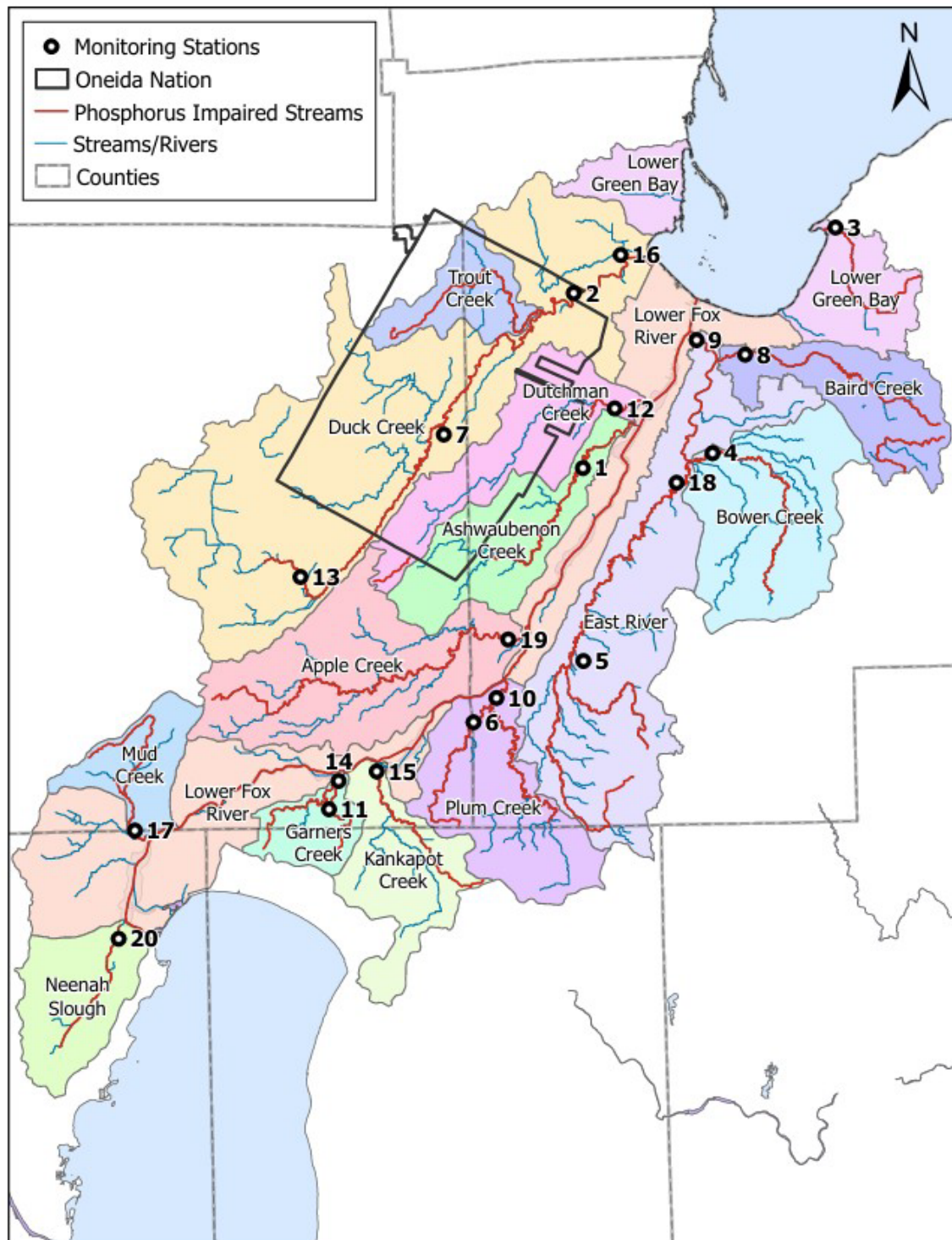
Acknowledgements

Thank you to all the volunteers, present and past, that have made the Lower Fox River Basin volunteer monitoring program possible. Thank you to the Wisconsin DNR and the WAV program for funding and support. The WAV program manages a nutrient data database, where results can be viewed for monitoring sites across the state ([WAV Data Dashboard \(wisc.edu\)](https://wisc.edu/WAV/Data/Dashboard)).

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Appendices

Appendix A: Lower Fox River Basin Volunteer Monitoring Sites and TMDL Sub-basin Boundaries



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<i>Site #</i>	<i>Stream Name</i>	<i>WBIC</i>	<i>SWIMS ID</i>	<i>SWIMS Station Name</i>	<i>Latitude, Longitude</i>
1	Ashwaubenon Creek	122200	10016502	Ashwaubenon Creek at Grant Street	44.44508, -88.09875
2	Lower Duck Creek	409700	10038644	Duck Creek at Pamperin Park	44.54773, -88.10285
3	Wequiock Creek	3000022	10010769	Wequiock Creek at Nicolet Rd/CTH A	44.57651, -87.89083
4	Bower Creek	118400	10009445	Bower Creek (1) 50m Upstream of CTH GV	44.45179, -87.99543
5	Upper East River	118000	053508	East River at Mallard Rd	44.33542, -88.11198
6	West Plum Creek	125200	10016494	West Plum Creek Downstream of County Line Rd	44.30296, -88.18901
7	Mid Duck Creek	409700	453255	Duck Creek at Seminary Rd	44.46608, -88.21892
8	Baird Creek	118100	053683	Baird Creek at Preble WI	44.50741, -87.96754
9	East River	118000	10043279	East River at Harold Lewis Trail off Main Street	44.51633, -88.00587
10	Plum Creek	125100	10046999	Plum Creek at VandeHey Farm Crossing	44.31540, -88.17154
11	Tributary to Garner's Creek	5022162	10047157	Trib. To Garner's Creek at CTH CE	44.25392, -88.30658
12	Dutchman Creek	121600	10015851	Dutchman Creek at Oneida Street	44.47859, -88.0723
13	Upper Duck Creek	409700	10029975	Duck Creek at CTH S	44.38665, -88.32509
14	Garner's Creek	127700	10043028	Garner's Creek Downstream of CTH Z	44.2701, -88.29816
15	Kankapot Creek	126800	453261	Kankapot Creek at CTH Z Dodge St 100 Ft upstream of Bridge	44.27504, -88.26778
16	Lancaster Creek	410000	10034510	Unnamed Trib. (410000) at Lakeview Dr	44.56583, -88.06471
17	Mud Creek	129500	453258	Mud Creek at CTH BB	44.24417, -88.46037
18	East River	118000	053675	East River at CTH G	44.43550, -88.02457
19	Apple Creek	124100	053684	Apple Creek at Rosin Rd	44.34861, -88.16119
20	Neenah Slough	130800	10032175	Neenah Slough #2 (100ft S of Adams St)	44.18274, -88.47481

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Appendix B: Impaired Monitoring Streams

Local Waterbody Name	Waters ID	WBIC	County	Start Mile	End Mile	Total Size	Date Listed	Source Category	Pollutant	Impairment	Listing Condition Category
Apple Creek	313933	124100	Brown	0	3.99	4	4/1/1998	NPS	Total Phosphorus	Low DO	TMDL approved by EPA in 2012 (4A)
Apple Creek	313933	124100	Brown	0	3.99	4	4/1/1998	NPS	Sediment/Total Suspended Solids	Elevated Water Temperature, Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Apple Creek	10839	124100	Brown, Outagamie	3.99	23.88	19.9	4/1/1998	NPS	Total Phosphorus	Low DO	TMDL approved by EPA in 2012 (4A)
Apple Creek	10839	124100	Brown, Outagamie	3.99	23.88	19.9	4/1/1998	NPS	Sediment/Total Suspended Solids	Elevated Water Temperature, Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Ashwaubenon Creek	10834	122200	Brown	0	14.15	14.2	4/1/2008	PS/NPS	Total Phosphorus	Low DO	TMDL approved by EPA in 2012 (4A)
Ashwaubenon Creek	10834	122200	Brown	0	14.15	14.2	4/1/2008	PS/NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Baird Creek	10681	118100	Brown	0	3.5	3.5	4/1/2006	NPS	Total Phosphorus	Low DO	TMDL approved by EPA in 2012 (4A)

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Local Waterbody Name	Waters ID	WBIC	County	Start Mile	End Mile	Total Size	Date Listed	Source Category	Pollutant	Impairment	Listing Condition Category
Baird Creek	10681	118100	Brown	0	3.5	3.5	4/1/2006	NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Baird Creek	10682	118100	Brown	3.5	13.1	9.6	4/1/2008	PS/NPS	Total Phosphorus	Low DO	TMDL approved by EPA in 2012 (4A)
Baird Creek	10682	118100	Brown	3.5	13.1	9.6	4/1/2008	PS/NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Bower Creek	10683	118400	Brown	0	3	3	4/1/2008	NPS	Total Phosphorus	Low DO, Degraded Biological Community	TMDL approved by EPA in 2012 (4A)
Bower Creek	10683	118400	Brown	0	3	3	4/1/2008	NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Bower Creek	10684	118400	Brown	3	13	10	4/1/2008	NPS	Total Phosphorus	Low DO	TMDL approved by EPA in 2012 (4A)
Bower Creek	10684	118400	Brown	3	13	10	4/1/2008	NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Duck Creek	10850	409700	Brown	0	4.96	5	4/1/1998	NPS	Total Phosphorus	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Duck Creek	10850	409700	Brown	0	4.96	5	4/1/1998	NPS	Sediment/Total Suspended Solids	Low DO	TMDL approved by EPA in 2012 (4A)

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Local Waterbody Name	Waters ID	WBIC	County	Start Mile	End Mile	Total Size	Date Listed	Source Category	Pollutant	Impairment	Listing Condition Category
Duck Creek	10851	409700	Outagamie	25.69	32.9	7.2	4/1/1998	PS/NPS	Total Phosphorus	Low DO	TMDL approved by EPA in 2012 (4A)
Duck Creek	10851	409700	Outagamie	25.69	32.9	7.2	4/1/1998	PS/NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Dutchman Creek	10832	121600	Brown	0	4.04	4.04	4/1/1998	PS/NPS	Total Phosphorus	Low DO, Degraded Biological Community	TMDL approved by EPA in 2012 (4A)
Dutchman Creek	1854741	121600	Outagamie	16.05	17.97	1.91	4/1/1998	PS/NPS	Total Phosphorus	Low DO	TMDL approved by EPA in 2012 (4A)
East River	10679	118000	Brown	0	14.15	14.15	4/1/1998	PS/NPS	Total Phosphorus	Low DO, Degraded Biological Community, High Phosphorus Levels	TMDL approved by EPA in 2012 (4A)
East River	10679	118000	Brown	0	14.15	14.15	4/1/1998	PS/NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
East River	10680	118000	Brown, Calumet	14.15	42.25	28.1	4/1/1998	PS/NPS	Total Phosphorus	Low DO, Degraded Biological Community	TMDL approved by EPA in 2012 (4A)
East River	10680	118000	Brown, Calumet	14.15	42.25	28.1	4/1/1998	PS/NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)

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Local Waterbody Name	Waters ID	WBIC	County	Start Mile	End Mile	Total Size	Date Listed	Source Category	Pollutant	Impairment	Listing Condition Category
Garners Creek	10845	127700	Calumet, Outagamie	0	6.99	6.99	4/1/2008	PS/NPS	Total Phosphorus	Degraded Biological Community, Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Garners Creek	10845	127700	Calumet, Outagamie	0	6.99	6.99	4/1/2008	PS/NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Kankapot Creek	10844	126800	Outagamie	0	2.66	2.66	4/1/2008	PS/NPS	Total Phosphorus	Degraded Biological Community, Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Kankapot Creek	10844	126800	Outagamie	0	2.66	2.66	4/1/2008	PS/NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Kankapot Creek	357763	126800	Calumet, Outagamie	2.66	9.57	6.91	4/1/2008	PS/NPS	Total Phosphorus	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Kankapot Creek	357763	126800	Calumet, Outagamie	2.66	9.57	6.91	4/1/2008	PS/NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Mud Creek	10846	129500	Outagamie, Winnebago	0	3.71	3.71	4/1/2008	PS/NPS	Total Phosphorus	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Mud Creek	10846	129500	Outagamie, Winnebago	0	3.71	3.71	4/1/2008	PS/NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)

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Local Waterbody Name	Waters ID	WBIC	County	Start Mile	End Mile	Total Size	Date Listed	Source Category	Pollutant	Impairment	Listing Condition Category
Mud Creek	10847	129500	Outagamie	3.71	6.87	3.16	4/1/1998	PS/NPS	Sediment/Total Suspended Solids	Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Neenah Slough	10848	130800	Winnebago	0	2.77	2.77	4/1/1998	PS/NPS	Total Phosphorus	Low DO	TMDL approved by EPA in 2012 (4A)
Neenah Slough	357915	130800	Winnebago	2.77	3.54	0.77	4/1/1998	PS/NPS	Total Phosphorus	Low DO	TMDL approved by EPA in 2012 (4A)
Neenah Slough	357955	130800	Winnebago	3.55	6.12	2.57	4/1/1998	PS/NPS	Total Phosphorus	Low DO, Degraded Biological Community	TMDL approved by EPA in 2012 (4A)
Plum Creek	10841	125100	Brown	0	13.86	13.86	4/1/2008	PS/NPS	Total Phosphorus	Degraded Biological Community, Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Plum Creek	10841	125100	Brown	0	13.86	13.86	4/1/1998	PS/NPS	Sediment/Total Suspended Solids	Elevated Water Temperature, Degraded Habitat	TMDL approved by EPA in 2012 (4A)
Plum Creek	357670	125100	Brown, Calumet	13.87	16.42	2.55	4/1/1998	PS/NPS	Sediment/Total Suspended Solids	Elevated Water Temperature, Degraded Habitat	TMDL approved by EPA in 2012 (4A)

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Local Waterbody Name	Waters ID	WBIC	County	Start Mile	End Mile	Total Size	Date Listed	Source Category	Pollutant	Impairment	Listing Condition Category
Plum Creek	357719	125100	Calumet	16.4	19.5	3.1	4/1/1998	PS/NPS	Sediment/Total Suspended Solids	Elevated Water Temperature, Degraded Habitat	TMDL approved by EPA in 2012 (4A)
West Plum Creek	5690388	125200	Brown, Outagamie	0	9.4	9.4	3/31/2018	NPS	Total Phosphorus	Degraded Biological Community	Watershed Plan (5W)
Local Water (Trib to Garner's Creek)	3993962	5022162	Calumet, Outagamie	0	4.71	4.71	4/1/2016	NPS	Total Phosphorus	Degraded Biological Community	Watershed Plan (5W)
Wequiock Creek	1479576	3000022	Brown	0	8.4	8.4	4/2/2024	NPS	Total Phosphorus	Impairment Unknown	Watershed Plan (5W)

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Appendix C: Percent Completeness by Monitoring Site

Monitoring Site	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Apple Creek	100%	100%	100%	83.3%	100%	50%	83%	100%	100%	100%	100%
Ashwaubenon Creek	100%	100%	100%	100%	83.3%	50%	83%	100%	100%	100%	100%
Baird Creek	100%	83.3%	100%	100%	100%	50%	83%	100%	100%	100%	100%
Bower Creek	100%	66.67%	100.0%	100%	100%	50%	83%	100%	100%	100%	100%
Lower Duck Creek (Pamperin Park)	100%	100%	100%	100%	100%	50%	100%	100%	100%	100%	100%
Dutchman Creek	50.0%	33.3%	100.0%	100%	100%	50%	83%	50%	100%	100%	100%
Middle East River (CTH G)	100%	100%	100%	100%	100%	50%	83%	100%	100%	100%	100%
Lower East River (Harold Lewis Trail)	0%	100%	100%	100%	100%	50%	100%	100%	100%	100%	100%
Garner's Creek	100%	83.3%	100%	100%	100%	50%	100%	100%	100%	100%	100%
Kankapot Creek	100%	83.3%	100%	100%	100%	50%	100%	100%	100%	100%	100%
Mud Creek	50.0%	100%	100%	100%	100%	50%	100%	100%	100%	100%	100%
Neenah Slough	100%	100%	100%	100%	100%	50%	83%	100%	100%	100%	100%
Plum Creek (VandeHey)	N/A	50%	100%	100%	100%	50%	83%	100%	100%	100%	83%
Lancaster Creek	50%	100%	100%	100%	100%	50%	100%	67%	100%	100%	100%
Upper Duck Creek (CTH S)	N/A	N/A	N/A	100%	100%	50%	100%	100%	100%	100%	100%
Middle Duck Creek (Seminary Rd)	N/A	N/A	N/A	100%	100%	50%	100%	100%	100%	100%	100%
Upper East River (Mallard Rd)	N/A	N/A	N/A	100%	100%	50%	83%	100%	100%	100%	83%
Trib to Garner's Creek	N/A	N/A	N/A	N/A	N/A	50%	100%	100%	100%	100%	100%
West Plum Creek (County Line)	N/A	N/A	N/A	N/A	N/A	50%	100%	100%	100%	100%	100%
Wequiock Creek	N/A	N/A	N/A	N/A	N/A	50%	83%	100%	83%	100%	100%
Combined Percentage	80.77%	85.71%	100.00%	99.02%	99.02%	50.00%	91.52%	95.85%	99.15%	100.00%	98.33%

Sample completeness is based on 6 samples per year.

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Appendix D: 2015-2025 Sampling Data

TP Concentration Data

Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Apple Creek	May	0.34	0.071	0.331	0.168	0.23	N/A	N/A	0.031	0.072	0.055	0.04
Apple Creek	June	0.268	0.342	1.67	0.244	0.262	N/A	0.514	0.184	0.103	0.166	0.069
Apple Creek	July	0.354	0.407	0.345	0.319	0.267	N/A	0.176	0.376	0.462	0.334	0.276
Apple Creek	August	0.278	0.251	0.207	N/A	0.288	0.267	0.186	0.888	0.277	0.321	0.498
Apple Creek	September	0.199	0.954	0.305	0.147	0.273	0.126	0.094	0.355	0.185	0.169	0.168
Apple Creek	October	0.224	0.141	0.254	0.069	0.224	0.122	0.067	0.076	0.189	0.17	0.346
Ashwaubenon Creek	May	0.513	0.3	0.254	0.291	N/A	N/A	N/A	0.291	0.221	0.678	0.209
Ashwaubenon Creek	June	0.435	0.295	0.529	0.293	0.313	N/A	0.512	0.309	0.373	0.923	0.269
Ashwaubenon Creek	July	0.472	0.332	0.388	0.332	0.544	N/A	0.264	0.335	0.23	0.268	0.279
Ashwaubenon Creek	August	0.226	0.259	0.204	0.313	0.317	0.223	0.323	0.212	0.222	0.789	0.274

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ashwaubenon Creek	September	0.258	0.489	0.239	0.309	0.715	0.099	0.232	0.159	0.165	0.202	0.108
Ashwaubenon Creek	October	0.259	0.678	0.466	0.289	0.485	0.119	0.319	0.099	0.111	0.115	0.14
Baird Creek	May	0.477	0.123	0.204	0.23	0.578	N/A	N/A	0.127	0.148	0.157	0.169
Baird Creek	June	0.317	0.179	0.393	0.191	0.502	N/A	0.281	0.2	0.124	0.252	0.191
Baird Creek	July	0.319	0.212	0.45	0.348	0.201	N/A	0.17	0.155	0.173	0.439	0.246
Baird Creek	August	0.181	N/A	0.363	0.187	0.51	0.16	0.479	0.264	0.178	0.493	0.238
Baird Creek	September	0.258	0.252	0.271	0.555	0.572	0.069	0.167	0.131	0.101	0.16	0.117
Baird Creek	October	0.127	0.133	0.137	0.499	0.253	0.075	0.115	0.069	0.084	0.093	0.11
Bower Creek	May	0.179	0.126	0.135	0.093	0.262	N/A	N/A	0.127	0.105	0.572	0.135
Bower Creek	June	0.187	0.257	0.318	0.344	0.289	N/A	0.63	0.37	0.233	0.119	0.281
Bower Creek	July	0.401	0.388	0.302	0.384	0.395	N/A	0.197	0.301	0.243	0.193	0.437

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Bower Creek	August	0.21	0.2	0.224	0.326	0.367	0.319	0.23	0.174	0.206	0.247	0.236
Bower Creek	September	0.213	N/A	0.451	0.319	0.436	0.154	0.175	0.162	0.19	0.242	0.339
Bower Creek	October	0.152	N/A	0.36	0.152	0.233	0.232	0.244	0.137	0.148	0.272	0.15
Lower Duck Creek (Pamperin Park)	May	0.094	0.067	0.069	0.059	0.074	N/A	0.194	0.094	0.063	0.318	0.08
Lower Duck Creek (Pamperin Park)	June	0.314	0.142	0.193	0.319	0.192	N/A	0.343	0.133	0.262	0.32	0.268
Lower Duck Creek (Pamperin Park)	July	0.172	0.183	0.276	0.186	0.237	N/A	0.118	0.223	0.128	0.17	0.202
Lower Duck Creek (Pamperin Park)	August	0.122	0.163	0.145	0.098	0.104	0.121	0.361	0.142	0.139	0.137	0.187
Lower Duck Creek (Pamperin Park)	September	0.159	0.257	0.19	0.114	0.269	0.034	0.045	0.087	0.055	0.142	0.132

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lower Duck Creek (Pamperin Park)	October	0.097	0.203	0.308	0.153	0.087	0.2	0.041	0.056	0.127	0.094	0.116
Dutchman Creek	May	0.547	0.107	0.098	0.104	0.363	N/A	N/A	0.054	0.442	0.092	0.106
Dutchman Creek	June	0.231	N/A	0.271	0.569	0.196	N/A	0.159	0.173	0.199	0.205	0.164
Dutchman Creek	July	0.306	N/A	0.212	0.165	0.396	N/A	0.113	N/A	0.133	0.368	0.174
Dutchman Creek	August	N/A	0.126	0.102	0.116	0.113	0.126	0.098	N/A	0.184	0.099	0.152
Dutchman Creek	September	N/A	N/A	0.187	0.201	0.423	0.054	0.091	0.14	0.184	0.129	0.046
Dutchman Creek	October	N/A	N/A	0.127	0.106	0.128	0.069	0.084	N/A	0.099	0.069	0.136
Middle East River (CTH G)	May	0.307	0.275	0.444	0.276	0.23	N/A	N/A	0.307	0.265	0.254	0.197
Middle East River (CTH G)	June	0.631	0.449	0.554	0.366	0.447	N/A	0.386	0.543	0.479	0.372	0.536
Middle East River (CTH G)	July	1.05	0.585	0.475	0.471	0.394	N/A	0.316	0.45	0.449	0.457	0.402
Middle East River (CTH G)	August	0.598	0.494	0.494	0.261	0.37	0.303	0.276	0.56	0.571	0.33	0.427

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Middle East River (CTH G)	September	0.453	0.885	0.289	0.368	0.605	0.209	0.213	0.272	0.184	0.279	0.352
Middle East River (CTH G)	October	0.361	0.368	0.336	0.159	0.551	0.363	0.239	0.264	0.299	0.274	0.38
Lower East River (HLT)	May	N/A	0.092	0.059	0.14	0.083	N/A	0.109	0.108	0.078	0.058	0.225
Lower East River (HLT)	June	N/A	0.189	0.624	0.294	0.095	N/A	0.691	0.206	0.078	0.324	0.132
Lower East River (HLT)	July	N/A	0.347	0.211	0.155	0.182	N/A	0.137	0.628	0.416	0.148	0.161
Lower East River (HLT)	August	N/A	0.314	0.12	0.348	0.29	0.121	0.131	0.158	0.551	1.94	0.211
Lower East River (HLT)	September	N/A	0.524	0.124	0.623	0.381	0.548	0.125	0.296	0.072	0.142	0.106
Lower East River (HLT)	October	N/A	0.178	0.161	0.375	0.158	0.253	0.082	0.1	0.181	0.156	0.171
Garner's Creek	May	0.124	0.077	0.118	0.046	0.075	N/A	0.09	0.057	0.039	0.073	0.055
Garner's Creek	June	0.14	N/A	0.147	0.155	0.143	N/A	0.162	0.161	0.124	0.129	0.215
Garner's Creek	July	0.326	0.131	0.14	0.142	0.151	N/A	0.084	0.142	0.198	0.071	0.185

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Garner's Creek	August	0.099	0.183	0.139	0.122	0.113	0.125	0.17	0.12	0.125	0.107	0.22
Garner's Creek	September	0.395	0.132	0.114	0.078	0.143	0.072	0.06	0.078	0.098	0.071	0.127
Garner's Creek	October	0.137	0.088	0.087	0.038	0.07	0.059	0.051	0.057	0.086	0.121	0.086
Kankapot Creek	May	0.379	0.169	0.313	0.437	0.222	N/A	0.278	0.056	0.133	0.209	0.186
Kankapot Creek	June	0.321	0.392	0.412	0.366	0.345	N/A	0.45	0.362	0.289	0.37	0.395
Kankapot Creek	July	0.351	0.292	0.488	0.462	0.364	N/A	0.325	0.357	0.446	0.4	0.395
Kankapot Creek	August	0.315	0.257	0.663	0.678	0.386	0.351	0.39	0.498	0.261	0.229	0.889
Kankapot Creek	September	0.38	N/A	0.747	0.311	0.462	0.277	0.212	0.547	0.271	0.186	0.328
Kankapot Creek	October	0.812	0.353	0.507	0.208	0.327	0.21	0.288	0.192	0.176	0.21	0.4
Mud Creek	May	0.108	0.082	0.071	0.083	0.044	N/A	0.119	0.062	0.059	0.058	0.073
Mud Creek	June	0.119	0.108	0.102	0.112	0.084	N/A	0.113	0.154	0.116	0.087	0.305

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Mud Creek	July	N/A	0.147	0.186	0.142	0.138	N/A	0.114	0.212	0.084	0.114	0.134
Mud Creek	August	0.075	0.096	0.114	0.119	0.101	0.122	0.075	0.152	0.122	0.077	0.101
Mud Creek	September	N/A	0.1	0.069	0.074	0.121	0.029	0.033	0.149	0.06	0.066	0.084
Mud Creek	October	N/A	0.093	0.075	0.05	0.059	0.096	0.072	0.062	0.126	0.054	0.042
Neenah Slough	May	0.134	0.075	0.1	0.19	0.096	N/A	N/A	0.067	0.075	0.091	0.072
Neenah Slough	June	N/A	0.352	0.159	0.167	0.102	N/A	0.089	0.147	0.064	0.194	0.136
Neenah Slough	July	0.078	0.231	0.081	0.061	0.118	N/A	0.075	0.162	0.044	0.114	0.123
Neenah Slough	August	0.094	0.061	0.061	0.038	0.053	0.08	0.084	0.045	0.043	0.137	0.053
Neenah Slough	September	0.057	0.086	0.045	0.088	0.234	0.038	0.046	0.085	0.034	0.03	0.069
Neenah Slough	October	0.076	0.138	0.115	0.065	0.131	0.223	0.051	0.111	0.038	0.036	0.039
Plum Creek (VandeHey)	May	N/A	N/A	0.462	0.266	0.184	N/A	N/A	0.189	0.14	1.03	0.09

