2024 STATUS REPORT
WATER QUALITY TRADING PLAN
ELEVA STRUM WWTP

ELEVA-STRUM, WI



DECEMBER 2024

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ELEVA-STRUM, WI

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1 EXECUTIVE SUMMARY

The existing WPDES Permit for the Eleva-Strum Sewer Commission wastewater treatment facility (WWTF) includes an effluent limit of 0.075 mg/L phosphorus and that is expected to continue with the reissued Permit. Eleva-Strum plans to continue to comply with the permit through Water Quality Trades (WQT) to offset the discharged phosphorus mass to meet the 0.075 mg/L limit. The WWTP discharges to the Buffalo River in Trempealeau County. All WQT projects needed are completed. This report updates flows, credit calculations, SPARROW values, and other values that are known to have changed since the original WQT report was submitted.

In 2020-2024, the discharge flow from the Eleva-Strum WWTP averaged 0.11 MGD. The 2020-2024 average effluent phosphorus concentration was 0.126 mg/L. The effluent phosphorus mass loading at 0.11 MGD and 0.126 mg/L is 41 lbs./year. At the same flow, the 0.075 mg/L Permit limit reduces the phosphorus mass loading to 24 lbs./year, a reduction of 17 lbs./year. This is the Base Trade amount to offset by WQT for current conditions. With a 3:1 Trade Ratio, WQT needs to secure an equivalent of 51 lbs./year of credit to meet the limit via Water Quality Trade (WQT). The Base Trade amount increases to 93 lbs./year (TR=3:1) at the Design Flow.

The projects described in the original Water Quality Trading Plan have all been constructed, inspected annually and continue to perform as planned. Those will continue in use during the new Permit term and will continue to provide the ~~231~~ 238 lbs./year in Phosphorus credit.

2 PURPOSE OF WATER QUALITY TRADING PLAN

The purpose of this 2024 Status Report to the Water Quality Trading Plan is to describe how the Eleva Strum WWTF utilizes water quality trading (WQT) to comply with the phosphorus limits for the renewal application filed in October 2024.

3 DESCRIPTION OF EXISTING LAND USES IN VICINITY OF WQT PROJECTS

Several of the WQT sites are located along the banks of Crystal Lake, within the Village of Strum in northern Trempealeau County. Crystal Lake is a flowage of the Buffalo River and is a 55-acre lake with a maximum depth of eight feet. While the main portion of Crystal Lake is occupied by single family dwellings in the Village of Strum, the eastern portion of the lake is wetlands and forest, and the northern side includes parklands and a campground. The Buffalo River upstream of Crystal Lake is heavily dominated by agricultural practices and is the receiving body of water for several streams that carry high phosphorus loads due to agricultural runoff and the desedimentation of streambanks.

3.1 Below Dam – Both North and South Side

The specific 250-foot riprap WQT site (North Side) and the 140-foot riprap WQT site (South Side) are located directly below the Crystal Lake dam that runs along 5th Avenue in Strum. The land immediately surrounding the lower dam site and streambank is planted in bluegrass and serves as a lawn primarily for use by fishermen.

3.2 Parking Lot Site

The specific 45-foot streambank WQT site is located on the southwest side of Crystal Lake, within Woodland Park. It is located near a parking lot that once served as a tennis court. The land immediately surrounding the streambank is planted in bluegrass and serves as a lawn for the park.

3.3 Campground

The approximately 400-foot streambank WQT site is located on the northwest side of Crystal Lake. The property is the Village of Strum's campground facility. The campground maintains 42 camping sites and is across the street from a nine (9) hole golf course. The streambank height ranges from four to six feet. There is a large goose population near the banks. The land surrounding the streambanks is planted in bluegrass and serves as a lawn for the campground facility.

3.4 Kinville & Crawford Site

The approximately 300 linear foot Kinville and Crawford WQT project site is located northeast of Strum south of USH 10 and along the Buffalo River. The project site is mainly open space along the streambank. There are twelve (12) foot high stream banks. The Buffalo River can experience high velocities during flood periods.

The WWTF Outfall Pipe discharge to the Buffalo River is downstream of all the project sites.

4 MANAGEMENT PRACTICES USED TO GENERATE CREDITS

Below Dam – North Side. The 250-foot streambank site for this WQT project was chosen as a site to generate WQT credits through a **riprap project,** as this section of streambank below the dam is where very high-velocity waters rapidly erode the banks during flood events. It was determined that riprapping the site to permanently armor the banks was the best solution to the problem, along with covering the rock with topsoil and native plantings.

Below Dam – South Side. The 140-foot streambank WQT site for this project was chosen as a site to generate WQT credits through a **riprap project**, as this section of streambank below the dam is where very high-velocity waters rapidly erode the banks during flood events. It was determined that riprapping the site to permanently armor the banks was the best solution to the problem, along with covering the rock with topsoil and native plantings.

Parking Lot Site. The 45-foot streambank site for this WQT project was chosen as a site to generate WQT credits through a **riprap project**, as this section of streambank was where high-velocity waters rapidly erode the banks during flood events. It was determined that riprapping the site to permanently armor the banks was the best solution to the problem, along with covering the rock with topsoil and native plantings.

Campground. The 400-foot streambank WQT site for this project was chosen as a site to generate WQT credits through a **riprap project**, as this section is near the inlet of Beaver Creek to Crystal Lake where high-velocity waters rapidly erode the banks during flood events. It was also determined that riprapping the site to permanently armor the banks was the best solution to the problem, along with covering the rock with topsoil and native plantings. The campground area is a portion of the lake where geese also congregate. Each goose produces two pounds of manure per day, adding a source of phosphorus.

Kinville and Crawford. The 300-foot streambank WQT site for this project was chosen as a site to generate WQT credits through a **riprap project,** as this section of streambank is where very high-velocity waters rapidly erode the banks during flood events. The banks are also very high and benefit from streambank protection.

4.1 Duration of Management Practice

The duration of the rock riprap streambank restoration management practices can be essentially 100+ years if maintained properly. The construction required shaping of the streambank and

placement of properly sized riprap. In several of the projects, the landowner is the Village. The operation and maintenance are discussed in more detail in Section 13 of this plan.

5 AMOUNT OF CREDIT BEING GENERATED

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The original calculations show that the WQT projects prevent ~~231~~ pounds of phosphorus per year from entering Crystal Lake and Buffalo River. The NRCS Streambank Erosion Estimator (Direct Volume Method) spreadsheet was used to calculate the phosphorus credits. The percentage phosphorus in the soil was sampled by the Trempealeau County Land Conservation Staff and tested by the University of Wisconsin Soil and Forage Analysis Laboratory. See **Appendix 5-1** for the Phosphorus Loss Calculation and **Appendix 5-2** for the Soil Test Lab results.

6 DESCRIPTION OF APPLICABLE TRADE RATIO PER AGREEMENT/MANAGEMENT PRACTICE

Trade Ratio = Delivery + Downstream + Equivalency + Uncertainty – Habitat Adjustment:1

6.1 Delivery Factor

The delivery factor is determined by the following equation:

Delivery Fraction = (1 / SPARROW delivery fraction) – 1

The SPARROW delivery fraction is determined by a model found on the USGS website. The WDNR has implemented the Sparrow trade factors onto the Surface Data Viewer on their website. Upon review of the website the delivery factor was shown to be a 1:1 ratio (a zero in the trade ratio equation). The WWTP has a delivery fraction of 0.92. See **Appendix 6-1** for the SPARROW Map.

Below Dam – Both North