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Plum Creek (VandeHey)	June	N/A	N/A	0.395	0.446	0.375	N/A	0.467	1.17	0.184	0.422	0.338
Plum Creek (VandeHey)	July	N/A	N/A	0.46	0.529	0.426	N/A	0.257	0.318	0.397	0.338	0.346
Plum Creek (VandeHey)	August	N/A	1.34	0.602	0.437	0.335	0.375	0.297	0.212	0.485	0.485	N/A
Plum Creek (VandeHey)	September	N/A	0.839	0.878	1.05	0.505	0.549	0.283	0.359	0.372	0.279	0.663
Plum Creek (VandeHey)	October	N/A	0.661	1.59	0.283	0.727	0.423	0.261	0.703	0.379	0.126	0.197
Lancaster Creek	May	0.054	0.049	0.055	0.091	0.062	N/A	0.071	N/A	0.026	0.134	0.044
Lancaster Creek	June	0.086	0.106	0.115	0.092	0.058	N/A	0.064	0.069	0.069	0.069	0.132
Lancaster Creek	July	0.128	0.113	0.084	0.12	0.072	N/A	0.05	0.079	0.088	0.094	0.085
Lancaster Creek	August	N/A	0.251	0.075	0.171	0.066	0.112	0.048	0.052	0.081	0.058	0.116
Lancaster Creek	September	N/A	0.065	0.077	0.058	0.059	0.097	0.037	N/A	0.054	0.052	0.051
Lancaster Creek	October	N/A	0.056	0.058	0.028	0.028	0.084	0.027	0.038	0.029	0.044	0.04

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Upper Duck Creek (CTH S)	May	N/A	N/A	N/A	0.24	0.073	N/A	0.171	0.104	0.067	0.059	0.054
Upper Duck Creek (CTH S)	June	N/A	N/A	N/A	0.253	0.109	N/A	0.495	0.112	0.12	0.289	0.087
Upper Duck Creek (CTH S)	July	N/A	N/A	N/A	0.355	0.171	N/A	0.121	0.226	0.212	0.144	0.125
Upper Duck Creek (CTH S)	August	N/A	N/A	N/A	0.537	0.136	0.322	0.144	0.147	0.356	0.177	0.303
Upper Duck Creek (CTH S)	September	N/A	N/A	N/A	0.238	0.254	0.189	0.184	0.123	0.308	0.15	0.278
Upper Duck Creek (CTH S)	October	N/A	N/A	N/A	0.071	0.273	0.282	0.172	0.057	0.448	0.155	0.263
Middle Duck Creek (Seminary Rd)	May	N/A	N/A	N/A	0.107	0.128	N/A	0.299	0.145	0.119	0.319	0.103
Middle Duck Creek (Seminary Rd)	June	N/A	N/A	N/A	0.172	0.29	N/A	0.282	0.214	0.207	0.28	0.383
Middle Duck Creek (Seminary Rd)	July	N/A	N/A	N/A	0.224	0.247	N/A	0.191	0.268	0.311	0.223	0.291
Middle Duck Creek (Seminary Rd)	August	N/A	N/A	N/A	0.214	0.173	0.154	0.33	0.248	0.223	0.22	0.266

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Middle Duck Creek (Seminary Rd)	September	N/A	N/A	N/A	0.144	0.286	0.086	0.109	0.132	0.19	0.249	0.235
Middle Duck Creek (Seminary Rd)	October	N/A	N/A	N/A	0.143	0.094	0.162	0.104	0.072	0.19	0.137	0.178
Upper East River (Mallard Rd)	May	N/A	N/A	N/A	0.453	0.213	N/A	N/A	0.339	0.323	0.802	0.218
Upper East River (Mallard Rd)	June	N/A	N/A	N/A	0.505	0.452	N/A	1.68	0.543	0.575	0.542	0.488
Upper East River (Mallard Rd)	July	N/A	N/A	N/A	0.553	0.562	N/A	0.44	0.571	0.529	0.386	0.508
Upper East River (Mallard Rd)	August	N/A	N/A	N/A	0.683	0.454	0.421	0.319	0.909	0.809	0.369	N/A
Upper East River (Mallard Rd)	September	N/A	N/A	N/A	0.556	0.691	0.252	0.257	0.441	1.27	0.391	0.403
Upper East River (Mallard Rd)	October	N/A	N/A	N/A	0.196	0.551	0.399	0.301	0.457	0.445	0.523	0.443
Trib to Garner's Creek	May	N/A	N/A	N/A	N/A	N/A	N/A	0.226	0.119	0.094	0.084	0.12
Trib to Garner's Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	0.306	0.196	0.157	0.418	0.24

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Trib to Garner's Creek	July	N/A	N/A	N/A	N/A	N/A	N/A	0.218	0.239	0.342	0.13	0.282
Trib to Garner's Creek	August	N/A	N/A	N/A	N/A	N/A	0.183	0.271	0.19	0.182	0.257	0.221
Trib to Garner's Creek	September	N/A	N/A	N/A	N/A	N/A	0.09	0.205	0.186	0.343	0.143	0.224
Trib to Garner's Creek	October	N/A	N/A	N/A	N/A	N/A	0.16	0.292	0.241	0.137	0.226	0.44
West Plum Creek (County Line)	May	N/A	N/A	N/A	N/A	N/A	N/A	1.38	0.151	0.306	0.3	0.108
West Plum Creek (County Line)	June	N/A	N/A	N/A	N/A	N/A	N/A	2.4	1.34	0.761	0.812	1
West Plum Creek (County Line)	July	N/A	N/A	N/A	N/A	N/A	N/A	0.344	1.57	1.21	0.772	0.632
West Plum Creek (County Line)	August	N/A	N/A	N/A	N/A	N/A	1.09	1.09	1.48	1.61	0.767	1.28
West Plum Creek (County Line)	September	N/A	N/A	N/A	N/A	N/A	1.71	0.724	0.858	0.76	0.737	0.56
West Plum Creek (County Line)	October	N/A	N/A	N/A	N/A	N/A	3.3	0.739	0.412	0.773	1.07	2.07

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Wequiock Creek	May	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.048	0.072	0.066	0.085
Wequiock Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	0.211	0.117	0.133	0.14	0.136
Wequiock Creek	July	N/A	N/A	N/A	N/A	N/A	N/A	0.114	0.153	N/A	0.153	0.235
Wequiock Creek	August	N/A	N/A	N/A	N/A	N/A	0.123	0.166	0.201	0.237	0.189	0.19
Wequiock Creek	September	N/A	N/A	N/A	N/A	N/A	0.065	0.067	0.14	0.086	0.194	0.099
Wequiock Creek	October	N/A	N/A	N/A	N/A	N/A	0.037	0.101	0.061	0.077	0.178	0.132

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DRP Concentration Data

Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Apple Creek	May	0.16	0.027	0.141	0.086	0.109	N/A	N/A	ND	0.029	0.036	0.01
Apple Creek	June	0.18	0.187	0.323	0.167	0.123	N/A	0.26	0.132	0.077	0.116	0.041
Apple Creek	July	0.27	0.259	0.251	0.264	0.219	N/A	0.082	0.306	0.386	0.189	0.177
Apple Creek	August	0.201	0.173	0.126	N/A	0.136	0.095	0.143	0.348	0.146	0.218	0.309
Apple Creek	September	0.139	0.341	0.238	0.072	0.188	0.062	0.061	N/A	0.102	0.116	0.089
Apple Creek	October	0.182	0.106	0.15	0.034	0.16	0.086	0.045	0.046	0.125	0.103	0.177
Ashwaubenon Creek	May	N/A	0.17	0.156	0.207	N/A	N/A	N/A	0.199	0.163	0.293	0.157
Ashwaubenon Creek	June	0.221	0.19	0.383	0.102	0.242	N/A	0.409	0.253	0.303	0.247	0.197
Ashwaubenon Creek	July	0.306	0.247	0.288	0.256	0.352	N/A	0.17	0.279	0.146	0.355	0.205
Ashwaubenon Creek	August	0.128	0.103	0.071	0.087	0.259	0.159	0.254	0.153	0.119	0.651	0.186
Ashwaubenon Creek	September	0.126	0.288	0.191	0.199	0.498	0.07	0.155	0.126	0.078	0.166	0.07
Ashwaubenon Creek	October	0.203	0.486	0.375	0.259	0.346	0.094	0.301	0.071	0.078	0.087	0.111
Baird Creek	May	0.345	0.057	0.142	0.158	0.278	N/A	N/A	0.075	0.092	0.105	0.089
Baird Creek	June	0.216	0.099	0.243	0.106	0.337	N/A	0.208	0.122	0.074	0.189	0.102

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Baird Creek	July	0.183	0.134	0.276	0.152	0.145	N/A	0.106	0.106	0.094	0.36	0.18
Baird Creek	August	0.12	N/A	0.29	0.134	0.274	0.109	0.293	0.193	0.12	0.287	0.169
Baird Creek	September	0.188	0.154	0.216	0.476	0.439	0.075	0.091	0.09	0.058	0.127	0.066
Baird Creek	October	0.098	0.096	0.101	0.326	0.158	0.071	0.084	0.042	0.057	0.073	0.082
Bower Creek	May	0.112	0.066	0.047	0.044	0.142	N/A	N/A	0.074	0.052	0.161	0.066
Bower Creek	June	0.097	0.154	0.229	0.232	0.192	N/A	0.363	0.271	0.163	0.075	0.11
Bower Creek	July	0.118	0.293	0.21	0.265	0.251	N/A	0.093	0.17	0.175	0.121	0.305
Bower Creek	August	0.108	0.119	0.13	0.174	0.178	0.14	0.145	0.105	0.129	0.129	0.148
Bower Creek	September	0.145	N/A	0.295	0.244	0.306	0.047	0.117	0.098	0.113	0.174	0.219
Bower Creek	October	0.12	N/A	0.03	0.095	0.113	0.118	0.181	0.08	0.073	0.199	0.117
Lower Duck Creek (Pamperin Park)	May	0.043	0.019	0.025	0.018	0.033	N/A	0.137	0.056	0.015	0.159	0.036
Lower Duck Creek (Pamperin Park)	June	0.141	0.08	0.121	0.193	0.093	N/A	0.134	0.108	0.177	0.174	0.117

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lower Duck Creek (Pamperin Park)	July	0.091	0.131	0.18	0.113	0.19	N/A	0.079	0.161	0.074	0.134	0.152
Lower Duck Creek (Pamperin Park)	August	0.074	0.077	0.095	0.03	0.059	0.041	0.227	0.084	0.083	0.103	0.132
Lower Duck Creek (Pamperin Park)	September	0.111	0.179	0.124	0.081	0.196	0.013	0.017	0.056	0.016	0.117	0.083
Lower Duck Creek (Pamperin Park)	October	0.047	0.156	0.177	0.12	0.063	0.167	0.021	0.018	0.077	0.076	0.083
Dutchman Creek	May	0.084	0.032	0.041	0.046	0.246	N/A	N/A	0.014	0.306	0.052	0.072
Dutchman Creek	June	0.176	N/A	0.198	0.378	0.136	N/A	0.104	0.118	0.143	0.159	0.11
Dutchman Creek	July	0.193	N/A	0.164	0.115	0.286	N/A	0.052	N/A	0.103	0.305	0.141
Dutchman Creek	August	N/A	0.05	0.045	0.067	0.056	0.108	0.073	N/A	0.145	0.071	0.107
Dutchman Creek	September	N/A	N/A	0.146	0.163	0.343	0.032	0.053	0.103	0.113	0.067	0.026
Dutchman Creek	October	N/A	N/A	0.103	0.08	0.087	0.043	0.068	N/A	0.063	0.057	0.101

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Middle East River (CTH G)	May	0.205	0.146	0.199	0.184	0.12	N/A	N/A	0.207	0.168	0.193	0.098
Middle East River (CTH G)	June	0.396	0.294	0.302	0.282	0.265	N/A	0.243	0.413	0.333	0.248	0.419
Middle East River (CTH G)	July	0.831	0.488	0.195	0.375	0.349	N/A	0.234	0.4	0.361	0.313	0.299
Middle East River (CTH G)	August	0.455	0.288	0.314	0.171	0.274	0.206	0.22	0.45	0.459	0.205	0.328
Middle East River (CTH G)	September	0.341	0.526	0.232	0.311	0.467	0.169	0.162	0.205	0.122	0.224	0.264
Middle East River (CTH G)	October	0.256	0.312	0.293	0.107	0.338	0.291	0.161	0.199	0.246	0.209	0.28
Lower East River (HLT)	May	N/A	0.019	0.022	0.084	0.053	N/A	0.03	0.042	0.034	0.026	0.112
Lower East River (HLT)	June	N/A	0.104	0.296	0.165	0.044	N/A	0.114	0.081	0.009	0.23	0.056
Lower East River (HLT)	July	N/A	0.257	0.122	0.045	0.105	N/A	0.062	0.089	0.097	0.066	0.045
Lower East River (HLT)	August	N/A	0.093	0.147	0.018	0.037	0.025	0.05	0.053	0.151	0.145	0.034
Lower East River (HLT)	September	N/A	0.336	0.038	0.194	0.194	0.062	0.025	0.095	0.008	0.008	0.014
Lower East River (HLT)	October	N/A	0.078	0.056	0.171	0.095	0.124	0.095	0.066	0.041	0.023	0.024
Garner's Creek	May	0.042	0.031	0.032	0.011	0.009	N/A	0.049	0.011	ND	0.038	0.016
Garner's Creek	June	0.056	0.059	0.053	0.06	0.039	N/A	0.088	0.048	0.064	0.063	0.139

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Garner's Creek	July	0.021	0.059	0.081	0.065	0.067	N/A	0.056	0.08	0.063	0.04	0.135
Garner's Creek	August	0.019	0.049	0.068	0.077	0.026	0.045	0.09	0.049	0.05	0.036	0.062
Garner's Creek	September	0.018	0.003	0.064	0.049	0.061	0.04	0.036	0.048	0.041	0.039	0.068
Garner's Creek	October	0.04	0.031	0.052	0.023	0.033	0.037	0.027	0.028	0.021	0.087	0.024
Kankapot Creek	May	0.171	0.077	0.182	0.306	0.149	N/A	0.157	0.01	0.067	0.117	0.098
Kankapot Creek	June	0.186	0.224	0.218	0.221	0.149	N/A	0.351	0.219	0.165	0.181	0.3
Kankapot Creek	July	0.236	0.179	0.282	0.335	0.255	N/A	0.236	0.26	0.279	0.255	0.275
Kankapot Creek	August	0.197	0.113	0.424	0.448	0.246	0.229	0.302	0.317	0.128	0.123	0.545
Kankapot Creek	September	0.235	N/A	0.564	0.213	0.304	0.161	0.15	0.373	0.173	0.116	0.22
Kankapot Creek	October	0.471	0.206	0.384	0.122	0.194	0.146	0.23	0.094	0.07	0.144	0.263
Mud Creek	May	0.033	0.027	0.03	0.023	0.01	N/A	0.053	0.022	0.023	0.029	0.024
Mud Creek	June	0.057	0.059	0.066	0.066	0.02	N/A	0.086	0.104	0.066	0.053	0.177
Mud Creek	July	N/A	0.096	0.096	0.096	0.089	N/A	0.079	0.168	0.048	0.07	0.092
Mud Creek	August	0.038	0.049	0.055	0.071	0.065	0.089	0.054	0.104	0.083	0.047	0.061

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Mud Creek	September	N/A	0.032	0.039	0.047	0.045	0.026	0.013	0.067	0.027	0.017	0.044
Mud Creek	October	N/A	0.06	0.043	0.024	0.036	0.057	0.039	0.037	0.032	0.019	0.028
Neenah Slough	May	0.04	0.031	0.016	0.119	0.046	N/A	N/A	0.024	0.021	0.005	0.026
Neenah Slough	June	N/A	0.223	0.1	0.115	0.055	N/A	0.057	0.112	0.029	0.111	0.073
Neenah Slough	July	0.033	0.163	0.049	0.036	0.102	N/A	0.048	0.128	0.011	0.055	0.09
Neenah Slough	August	0.071	0.038	0.028	0.007	0.036	0.04	0.046	0.029	0.026	0.099	0.03
Neenah Slough	September	0.031	0.05	0.019	0.055	0.146	0.018	0.014	0.048	0.007	0.016	0.037
Neenah Slough	October	0.05	0.094	0.054	0.042	0.085	0.164	0.014	0.055	0.02	0.015	0.017
Plum Creek (VandeHey)	May	N/A	N/A	0.321	0.159	0.108	N/A	N/A	0.101	0.066	0.536	0.039
Plum Creek (VandeHey)	June	N/A	N/A	0.26	0.311	0.284	N/A	0.367	0.858	0.116	0.237	0.25
Plum Creek (VandeHey)	July	N/A	N/A	0.354	0.319	0.331	N/A	0.177	0.191	0.209	0.266	0.265
Plum Creek (VandeHey)	August	N/A	0.197	0.29	0.326	0.227	0.222	0.196	0.072	0.381	0.298	N/A
Plum Creek (VandeHey)	September	N/A	0.633	0.726	0.877	0.393	0.326	0.187	0.254	0.228	0.146	0.464
Plum Creek (VandeHey)	October	N/A	0.571	1.21	0.203	0.399	0.318	0.2	0.466	0.266	0.065	0.123

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lancaster Creek	May	0.018	0.011	0.034	0.043	0.021	N/A	0.036	N/A	0.011	0.017	0.016
Lancaster Creek	June	0.043	0.052	0.046	0.051	0.043	N/A	0.03	0.038	0.03	0.039	0.068
Lancaster Creek	July	0.064	0.051	0.039	0.077	0.049	N/A	0.034	0.055	0.05	0.048	0.045
Lancaster Creek	August	N/A	0.037	0.045	0.034	0.033	0.074	0.035	0.033	0.05	0.032	0.04
Lancaster Creek	September	N/A	0.034	0.041	0.028	0.035	0.039	0.026	N/A	0.034	0.032	0.025
Lancaster Creek	October	N/A	0.023	0.031	0.016	0.023	0.031	0.019	0.006	0.017	0.028	0.02
Upper Duck Creek (CTH S)	May	N/A	N/A	N/A	0.124	0.04	N/A	0.097	0.059	0.025	0.036	0.032
Upper Duck Creek (CTH S)	June	N/A	N/A	N/A	0.09	0.064	N/A	0.378	0.071	0.072	0.165	0.044
Upper Duck Creek (CTH S)	July	N/A	N/A	N/A	0.225	0.138	N/A	0.081	0.18	0.15	0.101	0.084
Upper Duck Creek (CTH S)	August	N/A	N/A	N/A	0.37	0.105	0.198	0.101	0.106	0.27	0.128	0.222
Upper Duck Creek (CTH S)	September	N/A	N/A	N/A	0.158	0.169	0.115	0.113	0.085	0.186	0.107	0.199
Upper Duck Creek (CTH S)	October	N/A	N/A	N/A	0.046	0.151	0.217	0.126	0.04	0.259	0.114	0.192
Middle Duck Creek (Seminary Rd)	May	N/A	N/A	N/A	0.06	0.071	N/A	0.097	0.106	0.063	0.195	0.067

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Middle Duck Creek (Seminary Rd)	June	N/A	N/A	N/A	0.128	0.122	N/A	0.184	0.176	0.159	0.194	0.199
Middle Duck Creek (Seminary Rd)	July	N/A	N/A	N/A	0.174	0.18	N/A	0.152	0.234	0.262	0.168	0.244
Middle Duck Creek (Seminary Rd)	August	N/A	N/A	N/A	0.169	0.156	0.112	0.249	0.195	0.177	0.185	0.215
Middle Duck Creek (Seminary Rd)	September	N/A	N/A	N/A	0.111	0.213	0.051	0.08	0.101	0.142	0.21	0.183
Middle Duck Creek (Seminary Rd)	October	N/A	N/A	N/A	0.113	0.073	0.141	0.087	0.044	0.138	0.108	0.137
Upper East River (Mallard Rd)	May	N/A	N/A	N/A	0.345	0.139	N/A	N/A	0.277	0.252	0.589	0.184
Upper East River (Mallard Rd)	June	N/A	N/A	N/A	0.17	0.313	N/A	1.53	0.358	0.482	0.418	0.355
Upper East River (Mallard Rd)	July	N/A	N/A	N/A	0.153	0.491	N/A	0.31	0.522	0.595	0.315	0.396
Upper East River (Mallard Rd)	August	N/A	N/A	N/A	0.578	0.353	0.33	0.271	0.853	0.712	0.311	N/A

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Upper East River (Mallard Rd)	September	N/A	N/A	N/A	0.414	0.492	0.195	0.216	0.371	1.04	0.341	0.306
Upper East River (Mallard Rd)	October	N/A	N/A	N/A	0.139	0.338	0.346	0.271	0.396	0.372	0.455	0.38
Trib to Garner's Creek	May	N/A	N/A	N/A	N/A	N/A	N/A	0.189	0.082	0.054	0.062	0.075
Trib to Garner's Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	0.261	0.05	0.128	0.252	0.155
Trib to Garner's Creek	July	N/A	N/A	N/A	N/A	N/A	N/A	0.17	0.209	0.302	0.106	0.243
Trib to Garner's Creek	August	N/A	N/A	N/A	N/A	N/A	0.134	0.184	0.114	0.142	0.106	0.18
Trib to Garner's Creek	September	N/A	N/A	N/A	N/A	N/A	0.062	0.18	0.081	0.279	0.115	0.174
Trib to Garner's Creek	October	N/A	N/A	N/A	N/A	N/A	0.068	0.26	0.194	0.092	0.18	0.359
West Plum Creek (County Line)	May	N/A	N/A	N/A	N/A	N/A	N/A	1.22	0.091	0.164	0.26	0.055
West Plum Creek (County Line)	June	N/A	N/A	N/A	N/A	N/A	N/A	2.13	1.12	0.618	0.632	0.919
West Plum Creek (County Line)	July	N/A	N/A	N/A	N/A	N/A	N/A	0.28	1.4	1.07	0.598	0.543

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
West Plum Creek (County Line)	August	N/A	N/A	N/A	N/A	N/A	0.845	0.897	0.905	1.47	0.604	1.07
West Plum Creek (County Line)	September	N/A	N/A	N/A	N/A	N/A	1.23	0.653	N/A	0.621	0.588	0.403
West Plum Creek (County Line)	October	N/A	N/A	N/A	N/A	N/A	2.86	0.618	0.338	0.541	0.95	1.79
Wequiock Creek	May	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.008	0.037	0.044	0.051
Wequiock Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	0.137	0.073	0.092	0.101	0.083
Wequiock Creek	July	N/A	N/A	N/A	N/A	N/A	N/A	0.089	0.114	N/A	0.116	0.168
Wequiock Creek	August	N/A	N/A	N/A	N/A	N/A	0.097	0.138	0.143	0.151	0.146	0.123
Wequiock Creek	September	N/A	N/A	N/A	N/A	N/A	0.073	0.048	0.094	0.058	0.128	0.061
Wequiock Creek	October	N/A	N/A	N/A	N/A	N/A	0.042	0.074	0.027	0.048	0.119	0.08

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TSS Concentration Data

Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Apple Creek	May	61	3.2	47.7	15	82	N/A	N/A	3	3	ND	2
Apple Creek	June	4.4	82.3	1010	13.3	82.3	N/A	141	698	ND	9.6	ND
Apple Creek	July	11.4	61.4	39.3	7	13.6	N/A	20.6	16.9	2	66.8	28.3
Apple Creek	August	17.4	13.2	14.7	N/A	11.5	59.2	4	378	18.4	23.4	44.3
Apple Creek	September	8.8	420	11.6	2.6	19.8	NA	19.8	54.5	13.2	8.2	11
Apple Creek	October	7.8	3.2	7.8	ND	39.5	NA	ND	2.2	7	34	48
Ashwaubenon Creek	May	N/A	49.5	21.5	15	N/A	N/A	N/A	6.2	10.3	193	6.5
Ashwaubenon Creek	June	26.7	16.5	40.8	34	22.5	N/A	36	22	16.8	250	15.8
Ashwaubenon Creek	July	17.3	14.6	19.2	20.7	62	N/A	36.8	20.8	22.5	72.8	25.1
Ashwaubenon Creek	August	20.6	38.8	60.8	670	24	13.2	32.8	19.4	16.4	15.8	21.3
Ashwaubenon Creek	September	17.2	69.5	5.4	13.8	68.5	8.6	13	3.8	10.2	5	4.4
Ashwaubenon Creek	October	15.2	44.3	15	3.4	58	ND	ND	ND	2.5	ND	2
Baird Creek	May	ND	4.3	4.3	5	68	N/A	N/A	2.2	3	4	4.4
Baird Creek	June	12	19	29	5.5	12	N/A	7.2	4.4	3.8	10.4	10.6

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Baird Creek	July	24.8	13.4	36	77.7	8.2	N/A	12.6	5	17.6	12	11.6
Baird Creek	August	ND	N/A	7.2	6.4	81.5	3.2	72.6	10.8	8.4	48.8	8
Baird Creek	September	3.2	6.8	3.4	8.6	23	2.8	12.8	ND	10.2	2.8	3.4
Baird Creek	October	2.8	3.2	ND	39.2	18.3	2.4	ND	ND	3	ND	ND
Bower Creek	May	8.8	8	7.5	3.6	98	N/A	N/A	3.8	5.3	239	7.4
Bower Creek	June	40.8	27.3	25.1	24.4	8.6	N/A	44.2	19.8	6.4	7.8	12
Bower Creek	July	37	23.4	22.7	9.3	40.8	N/A	69.4	16	11.5	22.8	17
Bower Creek	August	16.8	13.4	12.4	44	51	21	34	16.6	9.4	10.4	21.2
Bower Creek	September	9.4	N/A	15	10.6	28	12.2	28.6	7.2	6.4	3.8	29
Bower Creek	October	7.6	N/A	7	ND	14.5	3	18.4	9.8	4.8	2	3.4
Lower Duck Creek (Pamperin Park)	May	7.2	ND	4.8	5	6.3	N/A	6.6	ND	5	74	9
Lower Duck Creek (Pamperin Park)	June	61.6	12.3	19.3	50.7	55	N/A	101	ND	42	64.5	82.3

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lower Duck Creek (Pamperin Park)	July	13.4	18.9	25.5	13.8	15.8	N/A	7.4	19	7.4	5.3	10.2
Lower Duck Creek (Pamperin Park)	August	11.7	22	11.4	11.8	12.3	23.8	62	22.2	11.8	3.4	13.2
Lower Duck Creek (Pamperin Park)	September	11.3	15.7	16.5	3.6	19.8	7.2	2	3	7.4	ND	4.4
Lower Duck Creek (Pamperin Park)	October	4.8	7.7	39	3.8	4.2	5.4	ND	2.6	8.2	ND	3.8
Dutchman Creek	May	75.3	10.8	10.8	6	44.3	N/A	N/A	2.4	53	5.8	2.8
Dutchman Creek	June	15	N/A	12.3	59.6	16	N/A	10.2	2.8	3.2	10.8	11.2
Dutchman Creek	July	153	N/A	9.6	9	25.8	N/A	27.6	N/A	5.2	14.8	5.2
Dutchman Creek	August	N/A	8.4	15.8	10.8	21.7	5	9.4	N/A	5	4.4	2.4
Dutchman Creek	September	N/A	N/A	3.4	4.6	13	6.6	8.6	5.8	15	5	2.8
Dutchman Creek	October	N/A	N/A	3.5	ND	7	3.2	2.2	N/A	ND	ND	ND
Middle East River (CTH G)	May	5.2	50.5	67	15.3	42.7	N/A	N/A	29.4	31	10.8	37

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Middle East River (CTH G)	June	62	52.5	98	19.2	89.3	N/A	57	50.8	41.8	51	33.5
Middle East River (CTH G)	July	17.8	26.6	55.3	25.3	12.8	N/A	20.8	20.4	11.2	71.3	38.2
Middle East River (CTH G)	August	35	134	46.3	75	20	21	23.4	20.6	21.3	38.5	103
Middle East River (CTH G)	September	22	69.5	11.8	21.2	32	13.3	13.6	10.4	14.4	8.8	10.6
Middle East River (CTH G)	October	38.8	8.2	11	2.8	52	12.4	28.6	5.8	7	8.8	12
Lower East River (HLT)	May	N/A	11	12.3	15.3	35	N/A	14	26.6	10	6.4	42.9
Lower East River (HLT)	June	N/A	13	24	4	16.8	N/A	51.5	18.8	6.8	20	14.2
Lower East River (HLT)	July	N/A	14.4	29.7	25.3	33.3	N/A	18.2	109	29.6	20.8	21.4
Lower East River (HLT)	August	N/A	28.8	26.3	75	57	32	16.9	16	198	142	33.5
Lower East River (HLT)	September	N/A	43	19.2	201	2	70.3	23.2	50.6	14	44	19.5
Lower East River (HLT)	October	N/A	29	32	48.5	17.7	70.3	12.6	9.4	30.2	40	43
Garner's Creek	May	25.7	8.4	21.3	7.3	12.6	N/A	6.8	6.2	4	6.6	7.8
Garner's Creek	June	27.8	40	38.7	33.3	54.2	N/A	28	86.4	12.4	30	17.8
Garner's Creek	July	53	36.6	16.5	16	34	N/A	8	32	47.2	14.7	22.8
Garner's Creek	August	14.3	44.8	23.6	14.2	23	10.6	46.7	23.1	29	6.6	73.5

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Garner's Creek	September	74	27	9.8	4.6	26.3	13.8	3.4	6.2	13.8	3.6	9.8
Garner's Creek	October	9.6	5.4	3.7	4.2	10.8	4.4	2	2.2	16.4	2.4	9.4
Kankapot Creek	May	24.5	12	20.5	20	5.2	N/A	11.2	3.8	5.8	16.6	8.3
Kankapot Creek	June	25	41.5	72	15.4	33.8	N/A	21.2	35.8	15.2	63.6	10
Kankapot Creek	July	26.2	12.8	35.9	7.5	27.5	N/A	24.2	13	23.4	62	31.8
Kankapot Creek	August	17	19.4	87	50.8	23	11.6	27.4	41	65.6	29.5	24
Kankapot Creek	September	17.6	N/A	37	6	58	NA	18	52.4	12.8	6.4	13.8
Kankapot Creek	October	ND	16.3	6	ND	13.3	16	6.8	4.4	18.7	3.4	16.2
Mud Creek	May	7.4	2.6	ND	2.6	6.2	N/A	6.4	ND	3.2	4.6	3.2
Mud Creek	June	4.3	7.3	ND	2.5	5.2	N/A	19.8	2.2	ND	ND	98
Mud Creek	July	N/A	3.4	7.7	ND	4.5	N/A	3.2	4.4	4.4	22.6	5.6
Mud Creek	August	2.8	4.4	4.8	2	ND	3.2	4.2	ND	ND	2.8	2.8
Mud Creek	September	N/A	29	2	2.6	27.3	2.4	2.4	34.8	4.4	3.4	3.6
Mud Creek	October	N/A	10	3	2.4	4.6	6	4.4	2	54.8	3.6	ND
Neenah Slough	May	33	4.2	42	17.5	8	N/A	N/A	5.4	10.8	14.4	10

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Neenah Slough	June	N/A	23	9.5	8.3	4.8	N/A	6.2	2.6	4	10	4.6
Neenah Slough	July	2.4	4.9	ND	ND	2.4	N/A	2.8	3.8	3.2	6.5	3.2
Neenah Slough	August	3	ND	ND	ND	ND	4.4	6.6	3.4	2	4.4	6.2
Neenah Slough	September	ND	ND	ND	9.8	21.3	6	4.6	6.8	3.6	3	4.4
Neenah Slough	October	2.8	3.8	69.7	2.6	50.2	9.6	5.6	5.2	11.2	3.2	4.6
Plum Creek (VandeHey)	May	N/A	N/A	16.5	19	9.2	N/A	N/A	32.2	21.7	322	12.8
Plum Creek (VandeHey)	June	N/A	N/A	52.8	34.5	39.3	N/A	41.8	63.2	11.7	37.6	7.8
Plum Creek (VandeHey)	July	N/A	N/A	41	24.7	31.8	N/A	27.6	25.8	13.6	17	22.6
Plum Creek (VandeHey)	August	N/A	27.4	32.4	15	34	16.8	25.6	23.6	23	13.2	N/A
Plum Creek (VandeHey)	September	N/A	30	12.3	76.9	30.5	12.3	15	24.6	9.4	18.4	17
Plum Creek (VandeHey)	October	N/A	10.2	11.7	2.2	140	19.1	9	12.6	15.6	2.4	7.8
Lancaster Creek	May	11.3	8	8.5	16.3	23.8	N/A	7	N/A	2.4	88.3	7.8
Lancaster Creek	June	18	20.3	29	12	7.2	N/A	13.8	9.6	10.6	13	25.3
Lancaster Creek	July	31	12	15.4	12	7.6	N/A	7.6	5.6	18.2	22.8	18.6
Lancaster Creek	August	N/A	133	9.2	83.1	17.6	31.6	5.8	8.4	8.2	9.4	37.3

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lancaster Creek	September	N/A	3.2	4	8.4	5.6	107	2	N/A	6.6	5.4	9.6
Lancaster Creek	October	N/A	ND	ND	ND	2	73.1	ND	2.4	ND	3	2.6
Upper Duck Creek (CTH S)	May	N/A	N/A	N/A	52	5	N/A	3.8	3.4	2.8	2.2	ND
Upper Duck Creek (CTH S)	June	N/A	N/A	N/A	61.5	7	N/A	9.2	8.6	7	45	4.6
Upper Duck Creek (CTH S)	July	N/A	N/A	N/A	20	16.6	N/A	9.8	7.6	6.8	10.4	8
Upper Duck Creek (CTH S)	August	N/A	N/A	N/A	16	6.5	34.8	7.8	5.4	8	4	6.2
Upper Duck Creek (CTH S)	September	N/A	N/A	N/A	6	16.2	7.4	24.6	4.2	69.6	2.2	3.4
Upper Duck Creek (CTH S)	October	N/A	N/A	N/A	ND	27.7	ND	2.8	ND	91.2	2	2.2
Middle Duck Creek (Seminary Rd)	May	N/A	N/A	N/A	5.3	10	N/A	5.4	2	2.8	24.5	2.8
Middle Duck Creek (Seminary Rd)	June	N/A	N/A	N/A	5	68.5	N/A	16.6	7	9.8	21	64.7
Middle Duck Creek (Seminary Rd)	July	N/A	N/A	N/A	4.3	33	N/A	9.4	4.2	5	14.2	7.2
Middle Duck Creek (Seminary Rd)	August	N/A	N/A	N/A	5.6	6.7	4.4	12.8	5.8	3.8	4.4	5.8

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Middle Duck Creek (Seminary Rd)	September	N/A	N/A	N/A	ND	40.5	5	ND	2	2.4	3.4	2.6
Middle Duck Creek (Seminary Rd)	October	N/A	N/A	N/A	2.6	2.8	6	ND	ND	N/A	ND	ND
Upper East River (Mallard Rd)	May	N/A	N/A	N/A	24.7	12	N/A	N/A	9.4	13	88	15.8
Upper East River (Mallard Rd)	June	N/A	N/A	N/A	55.6	61.5	N/A	44.8	86.8	43	46	52
Upper East River (Mallard Rd)	July	N/A	N/A	N/A	42.5	28.2	N/A	42.3	26.4	33	22.4	65
Upper East River (Mallard Rd)	August	N/A	N/A	N/A	25.2	23.3	40.6	20.6	12.8	30.8	10.6	N/A
Upper East River (Mallard Rd)	September	N/A	N/A	N/A	38.8	25.7	25.5	7.2	10.6	6	11	18.5
Upper East River (Mallard Rd)	October	N/A	N/A	N/A	4	52	13.2	2.2	ND	6.2	ND	9
Trib to Garner's Creek	May	N/A	N/A	N/A	N/A	N/A	N/A	ND	2.4	4.8	ND	9.3
Trib to Garner's Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	4.8	45.8	7	56.5	17.5
Trib to Garner's Creek	July	N/A	N/A	N/A	N/A	N/A	N/A	6.6	4.2	2.6	ND	2.4

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Trib to Garner's Creek	August	N/A	N/A	N/A	N/A	N/A	5	19	8.8	5.6	19.6	2.2
Trib to Garner's Creek	September	N/A	N/A	N/A	N/A	N/A	2.6	4.6	23.6	7	ND	5.2
Trib to Garner's Creek	October	N/A	N/A	N/A	N/A	N/A	10.5	ND	3.2	3.6	ND	4.2
West Plum Creek (County Line)	May	N/A	N/A	N/A	N/A	N/A	N/A	21	6.8	21.2	4.8	8.4
West Plum Creek (County Line)	June	N/A	N/A	N/A	N/A	N/A	N/A	21.6	852	14	31.8	4.4
West Plum Creek (County Line)	July	N/A	N/A	N/A	N/A	N/A	N/A	9	9	2.2	14.9	5.8
West Plum Creek (County Line)	August	N/A	N/A	N/A	N/A	N/A	29.4	48.2	87.5	2.4	6.4	21.2
West Plum Creek (County Line)	September	N/A	N/A	N/A	N/A	N/A	NA	16.6	33.6	6.2	10.6	42.5
West Plum Creek (County Line)	October	N/A	N/A	N/A	N/A	N/A	NA	12.6	4.6	24.6	7	19
Wequiock Creek	May	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3	10.6	2.2	ND
Wequiock Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	4.3	3.2	2	12.4	13

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Wequiock Creek	July	N/A	N/A	N/A	N/A	N/A	N/A	16.6	34.2	N/A	2.8	5
Wequiock Creek	August	N/A	N/A	N/A	N/A	N/A	8.8	4.6	5.6	19.8	ND	17.8
Wequiock Creek	September	N/A	N/A	N/A	N/A	N/A	3.2	3.4	20.2	7.6	14	8
Wequiock Creek	October	N/A	N/A	N/A	N/A	N/A	ND	3	4.2	ND	6.4	7.4

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TN Concentration Data

Monitoring Site	Month	2020	2021	2022	2023	2024	2025
Apple Creek	May	N/A	N/A	1.14	2.01	3.46	2.12
Apple Creek	June	N/A	23.1	2.22	0.75	3.58	1.24
Apple Creek	July	N/A	1.18	1.89	1.08	3.04	2.25
Apple Creek	August	1.16	0.98	3.99	1.06	2.97	1.19
Apple Creek	September	1.44	0.86	3.27	0.76	0.94	0.77
Apple Creek	October	0.12	0.59	0.56	0.83	0.72	0.98
Ashwaubenon Creek	May	N/A	N/A	1.16	2.23	4.36	1.62
Ashwaubenon Creek	June	N/A	1.56	4.32	1.27	5.14	1.58
Ashwaubenon Creek	July	N/A	1.93	1.4	1.24	2.03	1.9
Ashwaubenon Creek	August	1.71	2.18	1.33	1.02	4.41	0.92
Ashwaubenon Creek	September	1.3	1.25	1.03	1.14	1.06	0.77
Ashwaubenon Creek	October	0.82	0.83	0.64	0.7	0.68	0.62
Baird Creek	May	N/A	N/A	1.27	1.04	1.47	1.27
Baird Creek	June	N/A	0.96	1.17	0.65	1.55	1.22

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Monitoring Site	Month	2020	2021	2022	2023	2024	2025
Baird Creek	July	N/A	1.61	0.7	0.62	1.88	1.33
Baird Creek	August	0.73	1.63	4.59	0.93	6.66	0.75
Baird Creek	September	0.43	0.92	1.26	0.61	0.96	0.43
Baird Creek	October	0.39	0.94	0.58	0.33	0.36	0.37
Bower Creek	May	N/A	N/A	1.12	1.08	3.29	1.02
Bower Creek	June	N/A	1.35	1.19	0.96	1.51	1.39
Bower Creek	July	N/A	1.1	1.33	1.01	1.03	2.22
Bower Creek	August	1.11	1.34	1.08	1.07	1.43	1.08
Bower Creek	September	0.86	0.91	1.19	0.61	0.68	0.81
Bower Creek	October	0.88	1.23	0.55	0.53	0.66	0.57
Lower Duck Creek (Pamperin Park)	May	N/A	1.43	1.88	1.55	4.75	2.21
Lower Duck Creek (Pamperin Park)	June	N/A	10.6	1.31	6.02	5.73	2.8

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Monitoring Site	Month	2020	2021	2022	2023	2024	2025
Lower Duck Creek (Pamperin Park)	July	N/A	2.02	1.07	0.92	4.07	1.59
Lower Duck Creek (Pamperin Park)	August	1.26	1.92	1.16	0.93	1.52	1.37
Lower Duck Creek (Pamperin Park)	September	1.35	1.22	1.62	0.63	0.88	0.88
Lower Duck Creek (Pamperin Park)	October	3.87	1.44	0.93	1.44	0.58	0.77
Dutchman Creek	May	N/A	N/A	1.16	5.73	1.93	2.58
Dutchman Creek	June	N/A	1.14	0.92	1.27	1.34	1.24
Dutchman Creek	July	N/A	0.86	N/A	0.99	2.05	1.09
Dutchman Creek	August	0.94	1.47	N/A	0.85	2.1	1.07
Dutchman Creek	September	0.93	0.94	1.3	1.42	1.1	0.75
Dutchman Creek	October	0.88	0.78	N/A	0.69	0.81	0.8

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Monitoring Site	Month	2020	2021	2022	2023	2024	2025
Middle East River (CTH G)	May	N/A	N/A	1.52	1.5	1.64	1.92
Middle East River (CTH G)	June	N/A	13.8	1.32	17.3	3.18	2.34
Middle East River (CTH G)	July	N/A	1.74	0.97	0.91	2.86	3.75
Middle East River (CTH G)	August	1.02	1.93	0.94	1.29	2.19	1.68
Middle East River (CTH G)	September	0.75	1.07	0.87	0.61	0.72	0.75
Middle East River (CTH G)	October	7.05	1.21	0.79	0.48	0.53	0.56
Lower East River (HLT)	May	N/A	1.51	1.76	1.92	1.65	3.58
Lower East River (HLT)	June	N/A	13.1	2.1	1.36	2.77	1.87
Lower East River (HLT)	July	N/A	1.27	4.63	2.57	1.51	1.38
Lower East River (HLT)	August	1.39	1.24	1.25	2.56	14	1.56
Lower East River (HLT)	September	3.79	1.47	2.59	1.18	1.54	1.1
Lower East River (HLT)	October	3.07	1.77	1.56	2.15	1.6	1.66
Garner's Creek	May	N/A	1.14	0.89	0.82	1.08	1.06
Garner's Creek	June	N/A	1.17	1.4	0.96	1.19	1.12

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Monitoring Site	Month	2020	2021	2022	2023	2024	2025
Garner's Creek	July	N/A	1.16	1.05	1.2	1.19	1.09
Garner's Creek	August	0.94	1.23	1.22	0.89	1.28	1.16
Garner's Creek	September	0.88	0.5	0.99	0.62	0.64	0.78
Garner's Creek	October	0.49	0.71	0.49	0.85	0.5	0.84
Kankapot Creek	May	N/A	1.47	0.83	1	1.34	1.4
Kankapot Creek	June	N/A	1.47	4.7	1.39	2.96	1.36
Kankapot Creek	July	N/A	2.05	1.14	1.47	3.53	1.52
Kankapot Creek	August	1.73	2.32	2.61	1.56	2.18	2.93
Kankapot Creek	September	1.23	1.11	4	0.95	1.19	1.05
Kankapot Creek	October	4.39	0.99	1.65	2.04	5.11	1.11
Mud Creek	May	N/A	1.38	0.64	0.86	0.75	0.75
Mud Creek	June	N/A	0.63	1.03	0.65	0.85	0.95
Mud Creek	July	N/A	0.95	0.73	0.77	1.21	0.61
Mud Creek	August	0.9	0.52	1.18	0.7	1.17	0.73
Mud Creek	September	0.37	0.71	1.16	0.45	0.52	0.6

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Monitoring Site	Month	2020	2021	2022	2023	2024	2025
Mud Creek	October	1.07	0.93	0.43	1.06	0.84	0.39
Neenah Slough	May	N/A	N/A	1.12	1.44	1.69	1.12
Neenah Slough	June	N/A	0.75	1.24	0.92	1.15	1.94
Neenah Slough	July	N/A	0.99	0.88	0.75	1.3	1.08
Neenah Slough	August	0.94	0.77	0.8	0.69	1	1.07
Neenah Slough	September	0.58	0.84	1.15	0.54	0.86	0.84
Neenah Slough	October	1.48	0.91	0.78	0.9	0.6	0.65
Plum Creek (VandeHey)	May	N/A	N/A	4.19	1.57	9.87	11
Plum Creek (VandeHey)	June	N/A	1.2	3.02	1.07	6.34	3.14
Plum Creek (VandeHey)	July	N/A	1.37	1.18	2.76	2.98	4.98
Plum Creek (VandeHey)	August	1.31	1.51	2.16	1.55	4.08	N/A
Plum Creek (VandeHey)	September	1.21	0.93	2.08	0.9	2.08	1.65
Plum Creek (VandeHey)	October	11.9	1.09	1.58	4.51	1.39	0.73
Lancaster Creek	May	N/A	1.94	N/A	1.42	1.28	1.15
Lancaster Creek	June	N/A	1.48	1.34	1.56	1.47	1.44

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Monitoring Site	Month	2020	2021	2022	2023	2024	2025
Lancaster Creek	July	N/A	1.49	1.34	1.27	1.36	1.38
Lancaster Creek	August	1.4	2.04	1.48	1.15	1.35	1.28
Lancaster Creek	September	1.91	1.77	N/A	1.88	1.22	1.24
Lancaster Creek	October	2.15	1.46	0.86	1.46	0.7	1.03
Upper Duck Creek (CTH S)	May	N/A	2.08	2.6	3.18	6.49	3.28
Upper Duck Creek (CTH S)	June	N/A	1.8	4.8	1.98	6.6	3.85
Upper Duck Creek (CTH S)	July	N/A	4.6	1.87	1.49	6.77	4.93
Upper Duck Creek (CTH S)	August	1.68	3.22	1.86	1.61	2.25	2.08
Upper Duck Creek (CTH S)	September	0.99	3.46	3.51	1.57	1.77	1.81
Upper Duck Creek (CTH S)	October	0.22	3.95	3.36	0.98	1.13	1.12
Middle Duck Creek (Seminary Rd)	May	N/A	1.84	2.35	2.51	6.98	3.66
Middle Duck Creek (Seminary Rd)	June	N/A	13.6	1.87	16.6	5.57	5.31
Middle Duck Creek (Seminary Rd)	July	N/A	2.79	1.82	1.74	4.9	2.33

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Monitoring Site	Month	2020	2021	2022	2023	2024	2025
Middle Duck Creek (Seminary Rd)	August	2.26	1.89	1.96	1.73	2.19	2.78
Middle Duck Creek (Seminary Rd)	September	3	2.92	3.02	1.49	2.08	2.32
Middle Duck Creek (Seminary Rd)	October	4.33	2.58	1.96	3.08	1.54	1.92
Upper East River (Mallard Rd)	May	N/A	N/A	2.47	2.77	8.05	5.2
Upper East River (Mallard Rd)	June	N/A	2.57	3.72	3.05	4.14	4.28
Upper East River (Mallard Rd)	July	N/A	2.53	1.9	4.54	3.2	3.29
Upper East River (Mallard Rd)	August	2.7	2.43	1.44	2.32	3.1	N/A
Upper East River (Mallard Rd)	September	2.15	2.28	2.48	1.3	3.13	2.38
Upper East River (Mallard Rd)	October	5.85	2.01	0.98	8.3	1.65	2.69
Trib to Garner's Creek	May	N/A	0.93	0.6	0.68	0.65	0.63

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Monitoring Site	Month	2020	2021	2022	2023	2024	2025
Trib to Garner's Creek	June	N/A	0.97	2.3	0.63	1.6	1.07
Trib to Garner's Creek	July	N/A	1.13	0.66	0.63	0.69	0.85
Trib to Garner's Creek	August	0.98	1.73	1.16	0.7	1.22	0.92
Trib to Garner's Creek	September	0.51	0.74	1.3	0.97	0.7	0.64
Trib to Garner's Creek	October	1.49	0.61	0.62	0.44	0.58	0.83
West Plum Creek (County Line)	May	N/A	2.68	1.35	2.79	2.75	4.09
West Plum Creek (County Line)	June	N/A	4.24	14.6	1.8	3.67	2.37
West Plum Creek (County Line)	July	N/A	5.74	2.52	1.45	3.07	2.25
West Plum Creek (County Line)	August	1.91	1.79	5.1	1.97	3.47	2.28
West Plum Creek (County Line)	September	2.9	2.09	4.73	1.97	4.22	1.6
West Plum Creek (County Line)	October	4.54	4.12	0.93	2.14	1.96	1.87

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Monitoring Site	Month	2020	2021	2022	2023	2024	2025
Wequiock Creek	May	N/A	N/A	1.61	3.14	2.9	2.72
Wequiock Creek	June	N/A	18.9	2.71	1.49	2.4	1.41
Wequiock Creek	July	N/A	4.26	3.5	N/A	3.52	21.6
Wequiock Creek	August	2.91	3.33	6.03	4.76	2.22	1.2
Wequiock Creek	September	2.07	2.25	4.84	N/A	1.17	1.3
Wequiock Creek	October	1.26	1.53	1.76	0.72	0.72	0.6

ND indicates sample concentration was not detected.

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Appendix E: Confidence Interval Table

Monitoring Site	TP Calculation	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Apple Creek	U90% (mg/L)	0.311	0.452	0.598	0.239	0.272	0.253	0.262	0.462	0.273	0.235	0.329
Apple Creek	Median (mg/L)	0.273	0.297	0.318	0.188	0.265	0.246	0.181	0.27	0.187	0.17	0.222
Apple Creek	L90% (mg/L)	0.237	0.154	0.243	0.126	0.241	0.16	0.111	0.077	0.101	0.104	0.115
Apple Creek	Relation to Criteria	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds
Ashwaubenon Creek	U90% (mg/L)	0.425	0.461	0.412	0.314	0.523	0.279	0.369	0.309	0.275	0.683	0.285
Ashwaubenon Creek	Median (mg/L)	0.347	0.316	0.321	0.301	0.401	0.257	0.305	0.252	0.222	0.473	0.239
Ashwaubenon Creek	L90% (mg/L)	0.275	0.296	0.257	0.294	0.336	0.15	0.266	0.194	0.168	0.263	0.193
Ashwaubenon Creek	Relation to Criteria	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds
Baird Creek	U90% (mg/L)	0.34	0.197	0.368	0.406	0.532	0.329	0.37	0.184	0.159	0.307	0.216
Baird Creek	Median (mg/L)	0.288	0.176	0.317	0.289	0.506	0.181	0.226	0.143	0.136	0.206	0.18
Baird Creek	L90% (mg/L)	0.194	0.145	0.214	0.228	0.306	0.111	0.171	0.102	0.113	0.105	0.144
Baird Creek	Relation to Criteria	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds
Bower Creek	U90% (mg/L)	0.26	0.264	0.36	0.34	0.374	0.321	0.344	0.229	0.23	0.34	0.329

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Monitoring Site	TP Calculation	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Bower Creek	Median (mg/L)	0.199	0.207	0.31	0.323	0.328	0.276	0.237	0.168	0.198	0.245	0.259
Bower Creek	L90% (mg/L)	0.174	0.164	0.216	0.17	0.277	0.218	0.199	0.107	0.166	0.149	0.188
Bower Creek	Relation to Criteria	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds
Lower Duck Creek (Pamperin Park)	U90% (mg/L)	0.191	0.207	0.245	0.191	0.198	0.186	0.235	0.149	0.173	0.216	0.201
Lower Duck Creek (Pamperin Park)	Median (mg/L)	0.141	0.173	0.192	0.134	0.148	0.157	0.156	0.113	0.128	0.156	0.16
Lower Duck Creek (Pamperin Park)	L90% (mg/L)	0.111	0.118	0.129	0.095	0.102	0.076	0.074	0.077	0.082	0.096	0.118
Lower Duck Creek (Pamperin Park)	Relation to Criteria	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	May Exceed	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds
Dutchman Creek	U90% (mg/L)	0.308	0.202	0.199	0.251	0.337	0.254	0.181	0.161	0.258	0.183	0.173
Dutchman Creek	Median (mg/L)	0.209	0.157	0.157	0.141	0.28	0.161	0.106	0.127	0.184	0.114	0.144
Dutchman Creek	L90% (mg/L)	0.148	0.131	0.12	0.115	0.165	0.093	0.093	0.093	0.11	0.045	0.115
Dutchman Creek	Relation to Criteria	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	May Exceed	Clearly Exceeds

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Monitoring Site	TP Calculation	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Middle East River (CTH G)	U90% (mg/L)	0.68	0.606	0.49	0.377	0.509	0.375	0.31	0.462	0.465	0.351	0.459
Middle East River (CTH G)	Median (mg/L)	0.526	0.472	0.46	0.321	0.421	0.333	0.258	0.379	0.374	0.305	0.391
Middle East River (CTH G)	L90% (mg/L)	0.399	0.374	0.363	0.239	0.336	0.26	0.237	0.295	0.283	0.258	0.323
Middle East River (CTH G)	Relation to Criteria	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds
Lower East River (HLT)	U90% (mg/L)	N/A	0.343	0.261	0.399	0.246	0.26	0.244	0.304	0.255	0.599	0.194
Lower East River (HLT)	Median (mg/L)	N/A	0.252	0.143	0.321	0.17	0.152	0.128	0.182	0.129	0.152	0.166
Lower East River (HLT)	L90% (mg/L)	N/A	0.164	0.101	0.201	0.119	0.111	0.098	0.06	0.003	-0.295	0.138
Lower East River (HLT)	Relation to Criteria	N/A	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	May Exceed	May Exceed	May Exceed	Clearly Exceeds
Garner's Creek	U90% (mg/L)	0.248	0.146	0.138	0.121	0.136	0.124	0.125	0.127	0.143	0.107	0.199
Garner's Creek	Median (mg/L)	0.139	0.132	0.129	0.1	0.128	0.1	0.087	0.099	0.111	0.09	0.156
Garner's Creek	L90% (mg/L)	0.126	0.099	0.109	0.059	0.09	0.077	0.069	0.071	0.079	0.074	0.113
Garner's Creek	Relation to Criteria	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	May Exceed	Clearly Exceeds	Clearly Exceeds	May Exceed	May Exceed	Clearly Exceeds	May Exceed	Clearly Exceeds
Kankapot Creek	U90% (mg/L)	0.497	0.358	0.606	0.489	0.397	0.333	0.369	0.473	0.332	0.276	0.541
Kankapot Creek	Median (mg/L)	0.365	0.323	0.498	0.402	0.355	0.311	0.307	0.36	0.266	0.22	0.395

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Monitoring Site	TP Calculation	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Kankapot Creek	L90% (mg/L)	0.324	0.244	0.414	0.302	0.296	0.249	0.268	0.246	0.2	0.163	0.249
Kankapot Creek	Relation to Criteria	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds
Mud Creek	U90% (mg/L)	0.12	0.115	0.121	0.115	0.11	0.108	0.108	0.187	0.119	0.085	0.15
Mud Creek	Median (mg/L)	0.104	0.098	0.088	0.097	0.092	0.09	0.094	0.151	0.1	0.071	0.093
Mud Creek	L90% (mg/L)	0.091	0.091	0.076	0.073	0.065	0.052	0.06	0.114	0.081	0.058	0.035
Mud Creek	Relation to Criteria	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	May Exceed	May Exceed	May Exceed	May Exceed	Clearly Exceeds	Clearly Exceeds	May Meet	May Exceed
Neenah Slough	U90% (mg/L)	0.158	0.194	0.113	0.126	0.149	0.136	0.085	0.126	0.053	0.141	0.094
Neenah Slough	Median (mg/L)	0.086	0.112	0.091	0.076	0.11	0.099	0.079	0.098	0.043	0.102	0.07
Neenah Slough	L90% (mg/L)	0.072	0.085	0.065	0.06	0.083	0.068	0.059	0.07	0.034	0.064	0.046
Neenah Slough	Relation to Criteria	May Exceed	Clearly Exceeds	May Exceed	May Exceed	Clearly Exceeds	May Exceed	May Exceed	May Exceed	Clearly Meets	May Exceed	May Meet
Plum Creek (VandeHey)	U90% (mg/L)	N/A	N/A	0.781	0.605	0.516	0.462	0.336	0.572	0.458	0.571	0.467
Plum Creek (VandeHey)	Median (mg/L)	N/A	N/A	0.562	0.442	0.401	0.399	0.272	0.339	0.376	0.38	0.342
Plum Creek (VandeHey)	L90% (mg/L)	N/A	N/A	0.508	0.332	0.297	0.296	0.234	0.105	0.293	0.189	0.217
Plum Creek (VandeHey)	Relation to Criteria	N/A	N/A	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds

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Monitoring Site	TP Calculation	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lancaster Creek	U90% (mg/L)	0.129	0.13	0.088	0.118	0.068	0.092	0.058	0.069	0.078	0.084	0.092
Lancaster Creek	Median (mg/L)	0.075	0.085	0.076	0.091	0.061	0.078	0.049	0.06	0.062	0.063	0.068
Lancaster Creek	L90% (mg/L)	0.063	0.063	0.064	0.055	0.045	0.067	0.038	0.051	0.045	0.043	0.044
Lancaster Creek	Relation to Criteria	May Meet	May Exceed	May Meet	May Exceed	Clearly Meets	May Exceed	Clearly Meets	Clearly Meets	May Meet	May Meet	May Meet
Upper Duck Creek (CTH S)	U90% (mg/L)	N/A	N/A	N/A	0.362	0.208	0.237	0.256	0.152	0.349	0.198	0.261
Upper Duck Creek (CTH S)	Median (mg/L)	N/A	N/A	N/A	0.247	0.154	0.18	0.172	0.118	0.26	0.153	0.194
Upper Duck Creek (CTH S)	L90% (mg/L)	N/A	N/A	N/A	0.16	0.113	0.12	0.141	0.083	0.171	0.107	0.127
Upper Duck Creek (CTH S)	Relation to Criteria	N/A	N/A	N/A	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds
Middle Duck Creek (Seminary Rd)	U90% (mg/L)	N/A	N/A	N/A	0.192	0.247	0.214	0.27	0.226	0.237	0.274	0.31
Middle Duck Creek (Seminary Rd)	Median (mg/L)	N/A	N/A	N/A	0.158	0.21	0.158	0.237	0.18	0.199	0.236	0.251
Middle Duck Creek (Seminary Rd)	L90% (mg/L)	N/A	N/A	N/A	0.137	0.141	0.126	0.145	0.133	0.16	0.198	0.191
Middle Duck Creek (Seminary Rd)	Relation to Criteria	N/A	N/A	N/A	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds

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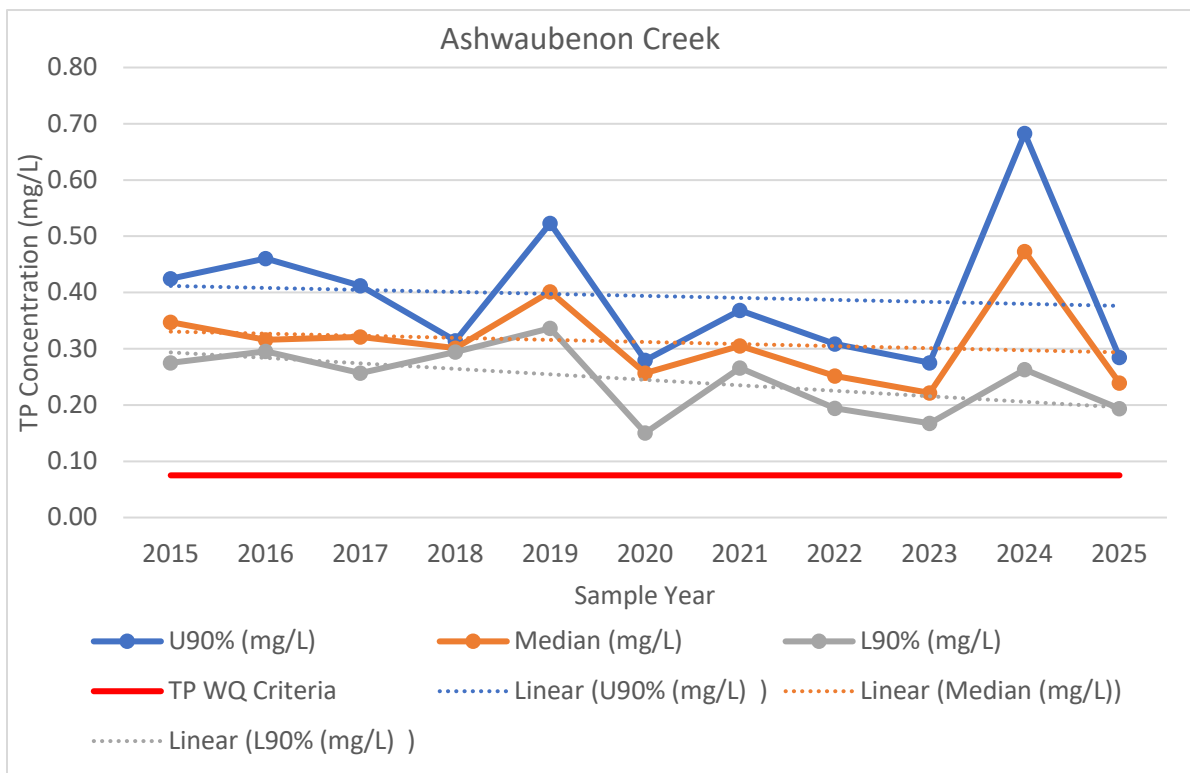
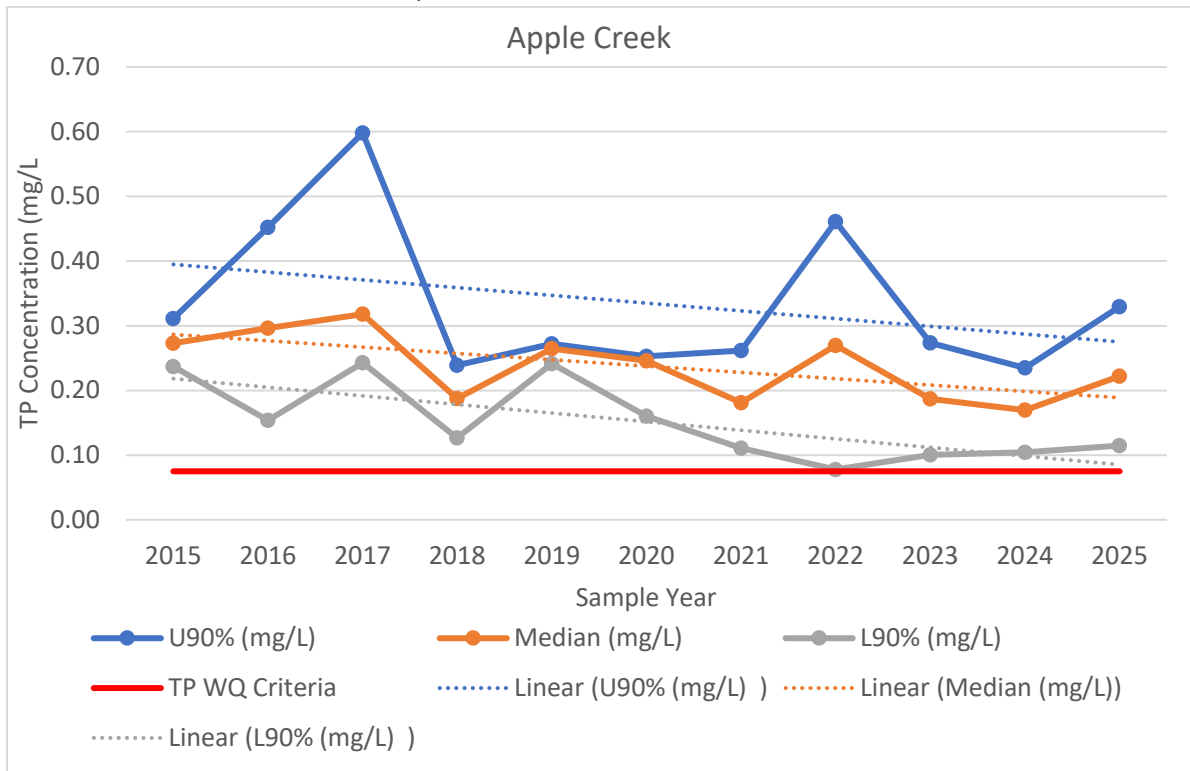
Monitoring Site	TP Calculation	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Upper East River (Mallard Rd)	U90% (mg/L)	N/A	N/A	N/A	0.599	0.587	0.454	0.622	0.621	0.761	0.558	0.487
Upper East River (Mallard Rd)	Median (mg/L)	N/A	N/A	N/A	0.529	0.503	0.41	0.31	0.5	0.552	0.457	0.423
Upper East River (Mallard Rd)	L90% (mg/L)	N/A	N/A	N/A	0.353	0.359	0.29	0.253	0.379	0.343	0.356	0.359
Upper East River (Mallard Rd)	Relation to Criteria	N/A	N/A	N/A	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds
Trib to Garner's Creek	U90% (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	0.1925	0.2204	0.2353	0.258	0.297
Trib to Garner's Creek	Median (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	0.1865	0.193	0.1695	0.185	0.232
Trib to Garner's Creek	L90% (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	0.1184	0.1656	0.1037	0.111	0.167
Trib to Garner's Creek	Relation to Criteria	N/A	N/A	N/A	N/A	N/A	N/A	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds
West Plum Creek (County Line)	U90% (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	1.3429	1.463	1.0423	0.922	1.234
West Plum Creek (County Line)	Median (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	0.897	1.099	0.767	0.77	0.816
West Plum Creek (County Line)	L90% (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	0.7053	0.735	0.4917	0.617	0.398

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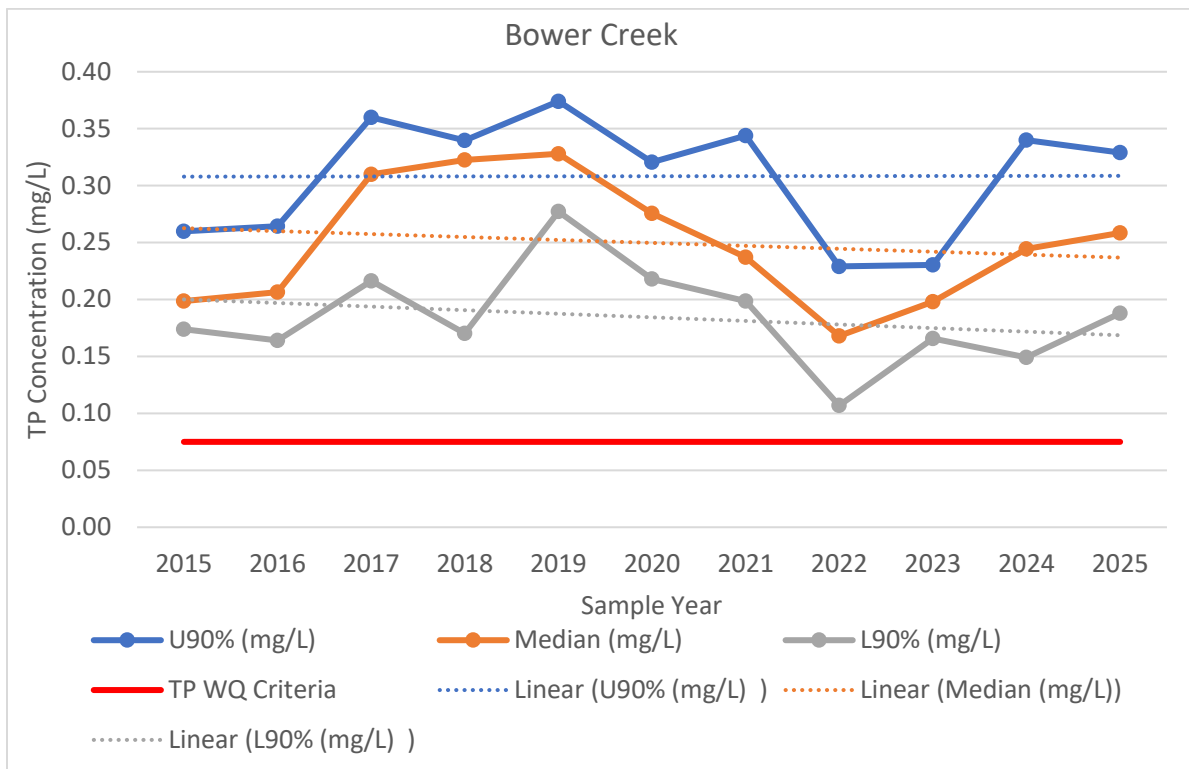
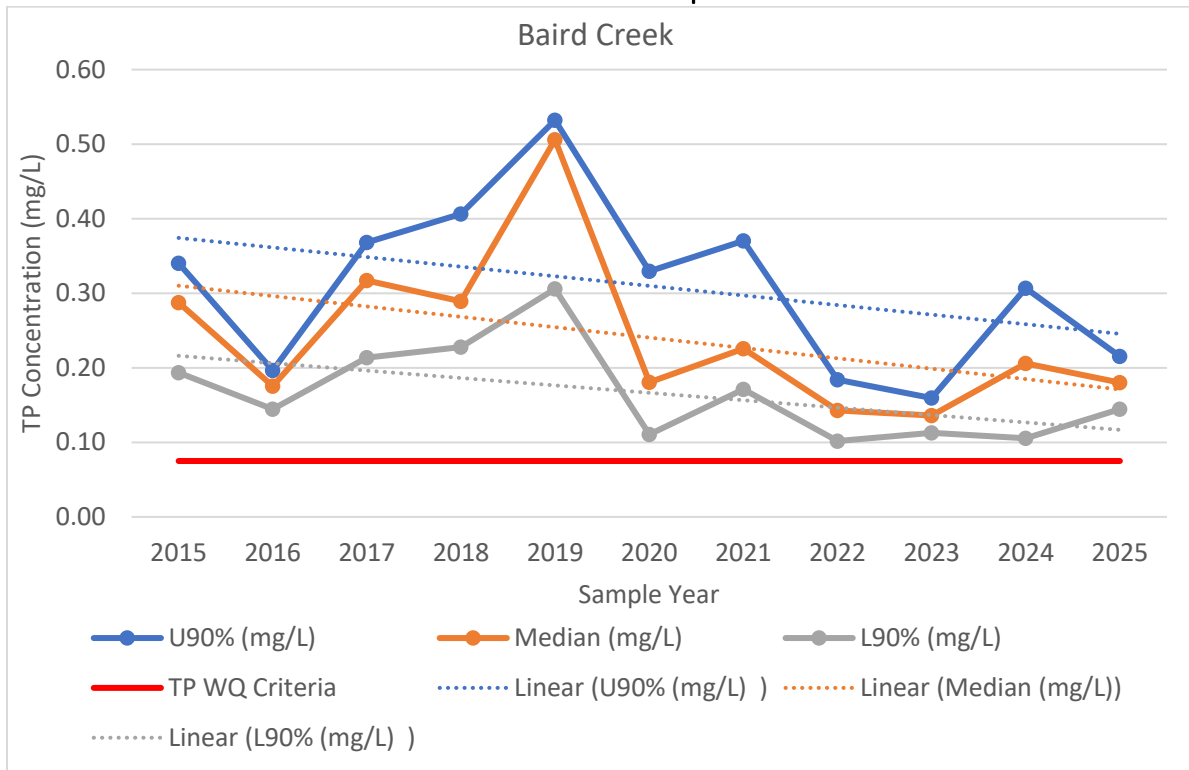
Monitoring Site	TP Calculation	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
West Plum Creek (County Line)	Relation to Criteria	N/A	N/A	N/A	N/A	N/A	N/A	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds	Clearly Exceeds
Wequiock Creek	U90% (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	0.10019	0.16407	0.15087	0.195	0.169
Wequiock Creek	Median (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	0.082	0.1285	0.10925	0.166	0.134
Wequiock Creek	L90% (mg/L)	N/A	N/A	N/A	N/A	N/A	N/A	0.06483	0.09293	0.06763	0.136	0.099
Wequiock Creek	Relation to Criteria	N/A	N/A	N/A	N/A	N/A	N/A	May Exceed	Clearly Exceeds	May Exceed	Clearly Exceeds	Clearly Exceeds

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Appendix F: Confidence Interval Graphs

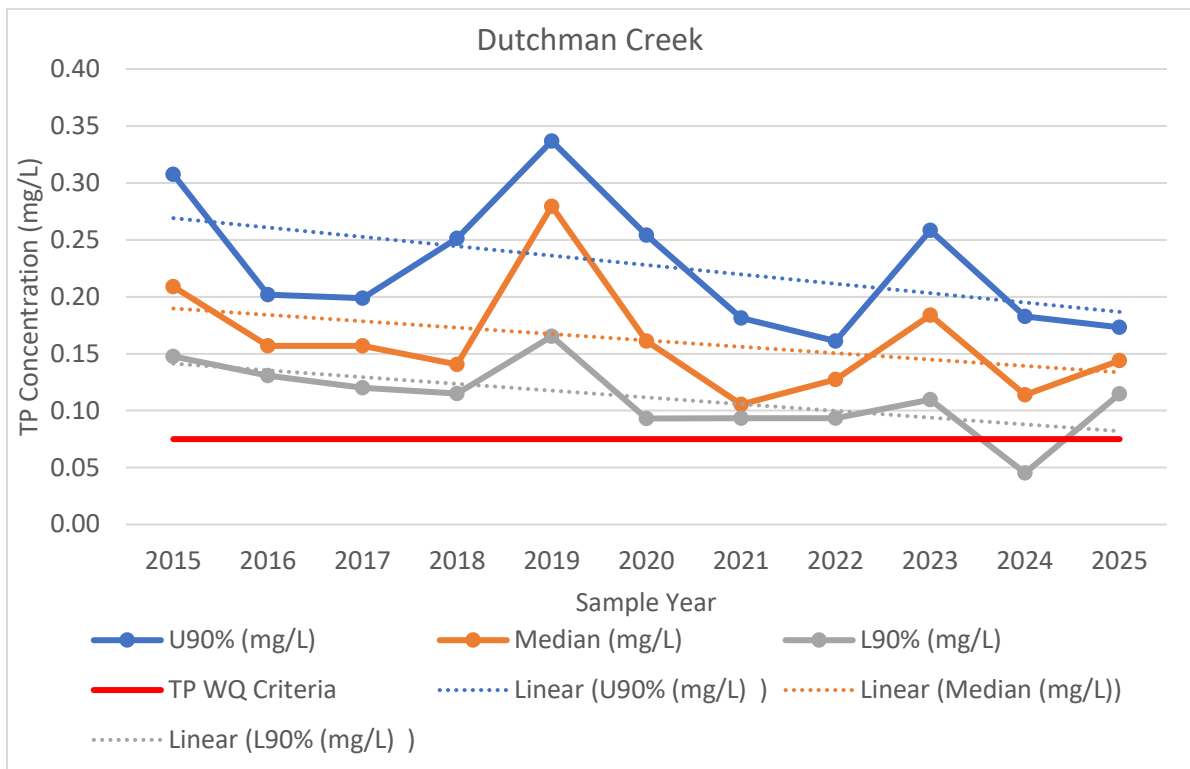
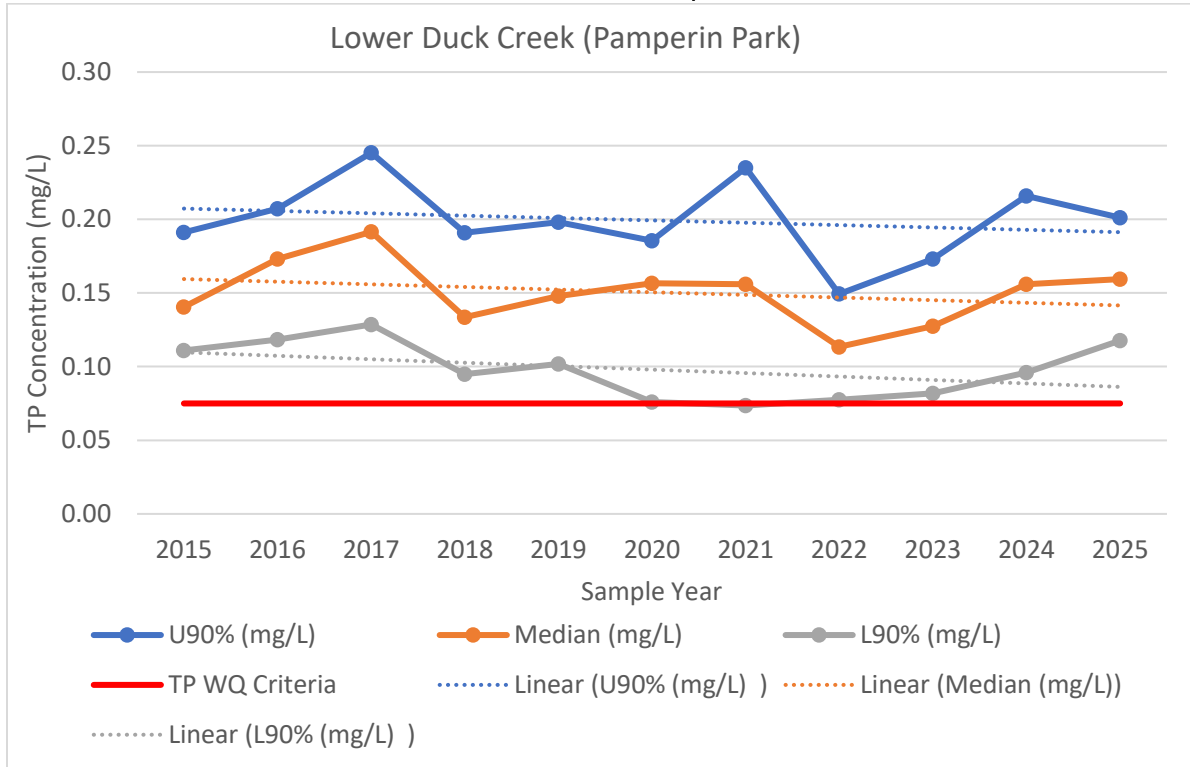


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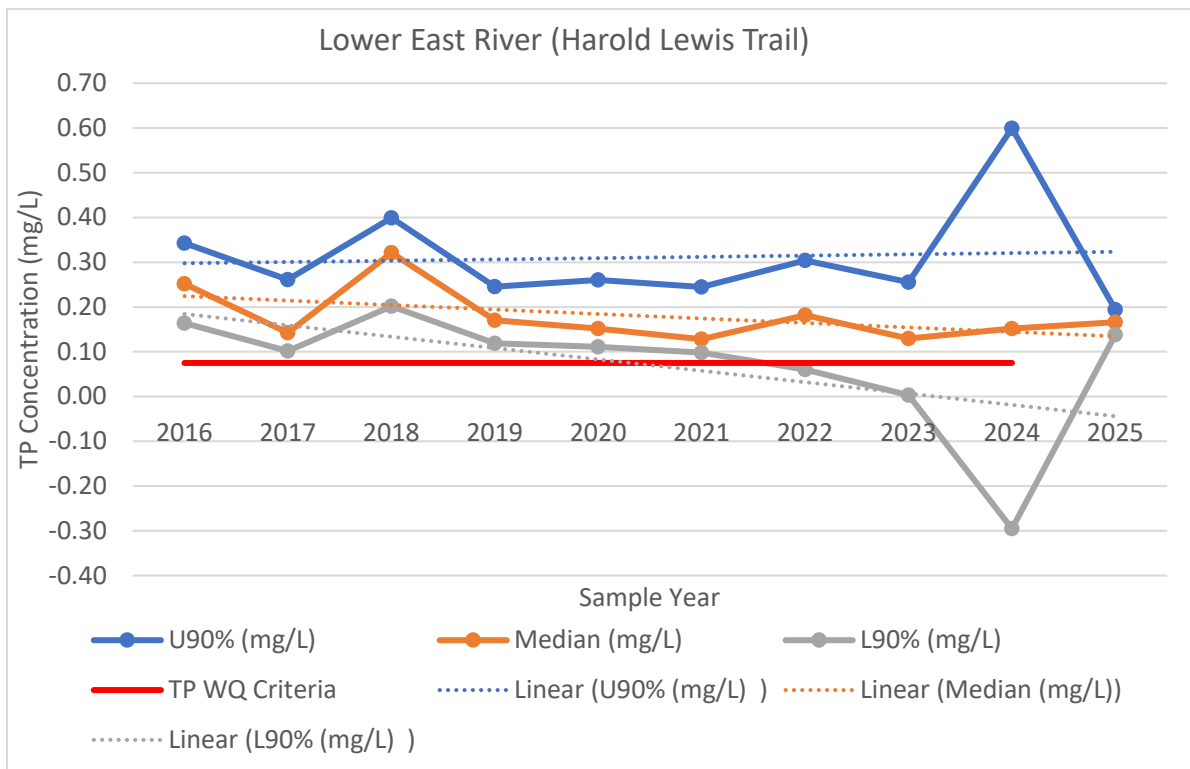
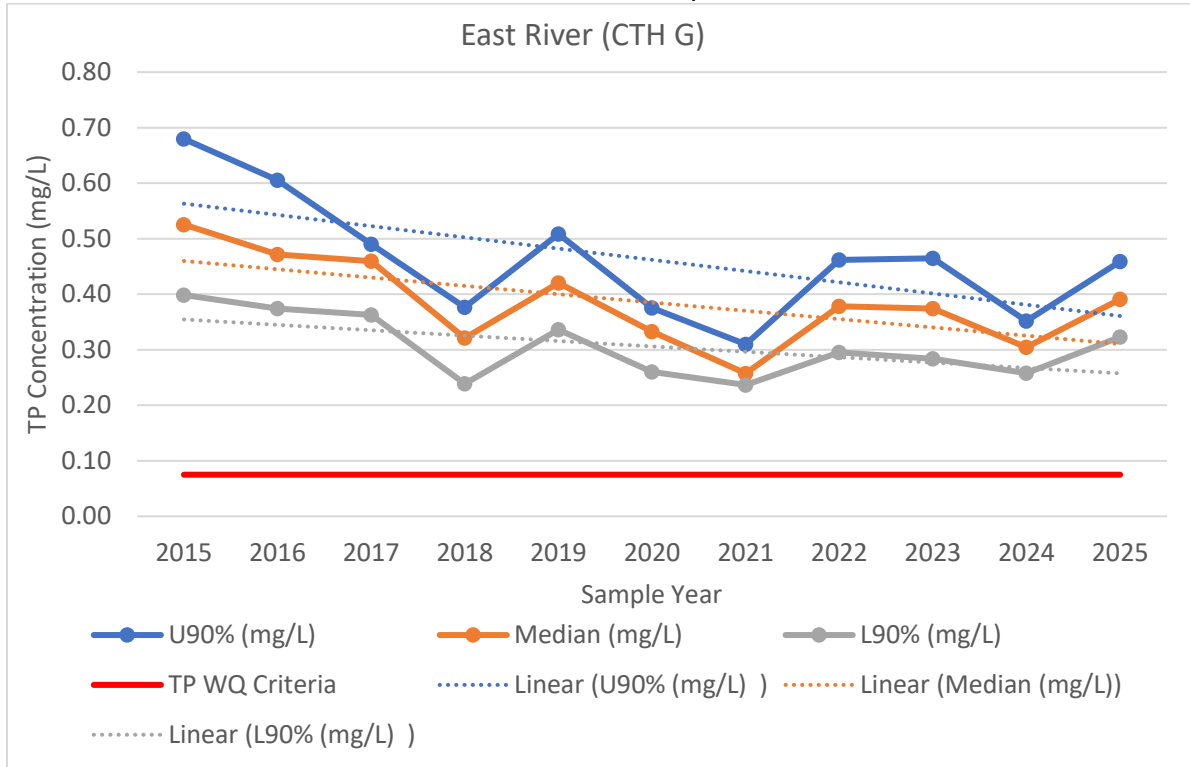


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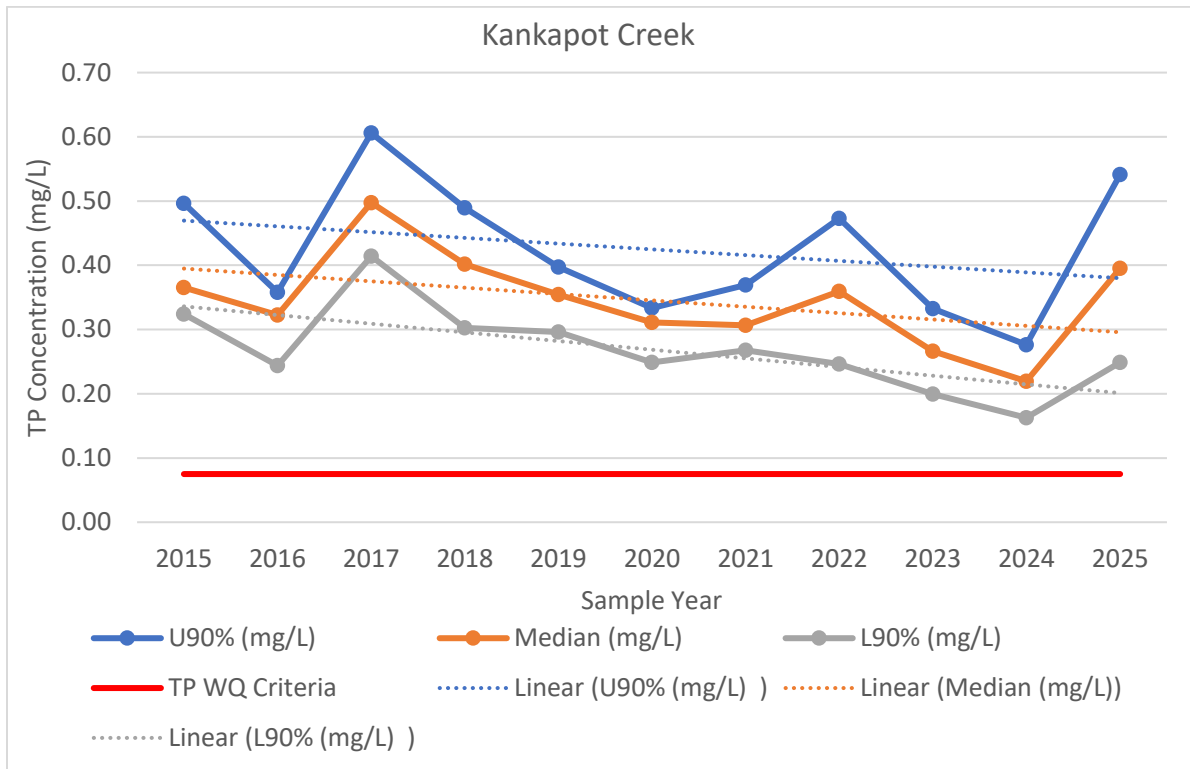
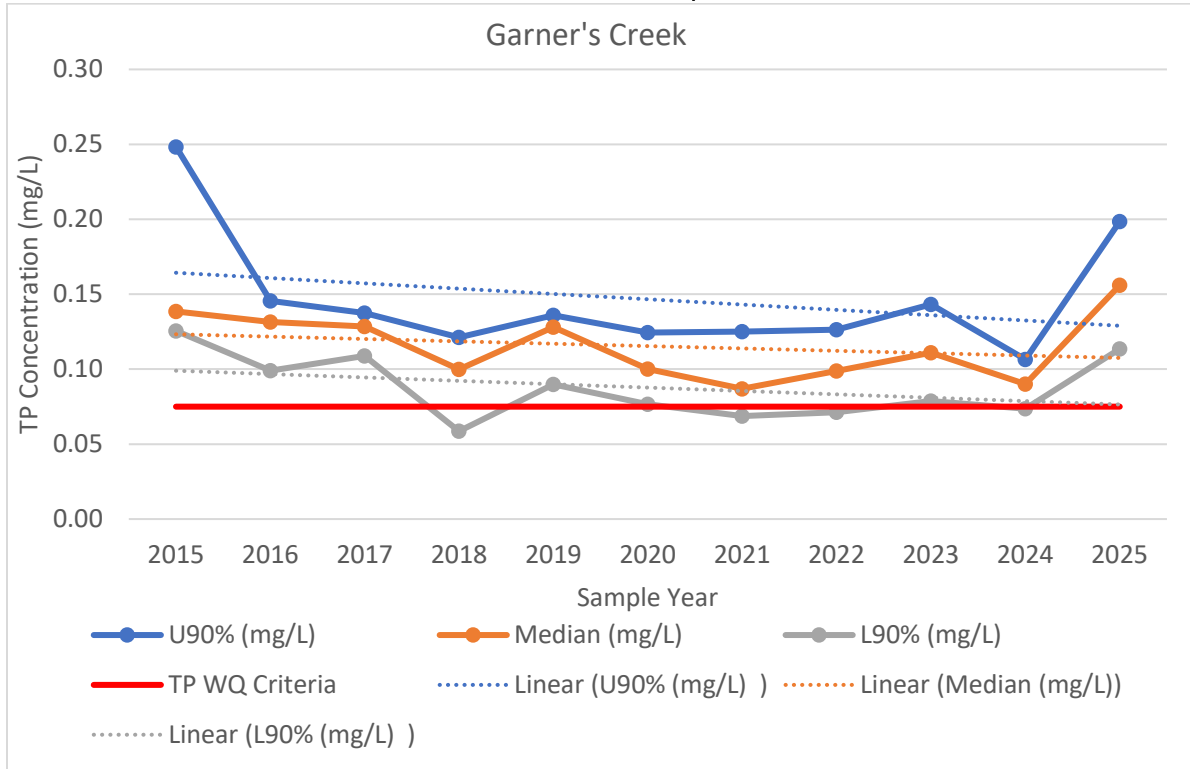
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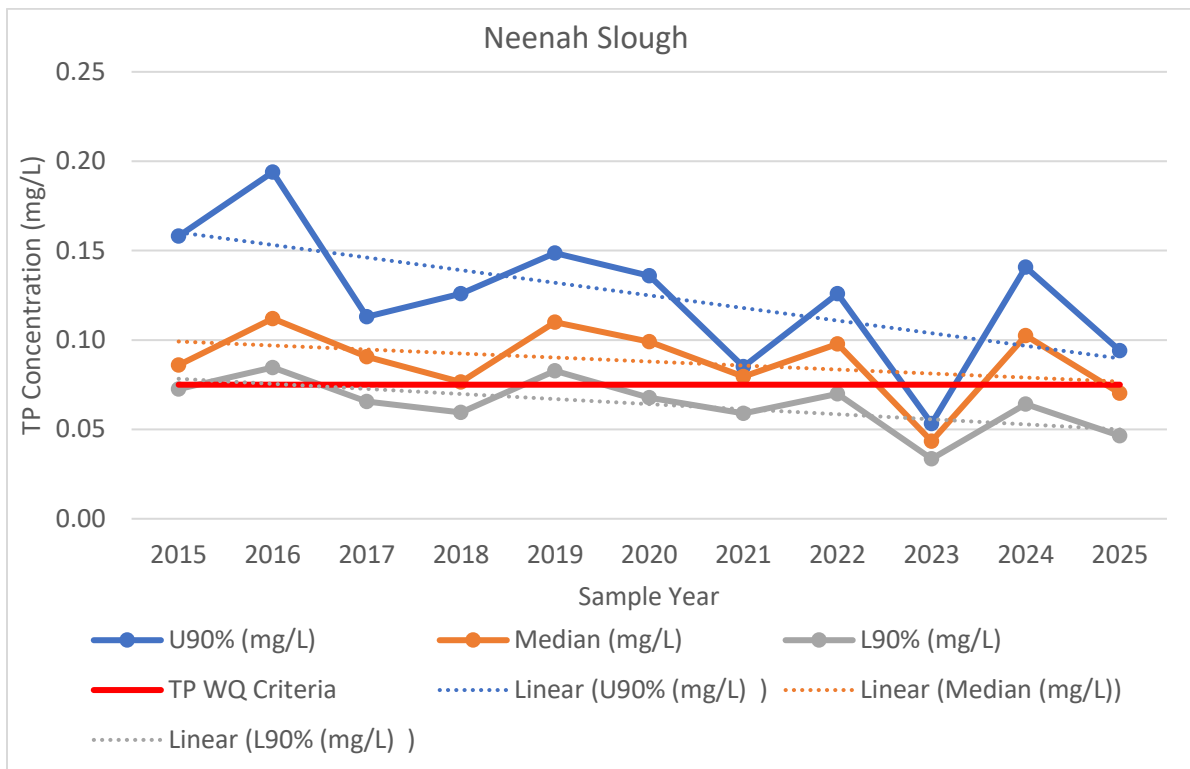
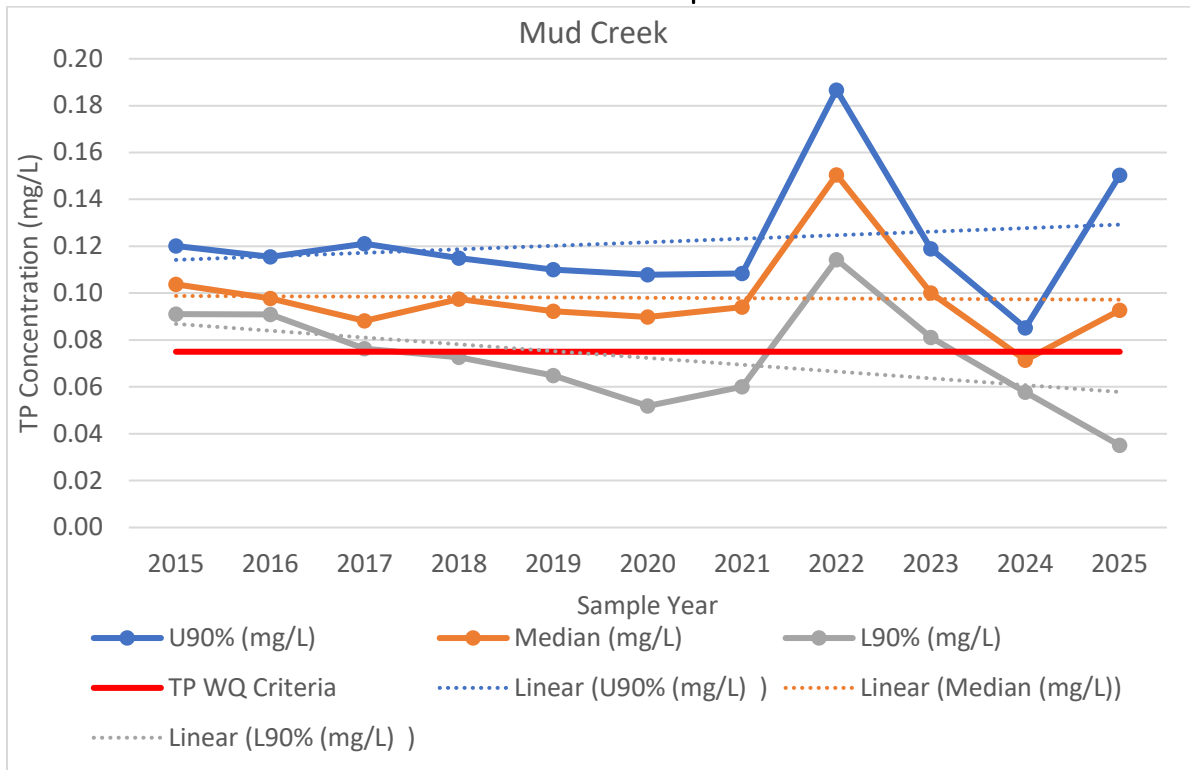
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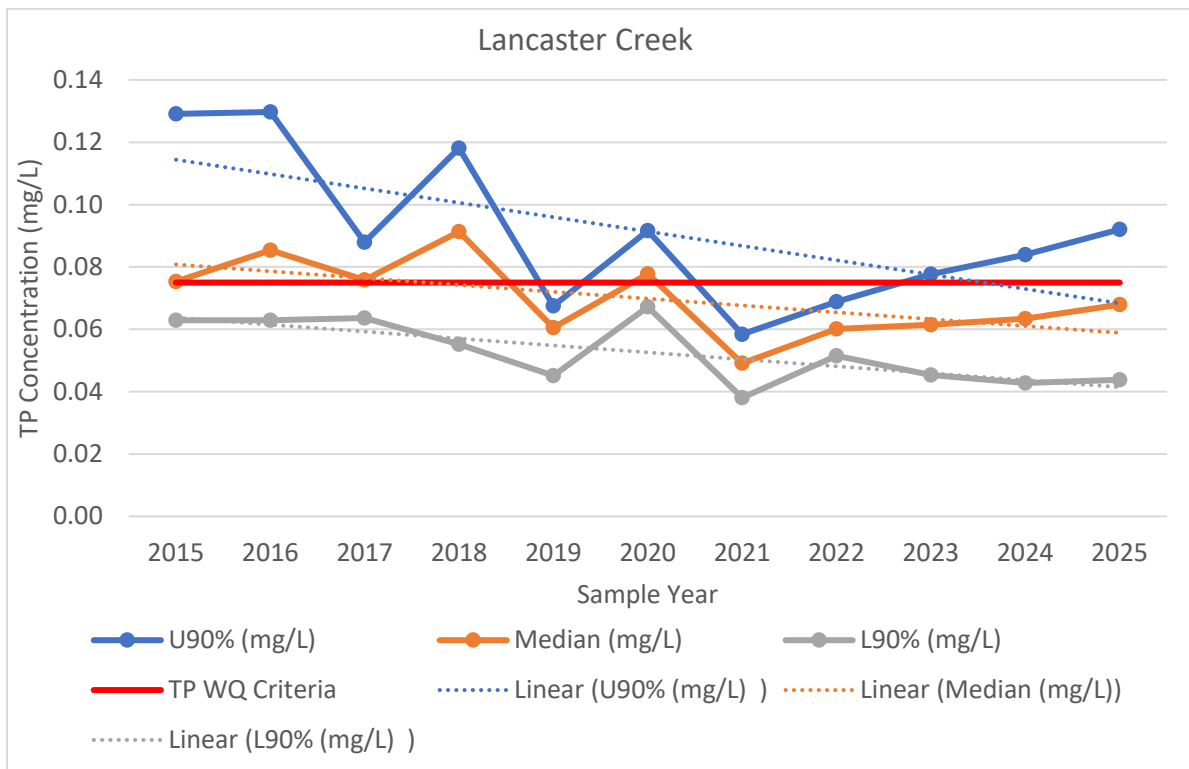
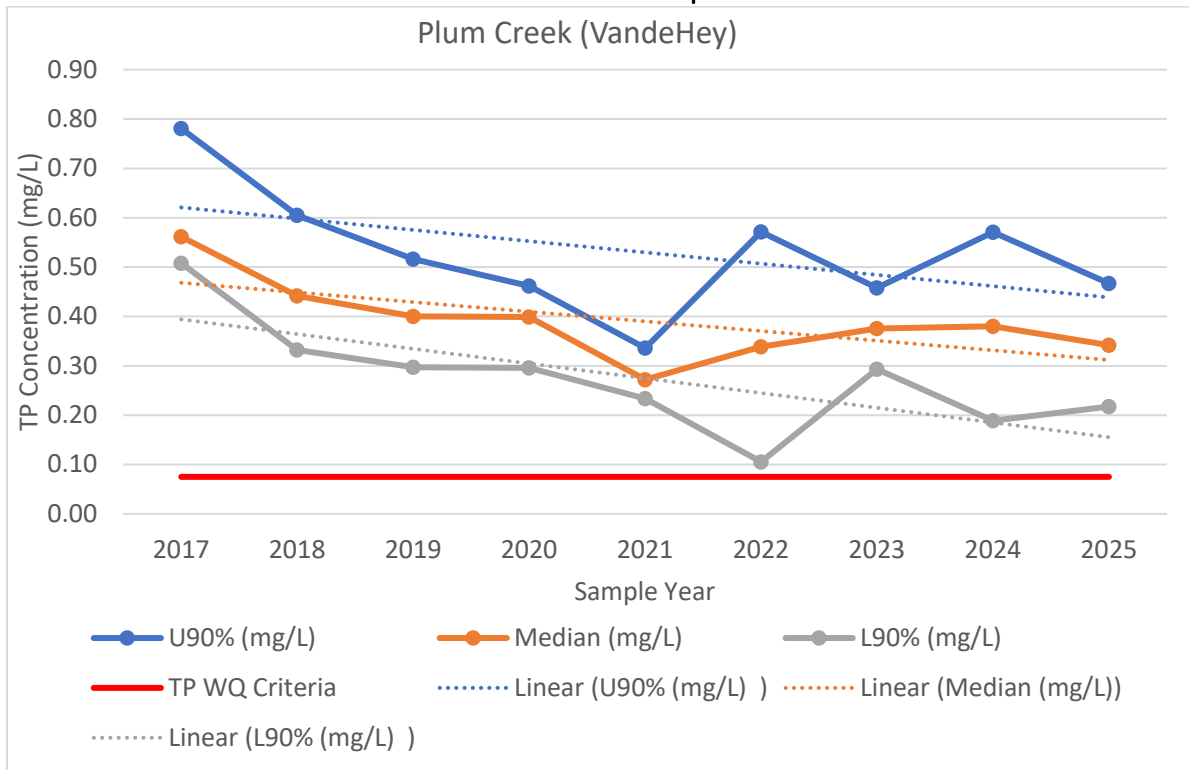
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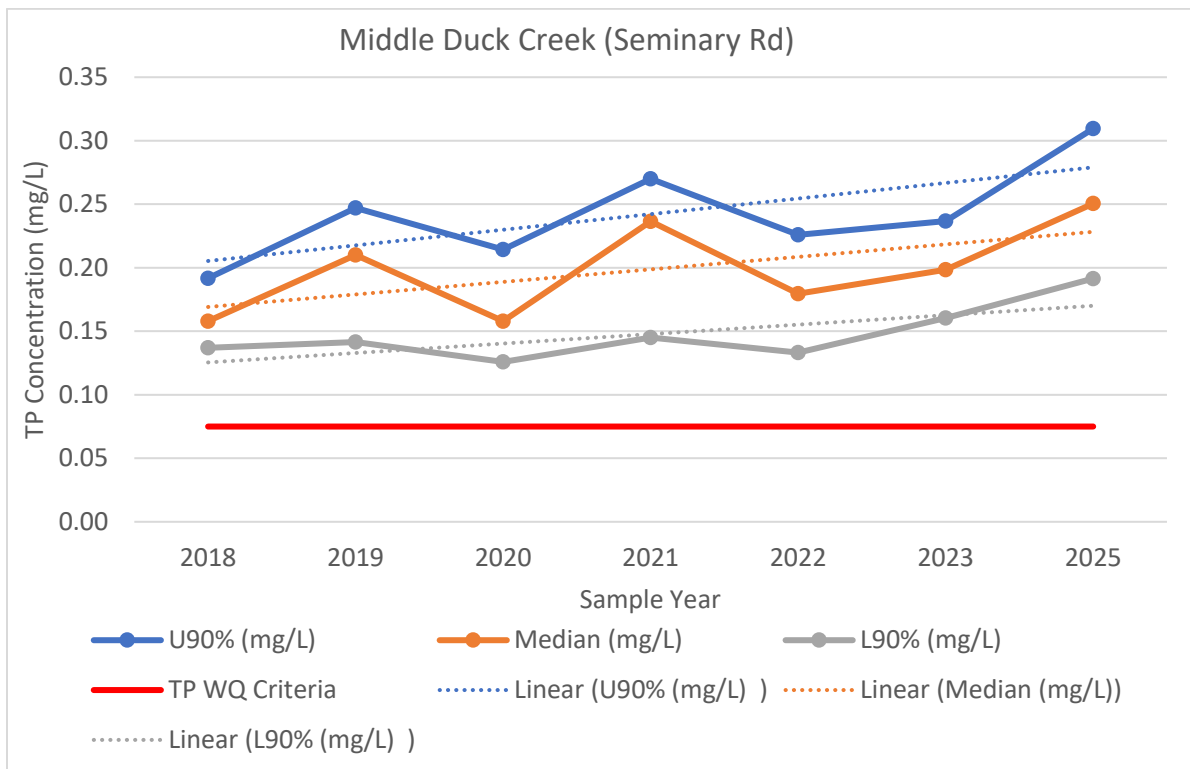
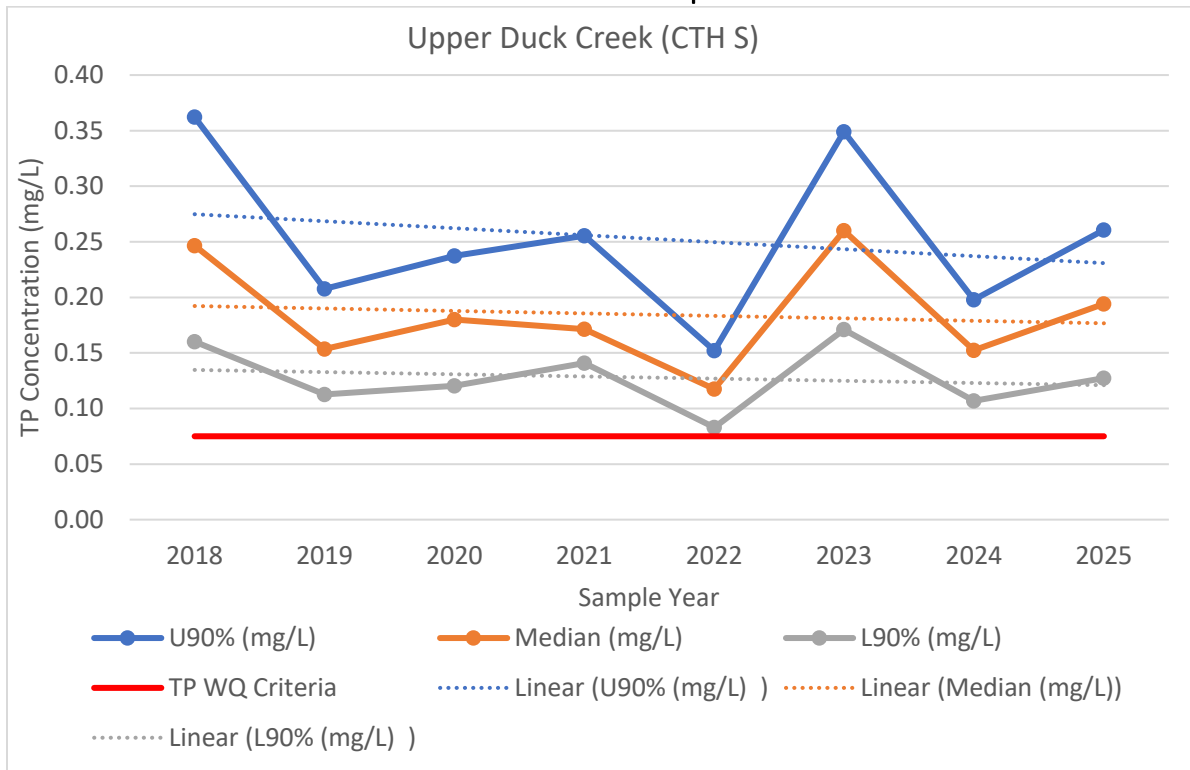
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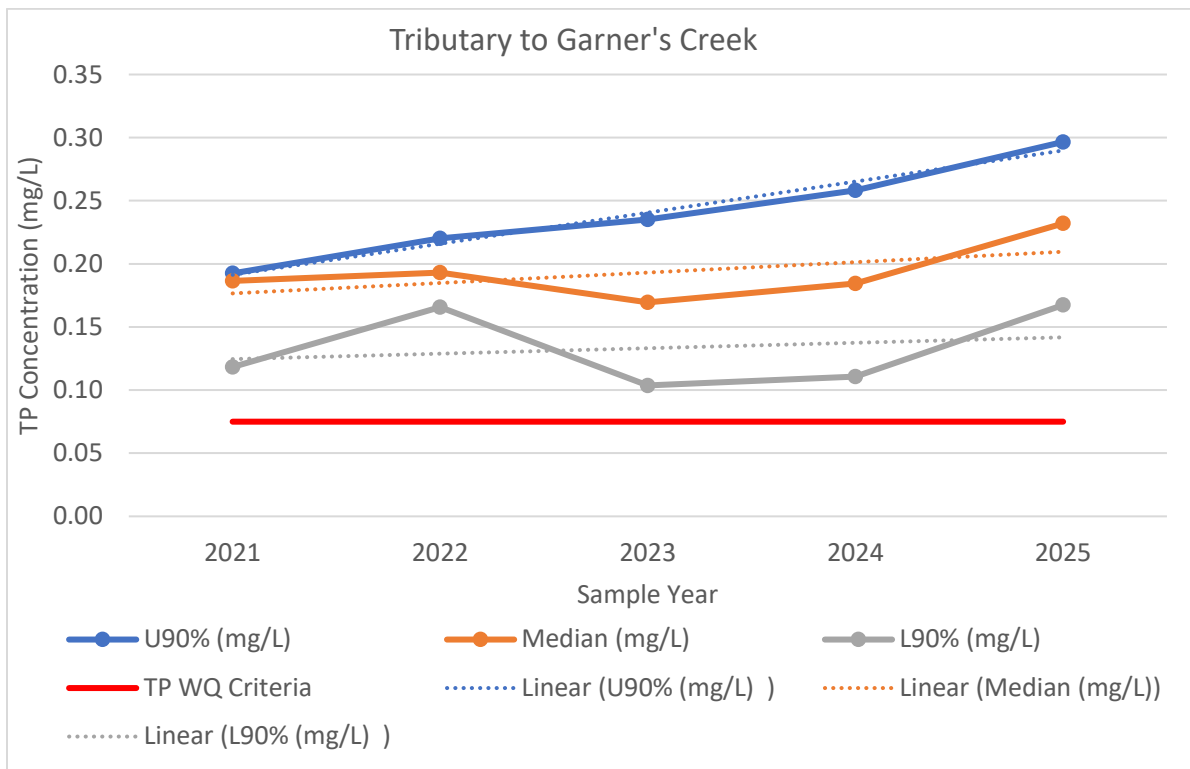
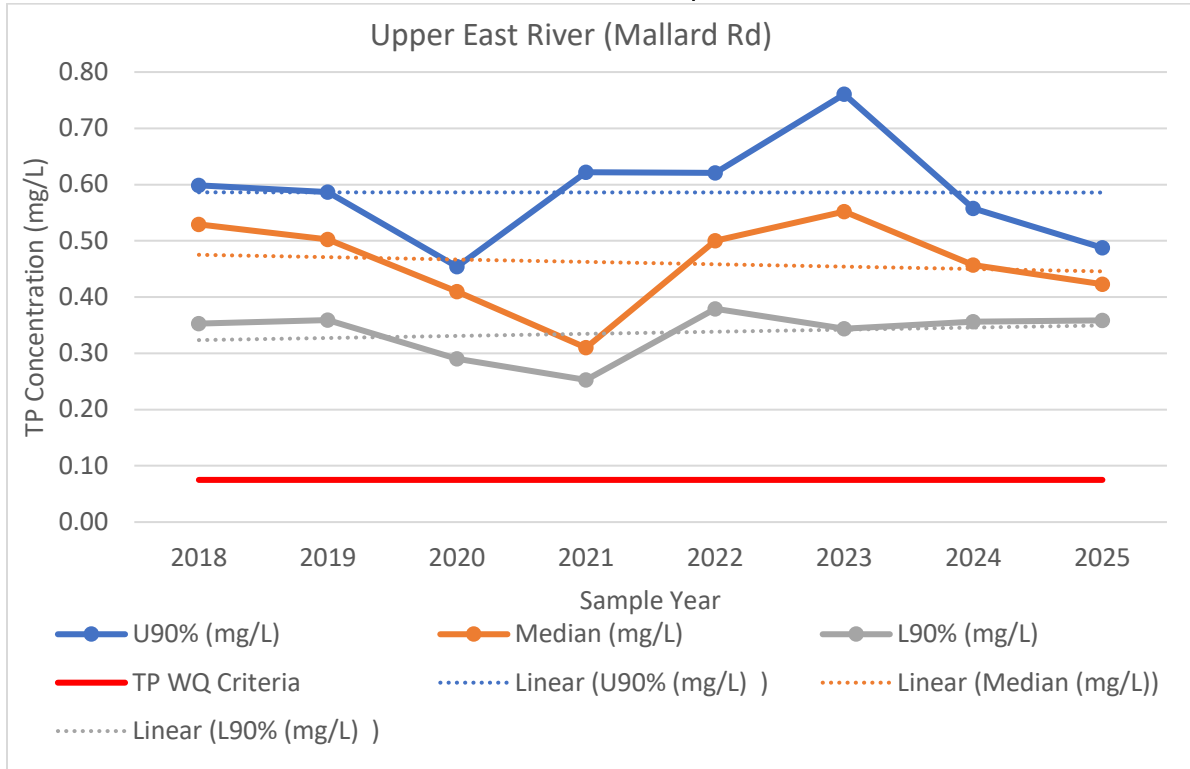
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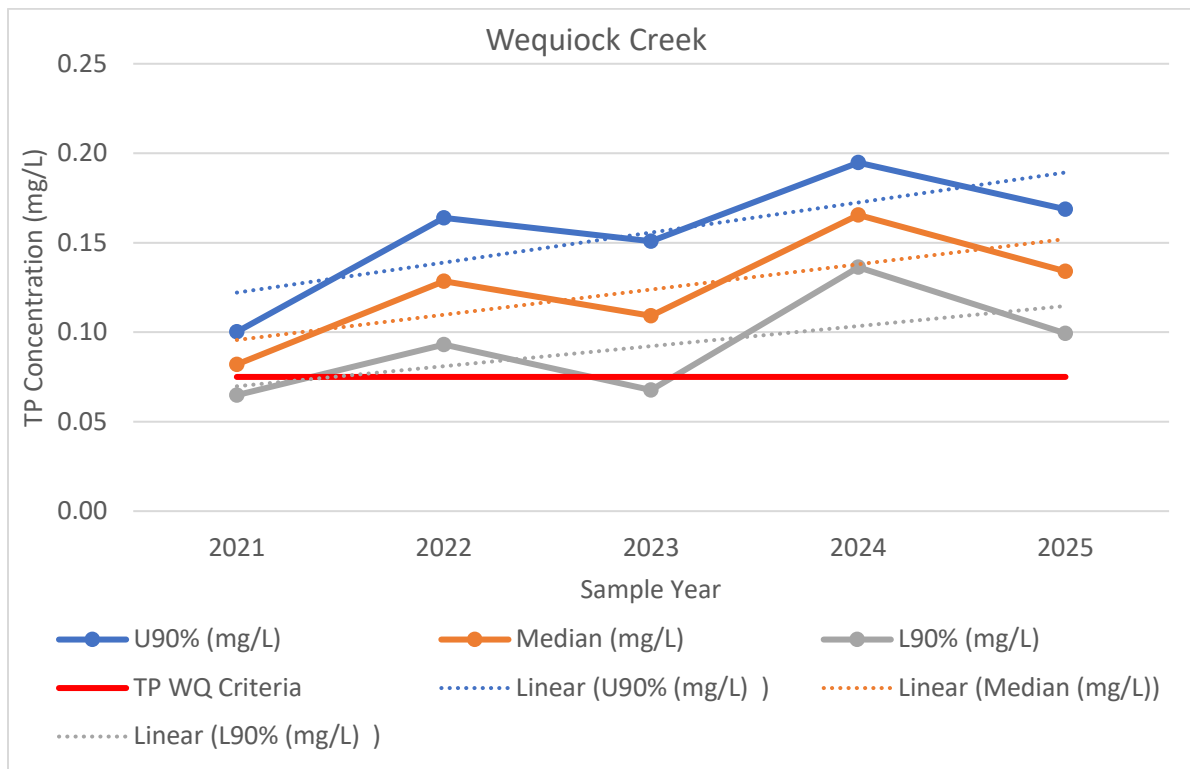
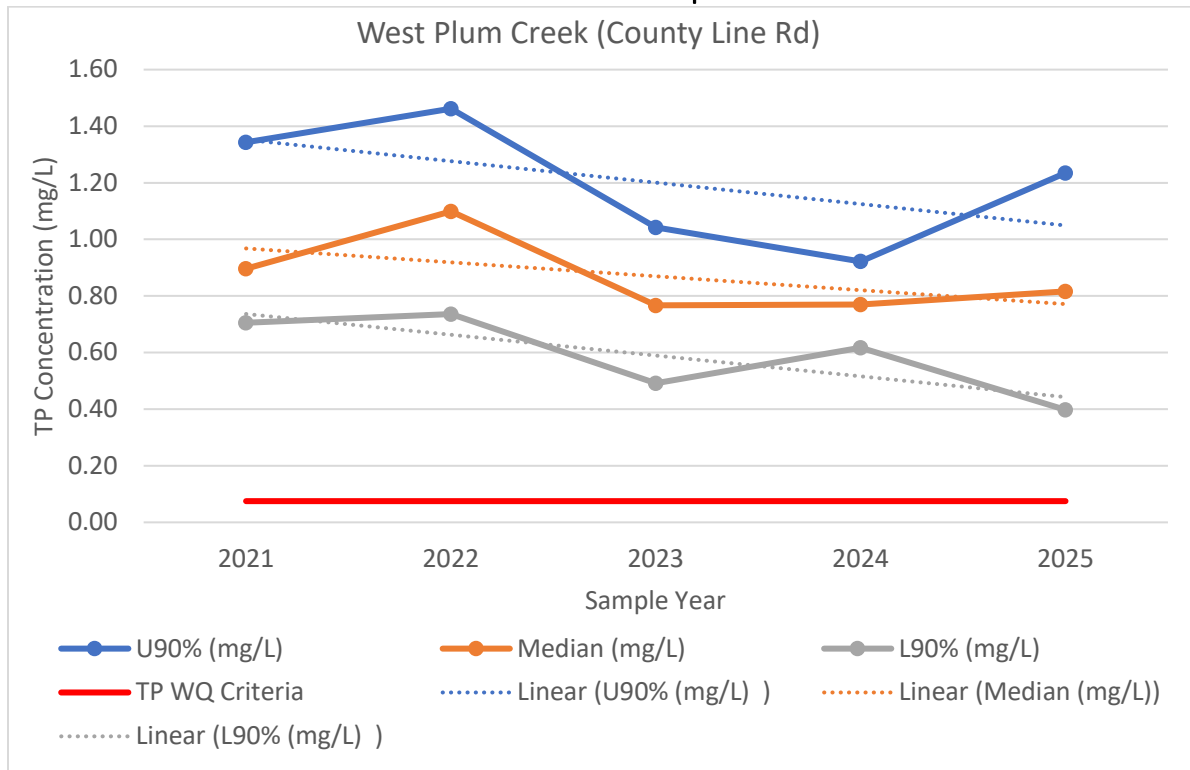
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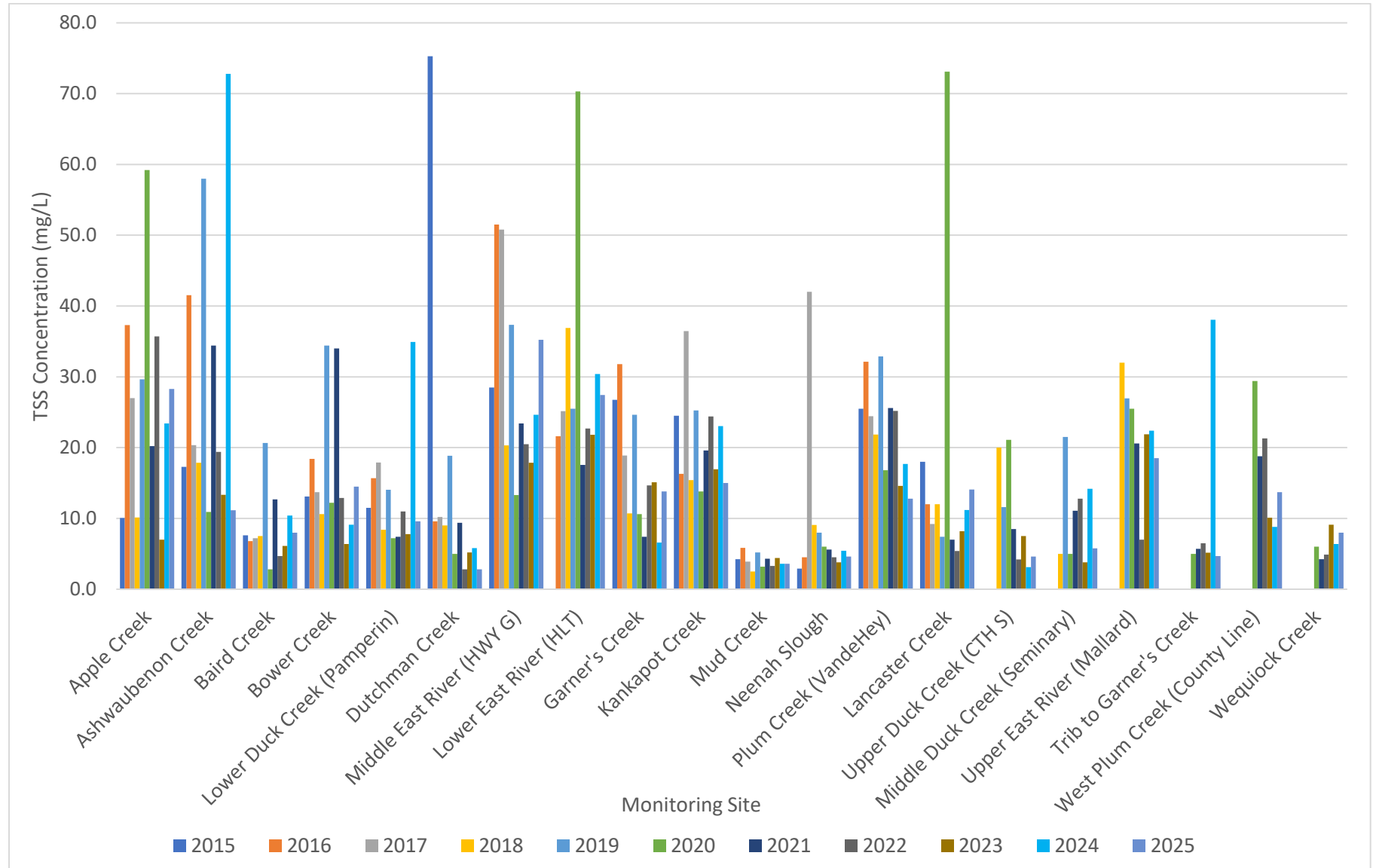
Appendix G: Median Total Phosphorus Concentration (mg/L) by Monitoring Site

Monitoring Site	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Apple Creek	0.273	0.297	0.318	0.168	0.265	0.126	0.176	0.270	0.187	0.170	0.222
Ashwaubenon Creek	0.347	0.316	0.321	0.301	0.485	0.119	0.319	0.252	0.222	0.473	0.239
Baird Creek	0.288	0.172	0.317	0.289	0.506	0.075	0.170	0.143	0.136	0.206	0.180
Bower Creek	0.199	0.229	0.310	0.323	0.328	0.232	0.230	0.168	0.198	0.245	0.259
Lower Duck Creek (Pamperin Park)	0.141	0.173	0.192	0.134	0.148	0.121	0.156	0.113	0.128	0.156	0.160
Dutchman Creek	0.306	0.117	0.157	0.141	0.280	0.069	0.098	0.127	0.184	0.114	0.144
Middle East River (CTH G)	0.526	0.472	0.460	0.321	0.421	0.303	0.276	0.379	0.374	0.305	0.391
Lower East River (HLT)		0.252	0.143	0.321	0.170	0.253	0.128	0.182	0.129	0.152	0.166
Garner's Creek	0.139	0.131	0.129	0.100	0.128	0.072	0.087	0.099	0.111	0.090	0.156
Kankapot Creek	0.365	0.292	0.498	0.402	0.355	0.277	0.307	0.360	0.266	0.220	0.395
Mud Creek	0.108	0.098	0.088	0.097	0.092	0.096	0.094	0.151	0.100	0.071	0.093
Neenah Slough	0.078	0.112	0.091	0.076	0.110	0.080	0.075	0.098	0.043	0.102	0.070
Plum Creek (VandeHey)		0.839	0.532	0.442	0.401	0.423	0.283	0.339	0.376	0.380	0.338
Lancaster Creek	0.086	0.085	0.076	0.091	0.061	0.097	0.049	0.060	0.062	0.063	0.068
Upper Duck Creek (CTH S)	N/A	N/A	N/A	0.247	0.154	0.282	0.172	0.180	0.260	0.153	0.194
Middle Duck Creek (Seminary Rd)	N/A	N/A	N/A	0.158	0.210	0.154	0.237	0.180	0.199	0.236	0.251
Upper East River (Mallard Rd)	N/A	N/A	N/A	0.529	0.503	0.399	0.319	0.500	0.552	0.457	0.443
Trib to Garner's Creek	N/A	N/A	N/A	N/A	N/A	0.160	0.249	0.193	0.170	0.185	0.232
West Plum Creek (County Line)	N/A	N/A	N/A	N/A	N/A	1.710	0.915	1.099	0.767	0.770	0.816
Wequiock Creek	N/A	N/A	N/A	N/A	N/A	0.065	0.114	0.129	0.077	0.166	0.134

Red cells indicate years with at least one missed sample.

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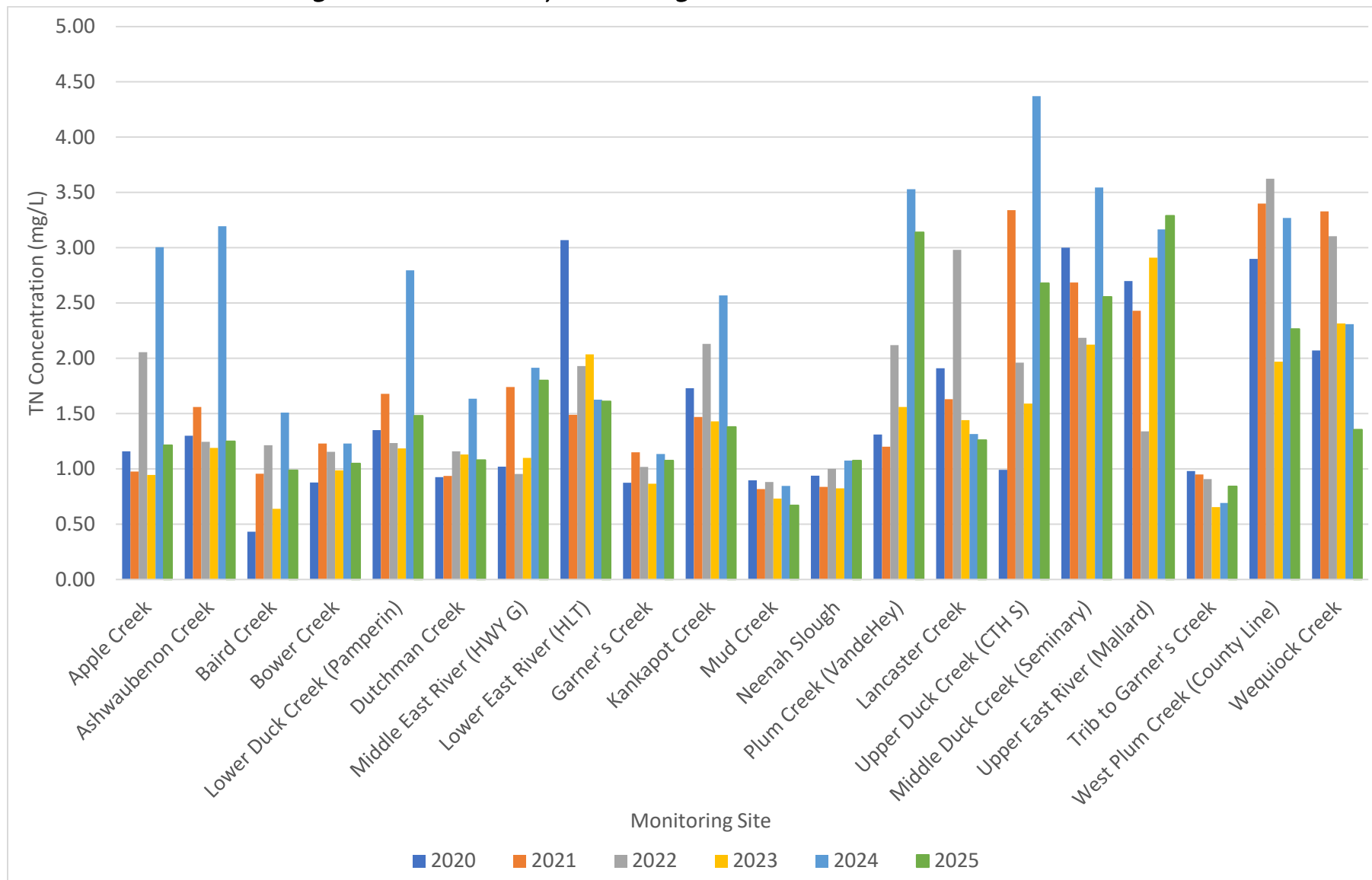
Appendix H: Median Total Suspended Solids Concentration by Monitoring Site



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Appendix I: Median Total Nitrogen Concentration by Monitoring Site



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Appendix J: Percentage of Total Phosphorus Concentrations from Dissolved Reactive Phosphorus

Blank	Apple Creek	Ashwaubenon Creek	Baird Creek	Bower Creek	Lower Duck Creek (Pamperin Park)	Dutchman's Creek	Middle East River (CTH G)	Lower East River (HLT)	Garner's Creek	Kankapot Creek	Mud Creek	Neenah Slough	Plum Creek (VandeHey)	Lancaster Creek	Upper Duck Creek (CTH S)	Middle Duck Creek (Seminary Rd)	Upper East River (Mallard Rd)	Trib to Garner's Creek	West Plum Creek (County Line)	Wequiock Creek
May-15	47%	NA	72%	63%	46%	15%	67%	N/A	34%	45%	30%	30%	N/A	34%	N/A	N/A	N/A	N/A	N/A	N/A
Jun-15	67%	51%	68%	52%	45%	76%	63%	N/A	40%	58%	48%	N/A	N/A	50%	N/A	N/A	N/A	N/A	N/A	N/A
Jul-15	76%	65%	57%	29%	53%	63%	79%	N/A	7%	67%	N/A	42%	N/A	50%	N/A	N/A	N/A	N/A	N/A	N/A
Aug-15	72%	57%	66%	51%	60%	N/A	76%	N/A	19%	63%	50%	76%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sep-15	70%	49%	73%	68%	70%	N/A	75%	N/A	5%	62%	N/A	55%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oct-15	81%	78%	77%	79%	48%	N/A	71%	N/A	29%	58%	N/A	66%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
May-16	37%	57%	47%	52%	28%	30%	53%	20%	40%	46%	33%	41%	N/A	22%	N/A	N/A	N/A	N/A	N/A	N/A
Jun-16	55%	64%	56%	60%	56%	N/A	65%	55%	N/A	57%	54%	63%	N/A	49%	N/A	N/A	N/A	N/A	N/A	N/A
Jul-16	64%	74%	63%	76%	72%	N/A	83%	74%	45%	61%	65%	71%	N/A	45%	N/A	N/A	N/A	N/A	N/A	N/A
Aug-16	69%	40%	N/A	60%	47%	39%	58%	30%	27%	44%	51%	61%	15%	15%	N/A	N/A	N/A	N/A	N/A	N/A
Sep-16	36%	59%	61%	N/A	70%	N/A	59%	64%	2%	N/A	33%	58%	75%	53%	N/A	N/A	N/A	N/A	N/A	N/A
Oct-16	75%	72%	72%	N/A	77%	N/A	85%	44%	35%	58%	65%	68%	86%	42%	N/A	N/A	N/A	N/A	N/A	N/A
May-17	43%	61%	70%	35%	36%	42%	45%	37%	27%	58%	42%	16%	69%	62%	N/A	N/A	N/A	N/A	N/A	N/A
Jun-17	19%	72%	62%	72%	63%	73%	55%	47%	36%	53%	65%	63%	66%	40%	N/A	N/A	N/A	N/A	N/A	N/A
Jul-17	73%	74%	61%	70%	65%	77%	41%	58%	58%	58%	52%	60%	77%	46%	N/A	N/A	N/A	N/A	N/A	N/A
Aug-17	61%	35%	80%	58%	66%	45%	64%	123%	49%	64%	48%	47%	48%	60%	N/A	N/A	N/A	N/A	N/A	N/A
Sep-17	78%	80%	80%	65%	65%	78%	80%	31%	56%	76%	57%	43%	83%	53%	N/A	N/A	N/A	N/A	N/A	N/A
Oct-17	59%	80%	74%	8%	57%	81%	87%	35%	59%	76%	58%	47%	76%	53%	N/A	N/A	N/A	N/A	N/A	N/A
May-18	51%	71%	69%	48%	44%	44%	67%	60%	24%	70%	28%	63%	60%	47%	52%	56%	76%	N/A	N/A	N/A
Jun-18	68%	35%	55%	67%	66%	66%	77%	56%	39%	60%	59%	69%	70%	56%	35%	74%	34%	N/A	N/A	N/A
Jul-18	83%	77%	44%	69%	70%	70%	80%	29%	45%	73%	67%	58%	60%	64%	63%	78%	28%	N/A	N/A	N/A
Aug-18	N/A	28%	72%	53%	58%	58%	66%	5%	63%	66%	60%	18%	75%	20%	69%	79%	85%	N/A	N/A	N/A
Sep-18	49%	64%	86%	76%	81%	81%	85%	31%	63%	68%	64%	62%	84%	49%	66%	77%	74%	N/A	N/A	N/A

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Blank	Apple Creek	Ashwaubenon Creek	Baird Creek	Bower Creek	Lower Duck Creek (Pamperin Park)	Dutchman's Creek	Middle East River (CTH G)	Lower East River (HLT)	Garner's Creek	Kankapot Creek	Mud Creek	Neenah Slough	Plum Creek (VandeHey)	Lancaster Creek	Upper Duck Creek (CTH S)	Middle Duck Creek (Seminary Rd)	Upper East River (Mallard Rd)	Trib to Garner's Creek	West Plum Creek (County Line)	Wequiock Creek
Oct-18	49%	90%	65%	62%	75%	75%	67%	46%	62%	59%	47%	64%	72%	59%	65%	79%	71%	N/A	N/A	N/A
May-19	47%	N/A	48%	54%	45%	68%	52%	63%	12%	67%	48%	48%	59%	33%	55%	55%	65%	N/A	N/A	N/A
Jun-19	47%	77%	67%	66%	48%	69%	59%	46%	27%	43%	54%	54%	76%	75%	59%	42%	69%	N/A	N/A	N/A
Jul-19	82%	65%	72%	64%	80%	72%	89%	58%	45%	70%	86%	86%	78%	68%	81%	73%	87%	N/A	N/A	N/A
Aug-19	47%	82%	54%	49%	57%	49%	74%	13%	23%	64%	69%	69%	68%	50%	77%	90%	78%	N/A	N/A	N/A
Sep-19	69%	70%	77%	70%	73%	81%	77%	51%	42%	66%	62%	62%	78%	59%	67%	74%	71%	N/A	N/A	N/A
Oct-19	71%	71%	62%	48%	73%	68%	61%	60%	47%	59%	65%	65%	55%	82%	55%	78%	61%	N/A	N/A	N/A
May-20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Jun-20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Jul-20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aug-20	36%	71%	68%	44%	33%	86%	68%	20%	36%	65%	73%	50%	59%	66%	61%	73%	78%	73%	78%	79%
Sep-20	49%	71%	108%	30%	37%	59%	81%	11%	55%	58%	90%	48%	59%	40%	61%	60%	77%	69%	72%	113%
Oct-20	71%	79%	94%	51%	84%	62%	80%	49%	63%	70%	59%	74%	75%	37%	77%	87%	87%	43%	87%	114%
May-21	N/A	N/A	N/A	N/A	71%	N/A	N/A	28%	54%	56%	45%	N/A	N/A	50%	56%	32%	N/A	84%	88%	N/A
Jun-21	51%	80%	74%	58%	39%	16%	63%	16%	54%	78%	76%	64%	79%	47%	76%	65%	91%	85%	89%	65%
Jul-21	47%	64%	62%	47%	67%	11%	74%	45%	66%	73%	69%	64%	69%	67%	67%	80%	70%	78%	81%	78%
Aug-21	77%	79%	61%	63%	63%	10%	80%	38%	53%	77%	72%	54%	66%	74%	70%	75%	85%	68%	82%	83%
Sep-21	64%	67%	55%	67%	37%	9%	76%	20%	60%	71%	40%	29%	66%	70%	61%	73%	84%	88%	90%	71%
Oct-21	67%	94%	73%	74%	52%	8%	67%	115%	52%	80%	54%	28%	77%	72%	73%	84%	90%	89%	84%	73%
May-22	N/A	68%	59%	58%	59%	27%	67%	39%	18%	18%	36%	36%	53%	N/A	57%	73%	82%	69%	60%	17%
Jun-22	72%	82%	61%	73%	81%	68%	76%	40%	30%	60%	68%	76%	73%	55%	63%	82%	66%	26%	84%	63%
Jul-22	81%	83%	68%	56%	72%	N/A	89%	14%	56%	73%	79%	79%	60%	70%	80%	87%	91%	87%	89%	75%
Aug-22	39%	72%	73%	60%	59%	N/A	80%	34%	40%	64%	68%	64%	34%	64%	72%	79%	94%	60%	61%	71%

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Blank	Apple Creek	Ashwaubenon Creek	Baird Creek	Bower Creek	Lower Duck Creek (Pamperin Park)	Dutchman's Creek	Middle East River (CTH G)	Lower East River (HLT)	Garner's Creek	Kankapot Creek	Mud Creek	Neenah Slough	Plum Creek (VandeHey)	Lancaster Creek	Upper Duck Creek (CTH S)	Middle Duck Creek (Seminary Rd)	Upper East River (Mallard Rd)	Trib to Garner's Creek	West Plum Creek (County Line)	Wequiock Creek
Sep-22	N/A	79%	69%	60%	65%	74%	75%	32%	61%	68%	45%	57%	71%	N/A	69%	77%	84%	43%	N/A	67%
Oct-22	61%	72%	61%	59%	33%	N/A	75%	66%	49%	49%	60%	49%	66%	17%	71%	61%	87%	80%	82%	45%
May-23	41%	74%	62%	50%	25%	69%	63%	43%	0%	51%	39%	28%	47%	41%	37%	53%	78%	57%	54%	52%
Jun-23	74%	81%	60%	70%	68%	72%	70%	11%	51%	57%	57%	45%	63%	44%	60%	77%	84%	82%	81%	69%
Jul-23	84%	63%	54%	72%	58%	77%	80%	23%	32%	63%	57%	26%	53%	56%	71%	84%	112%	88%	88%	N/A
Aug-23	53%	54%	67%	63%	59%	79%	80%	27%	40%	49%	68%	61%	79%	61%	76%	79%	88%	78%	91%	64%
Sep-23	55%	47%	57%	59%	29%	61%	66%	11%	42%	64%	44%	21%	61%	63%	60%	75%	82%	81%	82%	68%
Oct-23	66%	70%	67%	49%	60%	63%	82%	23%	24%	40%	25%	53%	70%	60%	58%	73%	84%	67%	70%	62%
May-24	65%	43%	67%	28%	50%	56%	76%	46%	52%	56%	51%	5%	52%	72%	61%	61%	73%	73%	87%	67%
Jun-24	70%	27%	75%	63%	54%	78%	67%	71%	49%	49%	61%	57%	56%	73%	57%	69%	77%	60%	78%	72%
Jul-24	57%	132%	82%	63%	79%	83%	68%	44%	57%	64%	61%	48%	79%	63%	70%	75%	82%	82%	77%	76%
Aug-24	68%	83%	58%	52%	75%	71%	62%	7%	34%	54%	61%	72%	61%	58%	72%	84%	84%	41%	79%	77%
Sep-24	69%	82%	79%	72%	82%	52%	80%	5%	54%	62%	26%	55%	52%	50%	71%	84%	87%	80%	80%	66%
Oct-24	61%	76%	79%	73%	81%	82%	76%	15%	72%	69%	36%	43%	52%	54%	74%	79%	87%	80%	89%	67%
May-25	24%	75%	53%	49%	45%	68%	50%	50%	29%	52%	33%	37%	43%	36%	58%	65%	84%	63%	51%	59%
Jun-25	60%	73%	53%	39%	44%	67%	78%	42%	65%	76%	58%	53%	74%	52%	51%	52%	73%	65%	92%	61%
Jul-25	64%	73%	73%	70%	75%	81%	74%	28%	73%	70%	68%	73%	77%	53%	67%	84%	78%	86%	86%	71%
Aug-25	62%	68%	71%	63%	71%	70%	77%	16%	28%	61%	61%	57%	N/A	34%	73%	81%	N/A	81%	84%	65%
Sep-25	53%	65%	57%	65%	63%	57%	75%	13%	53%	67%	52%	54%	70%	48%	72%	78%	76%	78%	72%	62%
Oct-25	51%	79%	75%	78%	72%	74%	74%	14%	28%	66%	67%	43%	62%	52%	73%	77%	86%	82%	86%	60%

Red cells indicate the DRP concentration exceeded the TP concentration (DRP >100%)

Italicized and bold percentages indicate the DRP sample concentration was below the 0.075 mg/L criteria.

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Appendix K: Duplicate Sample Data

Monitoring Site	Date	Parameter	Duplicate Sample	Regular Sample	Absolute Difference	Unit	Relative Percent Difference
Duck Creek-Pamperin Park	8/14/2018	PHOSPHATE ORTHO DISS	0.0301	0.0302	0.0001	MG/L	0.33
Duck Creek-Pamperin Park	8/14/2018	PHOSPHORUS TOTAL	0.103	0.0975	0.0055	MG/L	5.49
Duck Creek-Pamperin Park	8/14/2018	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	18.8	11.8	7	MG/L	45.75
Neenah Slough #2 (100ft S of Adams St)	9/25/2018	PHOSPHATE ORTHO DISS	0.04944	0.0548	0.00536	MG/L	10.28
Neenah Slough #2 (100ft S of Adams St)	9/25/2018	PHOSPHORUS TOTAL	0.078	0.088	0.01	MG/L	12.05
Neenah Slough #2 (100ft S of Adams St)	9/25/2018	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	31.4	9.8	21.6	MG/L	104.85
Apple Creek - Rosin Rd	9/15/2020	PHOSPHATE ORTHO DISS	0.063	0.0623	0.0007	MG/L	1.12
Apple Creek - Rosin Rd	9/15/2020	PHOSPHORUS TOTAL	0.125	0.126	0.001	MG/L	0.8
Apple Creek - Rosin Rd	9/15/2020	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	22.3	NA	NA	MG/L	
Apple Creek - Rosin Rd	9/15/2020	NITROGEN TOTAL	1.43	1.44	0.01	MG/L	0.7
West Plum Creek - DS of County Line Rd	9/14/2020	PHOSPHORUS TOTAL	1.7	1.71	0.01	MG/L	0.59
West Plum Creek - DS of County Line Rd	9/14/2020	PHOSPHATE ORTHO DISS	1.21	1.23	0.02	MG/L	1.64
West Plum Creek - DS of County Line Rd	9/14/2020	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	33.8	NA	NA	MG/L	
West Plum Creek - DS of County Line Rd	9/14/2020	NITROGEN TOTAL	2.92	2.9	0.02	MG/L	0.69
Upper East River - Mallard Rd	6/16/2021	PHOSPHORUS TOTAL	1.67	1.68	0.01	MG/L	0.6
Upper East River - Mallard Rd	6/16/2021	PHOSPHATE ORTHO DISS	1.49	1.53	0.04	MG/L	2.65

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Monitoring Site	Date	Parameter	Duplicate Sample	Regular Sample	Absolute Difference	Unit	Relative Percent Difference
Upper East River - Mallard Rd	6/16/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	33	44.8	11.8	MG/L	30.33
Upper East River - Mallard Rd	6/16/2021	NITROGEN TOTAL	2.59	2.57	0.02	MG/L	0.78
Trib to Garner's	6/23/2021	PHOSPHORUS TOTAL	0.311	0.306	0.005	MG/L	1.62
Trib to Garner's	6/23/2021	PHOSPHATE ORTHO DISS	0.262	0.261	0.001	MG/L	0.38
Trib to Garner's	6/23/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	6.2	4.8	1.4	MG/L	25.45
Trib to Garner's	6/23/2021	NITROGEN TOTAL	0.993	0.968	0.025	MG/L	2.55
Duck Creek-Pamperin Park	6/28/2021	PHOSPHORUS TOTAL	0.367	0.343	0.024	MG/L	6.76
Duck Creek-Pamperin Park	6/28/2021	PHOSPHATE ORTHO DISS	0.134	0.134	0	MG/L	0
Duck Creek-Pamperin Park	6/28/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	108	101	7	MG/L	6.7
Duck Creek-Pamperin Park	6/28/2021	NITROGEN TOTAL	10.6	10.6	0	MG/L	0
Baird Creek at Preble WI	7/6/2021	PHOSPHORUS TOTAL	0.17	0.17	0	MG/L	0
Baird Creek at Preble WI	7/6/2021	PHOSPHATE ORTHO DISS	0.107	0.106	0.001	MG/L	0.94
Baird Creek at Preble WI	7/6/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	13.4	12.6	0.8	MG/L	6.15
Baird Creek at Preble WI	7/6/2021	NITROGEN TOTAL	1.65	1.61	0.04	MG/L	2.45
Wequiock Creek - Nicolet Rd/CTY A	7/19/2021	PHOSPHORUS TOTAL	0.113	0.114	0.001	MG/L	0.88
Wequiock Creek - Nicolet Rd/CTY A	7/19/2021	PHOSPHATE ORTHO DISS	0.0885	0.0892	0.0007	MG/L	0.79
Wequiock Creek - Nicolet Rd/CTY A	7/19/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	10	16.6	6.6	MG/L	49.62
Wequiock Creek - Nicolet Rd/CTY A	7/19/2021	NITROGEN TOTAL	4.26	4.29	0.03	MG/L	0.7
Ashwaubenon Creek - Grant Street	7/21/2021	PHOSPHORUS TOTAL	0.265	0.264	0.001	MG/L	0.38

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Monitoring Site	Date	Parameter	Duplicate Sample	Regular Sample	Absolute Difference	Unit	Relative Percent Difference
Ashwaubenon Creek - Grant Street	7/21/2021	PHOSPHATE ORTHO DISS	0.165	0.17	0.005	MG/L	2.99
Ashwaubenon Creek - Grant Street	7/21/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	34.6	36.8	2.2	MG/L	6.16
Ashwaubenon Creek - Grant Street	7/21/2021	NITROGEN TOTAL	1.93	1.93	0	MG/L	0
Plum Creek at VandeHey Farm crossing	8/24/2021	PHOSPHORUS TOTAL	0.293	0.297	0.004	MG/L	1.36
Plum Creek at VandeHey Farm crossing	8/24/2021	PHOSPHATE ORTHO DISS	0.195	0.196	0.001	MG/L	0.51
Plum Creek at VandeHey Farm crossing	8/24/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	22.6	27.6	5	MG/L	19.92
Plum Creek at VandeHey Farm crossing	8/24/2021	NITROGEN TOTAL	1.49	1.51	0.02	MG/L	1.33
Unnamed Trib. (410000)-Lakeview Dr.	8/25/2021	PHOSPHORUS TOTAL	0.0445	0.0478	0.0033	MG/L	7.15
Unnamed Trib. (410000)-Lakeview Dr.	8/25/2021	PHOSPHATE ORTHO DISS	0.0342	0.0354	0.0012	MG/L	3.45
Unnamed Trib. (410000)-Lakeview Dr.	8/25/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	4.8	5.8	1	MG/L	18.87
Unnamed Trib. (410000)-Lakeview Dr.	8/25/2021	NITROGEN TOTAL	1.95	2.04	0.09	MG/L	4.51
Mud Creek - County Highway BB	9/16/2021	PHOSPHORUS TOTAL	0.0329	0.0331	0.0002	MG/L	0.61
Mud Creek - County Highway BB	9/16/2021	PHOSPHATE ORTHO DISS	0.0132	0.0134	0.0002	MG/L	1.5
Mud Creek - County Highway BB	9/16/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	2	2.4	0.4	MG/L	18.18
Mud Creek - County Highway BB	9/16/2021	NITROGEN TOTAL	0.712	0.706	0.006	MG/L	0.85

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Monitoring Site	Date	Parameter	Duplicate Sample	Regular Sample	Absolute Difference	Unit	Relative Percent Difference
East River at Harold Lewis Trail off Main Street	9/27/2021	PHOSPHATE ORTHO DISS	0.0273	0.0249	0.0024	MG/L	9.2
East River at Harold Lewis Trail off Main Street	9/27/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	28.8	23.2	5.6	MG/L	21.54
East River at Harold Lewis Trail off Main Street	9/27/2021	NITROGEN TOTAL	1.73	1.47	0.26	MG/L	16.25
East River at Harold Lewis Trail off Main Street	9/27/2021	PHOSPHORUS TOTAL	0.178	0.125	0.053	MG/L	34.98
Upper Duck Creek - CTH S	10/13/2021	PHOSPHORUS TOTAL	0.171	0.172	0.001	MG/L	0.58
Upper Duck Creek - CTH S	10/13/2021	PHOSPHATE ORTHO DISS	0.126	0.126	0	MG/L	0
Upper Duck Creek - CTH S	10/13/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	2.4	2.8	0.4	MG/L	15.38
Upper Duck Creek - CTH S	10/13/2021	NITROGEN TOTAL	3.9	3.46	0.44	MG/L	11.96
Bower Creek (1) 50m Upstream Of Hwy GV	8/24/2021	PHOSPHORUS TOTAL	0.243	0.23	0.013	MG/L	5.5
Bower Creek (1) 50m Upstream Of Hwy GV	8/24/2021	PHOSPHATE ORTHO DISS	0.147	0.145	0.002	MG/L	1.37
Bower Creek (1) 50m Upstream Of Hwy GV	8/24/2021	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	38.6	34	4.6	MG/L	12.67
Bower Creek (1) 50m Upstream Of Hwy GV	8/24/2021	NITROGEN TOTAL	1.36	1.34	0.02	MG/L	1.48
East River - HWY G	9/28/2022	PHOSPHORUS TOTAL	0.272	0.272	0	MG/L	0
East River - HWY G	9/28/2022	PHOSPHATE ORTHO DISS	0.203	0.205	-0.002	MG/L	-0.98
East River - HWY G	9/28/2022	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	15	10.4	4.6	MG/L	36.22
East River - HWY G	9/28/2022	NITROGEN TOTAL	0.899	0.867	0.032	MG/L	3.62
Baird Creek at Preble WI	9/24/2022	PHOSPHORUS TOTAL	0.131	0.131	0	MG/L	0

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Monitoring Site	Date	Parameter	Duplicate Sample	Regular Sample	Absolute Difference	Unit	Relative Percent Difference
Baird Creek at Preble WI	9/24/2022	PHOSPHATE ORTHO DISS	0.0907	0.0899	0.0008	MG/L	0.89
Baird Creek at Preble WI	9/24/2022	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	2	0	2	MG/L	200
Baird Creek at Preble WI	9/24/2022	NITROGEN TOTAL	1.26	1.26	0	MG/L	0
Kankapot Creek - CTH Z Dodge St 100 ft US of Bridge	9/14/2022	PHOSPHORUS TOTAL	0.544	0.547	-0.003	MG/L	-0.55
Kankapot Creek - CTH Z Dodge St 100 ft US of Bridge	9/14/2022	PHOSPHATE ORTHO DISS	0.379	0.373	0.006	MG/L	1.6
Kankapot Creek - CTH Z Dodge St 100 ft US of Bridge	9/14/2022	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	51	52.4	-1.4	MG/L	-2.71
Kankapot Creek - CTH Z Dodge St 100 ft US of Bridge	9/14/2022	NITROGEN TOTAL	4.01	4	0.01	MG/L	0.25
Mud Creek - County Highway BB	8/16/2022	PHOSPHORUS TOTAL	0.15	0.152	-0.002	MG/L	-1.32
Mud Creek - County Highway BB	8/16/2022	PHOSPHATE ORTHO DISS	0.106	0.104	0.002	MG/L	1.9
Mud Creek - County Highway BB	8/16/2022	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	0	0	0	MG/L	
Mud Creek - County Highway BB	8/16/2022	NITROGEN TOTAL	1.19	1.18	0.01	MG/L	0.84
Garner's Creek DS of CTH Z	8/15/2022	PHOSPHORUS TOTAL	0.117	0.12	-0.003	MG/L	-2.53
Garner's Creek DS of CTH Z	8/15/2022	PHOSPHATE ORTHO DISS	0.0484	0.0485	-0.0001	MG/L	-0.21
Garner's Creek DS of CTH Z	8/15/2022	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	21.6	23.1	-1.5	MG/L	-6.71
Garner's Creek DS of CTH Z	8/15/2022	NITROGEN TOTAL	1.23	1.22	0.01	MG/L	0.82
Tributary to Plum Creek - Downstream of County Line Road	8/7/2022	PHOSPHORUS TOTAL	1.47	1.48	-0.01	MG/L	-0.68

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Tributary to Plum Creek - Downstream of County Line Road	8/7/2022	PHOSPHATE ORTHO DISS	0.925	0.905	0.02	MG/L	2.19
Tributary to Plum Creek - Downstream of County Line Road	8/7/2022	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	89	87.5	1.5	MG/L	1.7
Tributary to Plum Creek - Downstream of County Line Road	8/7/2022	NITROGEN TOTAL	5.08	5.1	-0.02	MG/L	-0.39
Duck Creek at Seminary Rd	7/27/2022	PHOSPHORUS TOTAL		0.268	0.001	MG/L	0.37
Duck Creek at Seminary Rd	7/27/2022	PHOSPHATE ORTHO DISS	0.235	0.234	0.001	MG/L	0.43
Duck Creek at Seminary Rd	7/27/2022	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	4.6	4.2	0.4	MG/L	9.09
Duck Creek at Seminary Rd	7/27/2022	NITROGEN TOTAL	1.82	1.82	0	MG/L	0
Duck Creek - Pamperin Park	7/27/2022	PHOSPHORUS TOTAL	0.227	0.223	0.004	MG/L	1.78
Duck Creek - Pamperin Park	7/27/2022	PHOSPHATE ORTHO DISS	0.167	0.161	0.006	MG/L	3.66
Duck Creek - Pamperin Park	7/27/2022	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	18	19	-1	MG/L	-5.41
Duck Creek - Pamperin Park	7/27/2022	NITROGEN TOTAL	1.08	1.07	0.01	MG/L	0.93
Apple Creek - Rosin Rd	7/5/2022	PHOSPHORUS TOTAL	0.381	0.376	0.005	MG/L	1.32
Apple Creek - Rosin Rd	7/5/2022	PHOSPHATE ORTHO DISS	0.304	0.306	-0.002	MG/L	-0.66
Apple Creek - Rosin Rd	7/5/2022	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	14	16.9	-2.9	MG/L	-18.77
Apple Creek - Rosin Rd	7/5/2022	NITROGEN TOTAL	1.9	1.89	0.01	MG/L	0.53
Dutchman Creek - Oneida Street	6/30/2022	PHOSPHORUS TOTAL	0.172	0.173	-0.001	MG/L	-0.58
Dutchman Creek - Oneida Street	6/30/2022	PHOSPHATE ORTHO DISS	0.123	0.118	0.005	MG/L	4.15

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Monitoring Site	Date	Parameter	Duplicate Sample	Regular Sample	Absolute Difference	Unit	Relative Percent Difference
Dutchman Creek - Oneida Street	6/30/2022	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	2.8	2.8	0	MG/L	0
Dutchman Creek - Oneida Street	6/30/2022	NITROGEN TOTAL	0.924	0.92	0.004	MG/L	0.43
Bower Creek (1) 50m Upstream Of Hwy GV	6/26/2022	PHOSPHORUS TOTAL	0.421	0.37	0.051	MG/L	12.9
Bower Creek (1) 50m Upstream Of Hwy GV	6/26/2022	PHOSPHATE ORTHO DISS	0.272	0.271	0.001	MG/L	0.37
Bower Creek (1) 50m Upstream Of Hwy GV	6/26/2022	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	21	19.8	1.2	MG/L	5.88
Bower Creek (1) 50m Upstream Of Hwy GV	6/26/2022	NITROGEN TOTAL	1.23	1.19	0.04	MG/L	3.31
Plum Creek at VandeHey Farm crossing	6/19/2023	PHOSPHORUS TOTAL	0.185	0.184	0.001	MG/L	0.54
Plum Creek at VandeHey Farm crossing	6/19/2023	PHOSPHATE ORTHO DISS	0.119	0.116	0.003	MG/L	2.55
Plum Creek at VandeHey Farm crossing	6/19/2023	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	13.3	11.7	1.6	MG/L	12.8
Plum Creek at VandeHey Farm crossing	6/19/2023	NITROGEN TOTAL	1.07	1.07	0	MG/L	0
Ashwaubenon Creek - Grant Street	8/21/2023	PHOSPHORUS TOTAL	0.215	0.222	0.007	MG/L	3.2
Ashwaubenon Creek - Grant Street	8/21/2023	PHOSPHATE ORTHO DISS	0.118	0.119	0.001	MG/L	0.84
Ashwaubenon Creek - Grant Street	8/21/2023	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	16.8	16.4	0.4	MG/L	2.41
Ashwaubenon Creek - Grant Street	8/21/2023	NITROGEN TOTAL	1.02	1.02	0	MG/L	0
Garner's Creek DS of CTH Z	6/27/2024	PHOSPHORUS TOTAL	0.128	0.129	0.001	MG/L	0.78

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Monitoring Site	Date	Parameter	Duplicate Sample	Regular Sample	Absolute Difference	Unit	Relative Percent Difference
Garner's Creek DS of CTH Z	6/27/2024	PHOSPHATE ORTHO DISS	0.0636	0.0627	0.0009	MG/L	1.43
Garner's Creek DS of CTH Z	6/27/2024	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	29	30	1	MG/L	3.39
Garner's Creek DS of CTH Z	6/27/2024	NITROGEN TOTAL	1.16	1.19	0.03	MG/L	2.55
East River - HWY G	8/13/2024	PHOSPHORUS TOTAL	0.331	0.33	0.001	MG/L	0.3
East River - HWY G	8/13/2024	PHOSPHATE ORTHO DISS	0.205	0.205	0	MG/L	0
East River - HWY G	8/13/2024	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	37.6	38.5	0.9	MG/L	2.37
East River - HWY G	8/13/2024	NITROGEN TOTAL	2.2	2.19	0.01	MG/L	0.46
Mud Creek - County Highway Bb	6/23/2025	PHOSPHORUS TOTAL	0.298	0.305	0.007	MG/L	2.32
Mud Creek - County Highway Bb	6/23/2025	PHOSPHATE ORTHO DISS	0.188	0.177	0.011	MG/L	6.03
Mud Creek - County Highway Bb	6/23/2025	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	4.6	98	93.4	MG/L	182.07
Mud Creek - County Highway Bb	6/23/2025	NITROGEN TOTAL	0.933	0.945	0.012	MG/L	1.28
Trib to Garner's Creek	8/26/2025	PHOSPHORUS TOTAL	0.219	0.221	0.002	MG/L	0.91
Trib to Garner's Creek	8/26/2025	PHOSPHATE ORTHO DISS	0.182	0.18	0.002	MG/L	1.1
Trib to Garner's Creek	8/26/2025	RESIDUE TOTAL NFLT (TOTAL SUSPENDED SOLIDS)	2.6	2.2	0.4	MG/L	16.67
Trib to Garner's Creek	8/26/2025	NITROGEN TOTAL	0.889	0.917	0.028	MG/L	3.1

Parameter	Level of Detection (LOD) mg/L	Level of Quantification (LOQ) mg/L
TP	0.009	0.03
DRP	0.004	0.013
TSS	2	2
TN	0.058	0.192

Highlighted cells indicate variance (relative percent difference >30%) between regular and duplicate sample results.

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Appendix L: Streamflow and Transparency Data

Streamflow (CFS)

Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Apple Creek	May	N/A	N/A	40.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Apple Creek	June	N/A	N/A	55.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Apple Creek	July	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Apple Creek	August	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Apple Creek	September	N/A	N/A	6.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Apple Creek	October	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ashwaubenon Creek	May	N/A	0.818	N/A	N/A	N/A	N/A	N/A	42.3	3.5	N/A	9.2
Ashwaubenon Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	NA	2.2	100	N/A	0.5

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ashwaubenon Creek	July	N/A	14.6	N/A	N/A	27.1	N/A	13	0	0.9	53.3	3.04
Ashwaubenon Creek	August	N/A	0	46.4	0	0	N/A	1.2	0.9	0	N/A	5.3
Ashwaubenon Creek	September	N/A	16.8	13.9	0	N/A	N/A	0.61	0	0	N/A	1.2
Ashwaubenon Creek	October	N/A	54	36.6	0	N/A	0	N/A	0	0	N/A	0
Baird Creek	May	N/A	2.5	11.2	4.94	N/A	N/A	N/A	60.2	4.9	N/A	N/A
Baird Creek	June	N/A	0.56	12.6	74.69	18.44	N/A	20.2	29.6	1.5	N/A	3.83
Baird Creek	July	N/A	N/A	10	6.1	2.57	N/A	N/A	N/A	217.6	N/A	N/A
Baird Creek	August	N/A	N/A	4.5	47.23	38.25	1.02	N/A	16.8	2.2	27.46	N/A
Baird Creek	September	N/A	N/A	N/A	59.9	N/A	18.4	59.9	67.13	0.01	N/A	N/A

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Baird Creek	October	N/A	4.5	4.1	N/A	N/A	N/A	56.1	0.19	1.7	N/A	N/A
Bower Creek	May	N/A	1.178	8.6	19.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bower Creek	June	N/A	1	2.2	N/A	84.47	N/A	N/A	N/A	N/A	N/A	N/A
Bower Creek	July	N/A	N/A	2.3	1.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bower Creek	August	N/A	N/A	3.5	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bower Creek	September	N/A	N/A	N/A	12.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bower Creek	October	N/A	N/A	4.2	23.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lower Duck Creek (Pamperin Park)	May	N/A	10.95	49.5	74.1	N/A	N/A	36.1	31.7	306	742.2	26.9
Lower Duck Creek (Pamperin Park)	June	N/A	14.9	42.2	510.3	54.7	N/A	316.8	16.2	77.7	471.3	192.1

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lower Duck Creek (Pamperin Park)	July	N/A	7.1	40.5	16.5	97.2	N/A	31.7	20.4	13.7	54.1	16.7
Lower Duck Creek (Pamperin Park)	August	N/A	3.8	52.9	7.2	102	20.3	431.2	34.7	12.1	18.2	14.2
Lower Duck Creek (Pamperin Park)	September	N/A	27.2	40.1	49.3	240	10.2	15.2	32.2	10	7.61	14.1
Lower Duck Creek (Pamperin Park)	October	N/A	34.1	98.3	N/A	154.9	82.1	19.7	16.2	32.2	12.9	14.7
Dutchman Creek	May	N/A	7.713	38.54	19.5	N/A	N/A	N/A	N/A	N/A	N/A	25.11
Dutchman Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dutchman Creek	July	N/A	N/A	7.1	1.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dutchman Creek	August	N/A	N/A	N/A	1.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dutchman Creek	September	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Dutchman Creek	October	N/A	N/A	N/A	0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Middle East River (CTH G)	May	N/A	10.7	26.3	6.5	0	N/A	N/A	N/A	N/A	N/A	N/A
Middle East River (CTH G)	June	N/A	N/A	33.1	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Middle East River (CTH G)	July	N/A	N/A	31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Middle East River (CTH G)	August	N/A	N/A	42.4	16.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Middle East River (CTH G)	September	N/A	N/A	9.5	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Middle East River (CTH G)	October	N/A	N/A	4.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lower East River (HLT)	May	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lower East River (HLT)	June	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Lower East River (HLT)	July	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lower East River (HLT)	August	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lower East River (HLT)	September	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lower East River (HLT)	October	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Garner's Creek	May	N/A	8.24	8.24	8.35	16.97	N/A	N/A	N/A	N/A	6.88	4.19
Garner's Creek	June	3.52	13.85	13.85	14.6	9.55	N/A	7.3	N/A	N/A	9.3	N/A
Garner's Creek	July	N/A	2.31	2.31	1.83	5.74	N/A	4.02	N/A	N/A	N/A	13.36
Garner's Creek	August	N/A	3.77	0	1.93	3.79	N/A	27	N/A	N/A	6.77	9.84
Garner's Creek	September	N/A	5.3	N/A	6.83	26.66	N/A	0	N/A	N/A	N/A	N/A

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Garner's Creek	October	N/A	0	3.22	8.08	25.53	N/A	N/A	N/A	N/A	N/A	5.62
Kankapot Creek	May	N/A	0.0015	N/A	N/A	25.6	N/A	0.559	1.127	N/A	N/A	N/A
Kankapot Creek	June	N/A	10.6	16.6	N/A	0.8	N/A	0.125	1.9	N/A	N/A	N/A
Kankapot Creek	July	N/A	0	2.1	0	139	N/A	0.497	0.36	N/A	N/A	N/A
Kankapot Creek	August	N/A	0.17	1.5	0	0.17	N/A	0.628	0.95	N/A	N/A	N/A
Kankapot Creek	September	N/A	N/A	0.269	0	N/A	0.097	N/A	0.59	N/A	N/A	N/A
Kankapot Creek	October	N/A	0.3	1.868	0	1.33	1	0.26	0.118	N/A	N/A	N/A
Mud Creek	May	N/A	12.9	14.7	3.2	0	N/A	0.8	1.3	N/A	N/A	N/A
Mud Creek	June	N/A	N/A	7.4	6.4	N/A	N/A	1.2	N/A	N/A	N/A	N/A

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Mud Creek	July	N/A	N/A	24.7	2.6	N/A	N/A	7.2	N/A	N/A	N/A	N/A
Mud Creek	August	N/A	3740	24.6	0.6	N/A	1.18	2.6	N/A	N/A	N/A	N/A
Mud Creek	September	N/A	223.5	0.2	7.5	N/A	0.9	9.6	N/A	N/A	N/A	N/A
Mud Creek	October	N/A	4.2	45.7	N/A	N/A	18.7	6.9	N/A	N/A	N/A	N/A
Neenah Slough	May	N/A	12.4	N/A	4.59	0	N/A	N/A	N/A	N/A	N/A	N/A
Neenah Slough	June	N/A	N/A	N/A	20.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Neenah Slough	July	N/A	15.41	7	5.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Neenah Slough	August	N/A	13.2	9.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Neenah Slough	September	N/A	N/A	26	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A

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Neenah Slough	October	N/A	7.7	13.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plum Creek (VandeHey)	May	N/A	N/A	3.7	2.3	13.2	N/A	N/A	N/A	N/A	N/A	N/A
Plum Creek (VandeHey)	June	N/A	N/A	16	36.3	4.9	N/A	1.2	N/A	N/A	N/A	N/A
Plum Creek (VandeHey)	July	N/A	N/A	4.7	3.3	3.3	N/A	10	N/A	N/A	N/A	N/A
Plum Creek (VandeHey)	August	N/A	2.6	0.9	0.8	7	0.7	6.73	N/A	N/A	N/A	N/A
Plum Creek (VandeHey)	September	N/A	2.7	N/A	9.1	N/A	0.8	2	N/A	N/A	N/A	N/A
Plum Creek (VandeHey)	October	N/A	2.6	1.3	7	66.3	13	1.9	N/A	N/A	N/A	N/A
Lancaster Creek	May	N/A	N/A	24.9	4.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lancaster Creek	June	N/A	0	N/A	6.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Lancaster Creek	July	N/A	0	8.64	2.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lancaster Creek	August	N/A	0	8.99	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A
Lancaster Creek	September	N/A	0	2.98	23.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lancaster Creek	October	N/A	0	5.07	6.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Upper Duck Creek (CTH S)	May	N/A	N/A	N/A	N/A	55.6	N/A	N/A	6.3	4.1	21.5	9.54
Upper Duck Creek (CTH S)	June	N/A	N/A	N/A	N/A	9.2	N/A	N/A	N/A	0	N/A	3.88
Upper Duck Creek (CTH S)	July	N/A	N/A	N/A	N/A	28.7	N/A	30	0	1.5	47	8.83
Upper Duck Creek (CTH S)	August	N/A	N/A	N/A	N/A	2.9	N/A	0.7	2.2	0	27	8.83
Upper Duck Creek (CTH S)	September	N/A	N/A	N/A	N/A	N/A	0	36.2	1.9	0	N/A	N/A

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Upper Duck Creek (CTH S)	October	N/A	N/A	N/A	N/A	N/A	0	10.3	7.5	N/A	N/A	0
Middle Duck Creek (Seminary Rd)	May	N/A	N/A	N/A	N/A	N/A	N/A	16.4	22.4	18.7	296.2	100
Middle Duck Creek (Seminary Rd)	June	N/A	N/A	N/A	N/A	232	N/A	191.5	13.1	35.1	221	7.5
Middle Duck Creek (Seminary Rd)	July	N/A	N/A	N/A	N/A	46	N/A	20.8	N/A	8.3	17.8	15.2
Middle Duck Creek (Seminary Rd)	August	N/A	N/A	N/A	N/A	20.2	6.1	229.6	24.3	8.2	8.7	8.71
Middle Duck Creek (Seminary Rd)	September	N/A	N/A	N/A	N/A	127.3	3.9	9.4	15.1	8.1	4.1	7.2
Middle Duck Creek (Seminary Rd)	October	N/A	N/A	N/A	N/A	63.7	34.7	12.3	12.1	21.1	6.13	4.7
Upper East River (Mallard Rd)	May	N/A	N/A	N/A	5.6	32	N/A	N/A	N/A	N/A	N/A	N/A
Upper East River (Mallard Rd)	June	N/A	N/A	N/A	49.6	8.7	N/A	N/A	N/A	N/A	N/A	N/A

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Upper East River (Mallard Rd)	July	N/A	N/A	N/A	3.4	6.2	N/A	15	N/A	N/A	N/A	N/A
Upper East River (Mallard Rd)	August	N/A	N/A	N/A	0.7	15.7	1.4	4.65	N/A	N/A	N/A	N/A
Upper East River (Mallard Rd)	September	N/A	N/A	N/A	23.5	N/A	1.5	3.9	N/A	N/A	N/A	N/A
Upper East River (Mallard Rd)	October	N/A	N/A	N/A	13.7	N/A	23.5	5.1	N/A	N/A	N/A	N/A
Trib to Garner's Creek	May	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Trib to Garner's Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	1.2	N/A	N/A	N/A	N/A
Trib to Garner's Creek	July	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Trib to Garner's Creek	August	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Trib to Garner's Creek	September	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Trib to Garner's Creek	October	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
West Plum Creek (County Line)	May	N/A	N/A	N/A	N/A	N/A	N/A	3.1075	N/A	N/A	N/A	N/A
West Plum Creek (County Line)	June	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A
West Plum Creek (County Line)	July	N/A	N/A	N/A	N/A	N/A	N/A	0.978	N/A	N/A	N/A	N/A
West Plum Creek (County Line)	August	N/A	N/A	N/A	N/A	N/A	0	0.732	N/A	N/A	N/A	N/A
West Plum Creek (County Line)	September	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
West Plum Creek (County Line)	October	N/A	N/A	N/A	N/A	N/A	N/A	3.34	N/A	N/A	N/A	N/A
Wequiock Creek	May	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12.5	N/A	9.2
Wequiock Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	8.21	N/A	N/A	61.5	76

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Wequiock Creek	July	N/A	N/A	N/A	N/A	N/A	N/A	8.2	N/A	N/A	N/A	104
Wequiock Creek	August	N/A	N/A	N/A	N/A	N/A	N/A	7.68	N/A	N/A	9.5	8.8
Wequiock Creek	September	N/A	N/A	N/A	N/A	N/A	0.192	N/A	N/A	N/A	35	4.3
Wequiock Creek	October	N/A	N/A	N/A	N/A	N/A	0.05	11.3	N/A	N/A	N/A	N/A

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Transparency (CM)

Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Apple Creek	May	N/A	N/A	10	41	N/A	N/A	N/A	120	120	120	120
Apple Creek	June	N/A	N/A	5	59	12	N/A	N/A	60	120	66	120
Apple Creek	July	N/A	N/A	5	47	N/A	N/A	N/A	46	120	12	30
Apple Creek	August	N/A	N/A	N/A	N/A	N/A	25	N/A	4	34	31	50
Apple Creek	September	39	N/A	7	1	32	26	81	17	35	N/A	58
Apple Creek	October	N/A	N/A	N/A	70	N/A	N/A	N/A	109	83	101	57
Ashwaubenon Creek	May	N/A	18	N/A	42	N/A	N/A	N/A	50	47	4	74
Ashwaubenon Creek	June	N/A	31	N/A	17	N/A	N/A	18	24	25	3	39
Ashwaubenon Creek	July	N/A	40	N/A	12	27	N/A	16	22	24	7	24

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ashwaubenon Creek	August	N/A	15	16	32	26	28	31	30	47	28	27
Ashwaubenon Creek	September	18	12	68	21	9	51	39	78	49	79	61
Ashwaubenon Creek	October	N/A	18	21	35	13	101	115	110	93	102	101
Baird Creek	May	N/A	120	110	79	17	N/A	N/A	105	120	120	113
Baird Creek	June	N/A	55	24	54	N/A	N/A	60	97	120	63	38
Baird Creek	July	N/A	N/A	18	10	36	N/A	40	N/A	66	45	35
Baird Creek	August	N/A	N/A	N/A	76	8	120	12	63	53	12	49
Baird Creek	September	83	N/A	102	55	40	115	N/A	120	51	91	84
Baird Creek	October	N/A	81	120	26	29	20	120	120	120	N/A	120

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Bower Creek	May	N/A	97	85	62	15	N/A	N/A	60	83	5	47
Bower Creek	June	N/A	35	N/A	21	55	N/A	35	36	83	6	40
Bower Creek	July	N/A	N/A	11	64	21	N/A	10	N/A	45	44	44
Bower Creek	August	N/A	N/A	80	78	15	37	33	39	58	30	33
Bower Creek	September	36	N/A	56	38	17	27	42	N/A	67	105	60
Bower Creek	October	N/A	N/A	56	113	58	N/A	102	N/A	50	110	115
Lower Duck Creek (Pamperin Park)	May	N/A	55	99	105	120	N/A	85	100	92	16	95
Lower Duck Creek (Pamperin Park)	June	N/A	22	45	33	15	N/A	27	100	41	15	14
Lower Duck Creek (Pamperin Park)	July	N/A	28	25	46	31	N/A	92	40	80	80	62

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lower Duck Creek (Pamperin Park)	August	N/A	32	55	53	45	25	24	N/A	60	110	40
Lower Duck Creek (Pamperin Park)	September	N/A	55	53	93	29	84	100	93	66	100	85
Lower Duck Creek (Pamperin Park)	October	N/A	78	23	N/A	96	69	100	97	100	100	82
Dutchman Creek	May	N/A	72	55	83	17	N/A	N/A	85	15	120	110
Dutchman Creek	June	N/A	N/A	47	14	37	N/A	83	120	120	54	N/A
Dutchman Creek	July	N/A	N/A	58	45	24	N/A	19	N/A	99	40	101
Dutchman Creek	August	N/A	55	35	62	26	35	62	N/A	81	100	120
Dutchman Creek	September	N/A	N/A	105	63	29	109	50	88	32	66	120
Dutchman Creek	October	N/A	N/A	2	120	34	N/A	103	N/A	115	120	120

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Middle East River (CTH G)	May	N/A	23	16	16	29	N/A	N/A	28	26	47	24
Middle East River (CTH G)	June	N/A	N/A	10	24	12	N/A	18	N/A	28	15	17
Middle East River (CTH G)	July	N/A	N/A	15	15	37	N/A	33	31	45	16	19
Middle East River (CTH G)	August	N/A	N/A	10	27	28	39	26	28	45	20	27
Middle East River (CTH G)	September	N/A	2	44	16	N/A	51	55	43	36	45	36
Middle East River (CTH G)	October	N/A	N/A	N/A	74	21	27	85	70	65	47	37
Lower East River (HLT)	May	N/A	40	50	32	0	N/A	34	29	38	41	22
Lower East River (HLT)	June	N/A	N/A	30	15	1	N/A	0	30	45	34	51
Lower East River (HLT)	July	N/A	N/A	16	21	32	N/A	7	11	24	20	47

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lower East River (HLT)	August	N/A	N/A	29	N/A	11	0	24	29	7	0	31
Lower East River (HLT)	September	N/A	N/A	32	4	6	N/A	20	15	N/A	10	31
Lower East River (HLT)	October	N/A	N/A	29	14	33	15	0	40	28	15	25
Garner's Creek	May	N/A	23	23	45	53	N/A	N/A	N/A	N/A	66	59
Garner's Creek	June	22	9	9	16	13	N/A	67	N/A	N/A	19	24
Garner's Creek	July	N/A	25	25	27	22	N/A	52	N/A	N/A	38	31
Garner's Creek	August	N/A	13	19	30	22	41	12	N/A	N/A	45	10
Garner's Creek	September	N/A	23	35	64	21	34	114	N/A	N/A	81	36
Garner's Creek	October	N/A	32	80	120	43	96	120	N/A	N/A	105	35

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Kankapot Creek	May	N/A	56	16	N/A	78	N/A	44	78	78	38	43
Kankapot Creek	June	N/A	10	7	28	22	N/A	24	25	22	10	44
Kankapot Creek	July	N/A	5	12	54	27	N/A	24	35	21	14	20
Kankapot Creek	August	N/A	18	44	9	26	55	15	12	13	15	5
Kankapot Creek	September	N/A	N/A	8	0	13	32	43	15	31	55	21
Kankapot Creek	October	N/A	44	43	90	30	40	45	58	30	68	32
Mud Creek	May	N/A	120	100	84	67	N/A	45	120	120	112	120
Mud Creek	June	N/A	53	114	93	81	N/A	120	120	120	120	120
Mud Creek	July	N/A	120	76	102	N/A	N/A	120	120	58	N/A	120

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Mud Creek	August	N/A	94	79	108	N/A	N/A	113	120	120	115	115
Mud Creek	September	N/A	48	71	89	N/A	120	120	25	111	120	N/A
Mud Creek	October	N/A	120	80	120	N/A	56	80	120	17	65	120
Neenah Slough	May	18	120	42	117	46	N/A	N/A	N/A	50	62	N/A
Neenah Slough	June	N/A	19	43	114	87	N/A	51	86	106	64	82
Neenah Slough	July	N/A	93	120	120	120	N/A	120	92	102	70	116
Neenah Slough	August	N/A	120	118	120	115	81	106	93	1	1	113
Neenah Slough	September	N/A	N/A	120	120	26	66	111	58	113	10	105
Neenah Slough	October	N/A	116	46	120	50	31	87	80	37	96	90

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Plum Creek (VandeHey)	May	N/A	N/A	34	26	52	N/A	N/A	22	25	3	N/A
Plum Creek (VandeHey)	June	N/A	N/A	12	14	20	N/A	22	11	36	17	N/A
Plum Creek (VandeHey)	July	N/A	N/A	15	21	22	N/A	22	23	39	28	N/A
Plum Creek (VandeHey)	August	N/A	19	15	30	18	30	27	25	25	40	N/A
Plum Creek (VandeHey)	September	N/A	7	46	8	21	42	31	N/A	N/A	N/A	N/A
Plum Creek (VandeHey)	October	N/A	32	30	75	6	22	51	35	N/A	N/A	N/A
Lancaster Creek	May	N/A	89	104	65	44	N/A	104	N/A	120	25	120
Lancaster Creek	June	N/A	0	N/A	61	101	N/A	N/A	104	69	58	38
Lancaster Creek	July	N/A	54	65	65	N/A	N/A	N/A	107	41	38	59

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Lancaster Creek	August	N/A	12	77	23	85	120	120	120	67	76	32
Lancaster Creek	September	N/A	117	120	95	120	120	N/A	N/A	91	80	59
Lancaster Creek	October	N/A	117	120	120	120	106	N/A	120	120	120	120
Upper Duck Creek (CTH S)	May	N/A	N/A	N/A	82	56	N/A	16	71	84	100	99
Upper Duck Creek (CTH S)	June	N/A	N/A	N/A	65	70	N/A	54	36	59	12	80
Upper Duck Creek (CTH S)	July	N/A	N/A	N/A	33	48	N/A	57	42	61	59	58
Upper Duck Creek (CTH S)	August	N/A	N/A	N/A	35	55	34	21	60	47	53	64
Upper Duck Creek (CTH S)	September	N/A	N/A	N/A	58	34	31	33	71	40	81	43
Upper Duck Creek (CTH S)	October	N/A	N/A	N/A	69	25	67	77	115	N/A	83	82

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Middle Duck Creek (Seminary Rd)	May	N/A	N/A	N/A	120	51	N/A	92	100	97	15	18
Middle Duck Creek (Seminary Rd)	June	N/A	N/A	N/A	83	14	N/A	30	71	72	21	99
Middle Duck Creek (Seminary Rd)	July	N/A	N/A	N/A	75	46	N/A	59	N/A	90	41	72
Middle Duck Creek (Seminary Rd)	August	N/A	N/A	N/A	67	75	90	20	N/A	91	98	64
Middle Duck Creek (Seminary Rd)	September	N/A	N/A	N/A	2	41	95	100	96	100	95	87
Middle Duck Creek (Seminary Rd)	October	N/A	N/A	N/A	N/A	100	83	100	95	100	100	92
Upper East River (Mallard Rd)	May	N/A	N/A	N/A	25	51	N/A	N/A	53	47	6	N/A
Upper East River (Mallard Rd)	June	N/A	N/A	N/A	15	12	N/A	N/A	10	15	12	N/A
Upper East River (Mallard Rd)	July	N/A	N/A	N/A	13	24	N/A	20	24	22	18	N/A

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Upper East River (Mallard Rd)	August	N/A	N/A	N/A	33	27	16	28	30	22	33	N/A
Upper East River (Mallard Rd)	September	N/A	N/A	N/A	15	20	27	58	32	N/A	N/A	N/A
Upper East River (Mallard Rd)	October	N/A	N/A	N/A	67	11	30	100	N/A	N/A	N/A	N/A
Trib to Garner's Creek	May	N/A	N/A	N/A	N/A	N/A	N/A	120	120	76	120	120
Trib to Garner's Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	120	20	55	11	27
Trib to Garner's Creek	July	N/A	N/A	N/A	N/A	N/A	N/A	65	66	90	N/A	102
Trib to Garner's Creek	August	N/A	N/A	N/A	N/A	N/A	49	23	60	65	19	85
Trib to Garner's Creek	September	N/A	N/A	N/A	N/A	N/A	120	37	33	65	120	70
Trib to Garner's Creek	October	N/A	N/A	N/A	N/A	N/A	26	80	53	95	113	47

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
West Plum Creek (County Line)	May	N/A	N/A	N/A	N/A	N/A	N/A	18	74	35	108	102
West Plum Creek (County Line)	June	N/A	N/A	N/A	N/A	N/A	N/A	24	26	43	19	109
West Plum Creek (County Line)	July	N/A	N/A	N/A	N/A	N/A	N/A	45	45	110	14	104
West Plum Creek (County Line)	August	N/A	N/A	N/A	N/A	N/A	23	19	9	99	64	72
West Plum Creek (County Line)	September	N/A	N/A	N/A	N/A	N/A	16	32	17	120	39	53
West Plum Creek (County Line)	October	N/A	N/A	N/A	N/A	N/A	15	38	31	120	88	46
Wequiock Creek	May	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	120	115	115
Wequiock Creek	June	N/A	N/A	N/A	N/A	N/A	N/A	68	N/A	N/A	N/A	8
Wequiock Creek	July	N/A	N/A	N/A	N/A	N/A	N/A	63	N/A	N/A	106	65

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Monitoring Site	Month	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Wequiock Creek	August	N/A	N/A	N/A	N/A	N/A	69	48	N/A	42	118	42
Wequiock Creek	September	N/A	N/A	N/A	N/A	N/A	120	N/A	N/A	120	120	120
Wequiock Creek	October	N/A	N/A	N/A	N/A	N/A	115	82	N/A	120	120	N/A

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Appendix M: Lower Fox River Basin Volunteer Monitoring Fact Sheet

Lower Fox River Basin Volunteer Monitoring Fact Sheet

In 2012, the U.S Environmental Protection Agency (EPA) approved the Lower Fox River Total Maximum Daily Load (TMDL). The TMDL identifies the need for pollutant reductions in waterbodies throughout the basin to meet water quality standards. There are 27 stream segments in the Lower Fox basin listed as impaired due to excess phosphorus and/or sediment loading.

Phosphorus is an essential nutrient for plant growth, but can have detrimental effects on lakes, rivers, and streams when excessive amounts are introduced to these systems. Common forms of pollutant delivery in these systems include surface runoff from urban and agricultural areas and discharges from wastewater treatment facilities, industrial businesses, and farms. Excess phosphorus in a river system can create harmful algal blooms during the summer months which impact human, plant, and animal life.

In 2015, the Lower Fox River Volunteer Monitoring Program began to help achieve the monitoring goals outlined in the TMDL. There are 20 stream monitoring locations total across 16 tributary streams which are monitored by citizen volunteers. Volunteers are relied upon to collect surface water samples following WDNR protocol on a monthly basis between the months of May and October. Water samples are shipped to the State Lab of Hygiene in Madison and are analyzed for Total Phosphorus, Total Suspended Solids, and Total Nitrogen.

Lower Fox River Basin Facts:

- Watershed area: 641 square miles (403,657 acres)
- Includes 4 counties (Brown, Outagamie, Calumet, Winnebago) and Oneida Tribal Land
- 27 impaired waterbody segments
- Approx. 300 farms
- 29 MS4s*
- 32 Dischargers:
 - 14 municipal
 - 18 industrial

Want to get involved or have questions? Contact:

Grace Hiley
Water Resource Management
Specialist
Phone: (920) 296-5126
Email:
Grace.Hiley@wisconsin.gov

See backside for exact sample locations.



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	Stream Name	WBIC	SWIMS ID	SWIMS Station Name	Latitude, Longitude	Impairment
1	Ashwaubenon Creek	122200	10016502	Ashwaubenon Creek at Grant Street	44.44508, -88.09875	TP and TSS
2	Lower Duck Creek	409700	10038644	Duck Creek at Pamperin Park	44.54773, -88.10285	TP and TSS
3	Wequiock Creek	3000022	10010769	Wequiock Creek at Nicolet Rd/CTH A	44.57651, -87.89083	None
4	Bower Creek	118400	10009445	Bower Creek (1) 50m Upstream of CTH GV	44.45179, -87.99543	TP and TSS
5	Upper East River	118000	053508	East River at Mallard Rd	44.33542, -88.11198	TP and TSS
6	West Plum Creek	125200	10016494	West Plum Creek Downstream of County Line Rd	44.30296, -88.18901	TP
7	Mid Duck Creek	409700	453255	Duck Creek at Seminary Rd	44.46608, -88.21892	TP and TSS
8	Baird Creek	118100	053683	Baird Creek at Preble WI	44.50741, -87.96754	TP and TSS
9	East River	118000	10043279	East River at Harold Lewis Trail off Main Street	44.51633, -88.00587	TP and TSS
10	Plum Creek	125100	10046999	Plum Creek at VandeHey Farm Crossing	44.31540, -88.17154	TP and TSS
11	Tributary to Garner's Creek	5022162	10047157	Trib. to Garner's Creek at CTH CE	44.25392, -88.30658	TP
12	Dutchman Creek	121600	10015851	Dutchman Creek at Oneida Street	44.47859, -88.0723	TP
13	Upper Duck Creek	409700	10029975	Duck Creek at CTH S	44.38665, -88.32509	TP and TSS
14	Garner's Creek	127700	10043028	Garner's Creek Downstream of CTH Z	44.2701, -88.29816	TP and TSS
15	Kankapot Creek	126800	453261	Kankapot Creek at CTH Z Dodge St 100 Ft upstream of Bridge	44.27504, -88.26778	TP and TSS
16	Lancaster Creek	410000	10034510	Unnamed Trib. (410000) at Lakeview Dr	44.56583, -88.06471	
17	Mud Creek	129500	453258	Mud Creek at CTH BB	44.24417, -88.46037	TP and TSS
18	East River	118000	053675	East River at CTH G	44.43550, -88.02457	TP and TSS
19	Apple Creek	124100	053684	Apple Creek at Rosin Rd	44.34861, -88.16119	TP and TSS
20	Neenah Slough	130800	10032175	Neenah Slough #2 (100ft S of Adams St)	44.18274, -88.47481	TP

*SWIMS – Surface Water Integrated Monitoring System; a Wisconsin DNR information system that holds chemistry (water, sediment), physical, and biological (macroinvertebrate, aquatic invasive species) surface water data.

[Link to Lower Fox River Basin Volunteer Monitoring Webpage](#)

Lower Fox River Basin Volunteer Monitoring Program 2025 Annual Report

Appendix N: Mason Jar Photos

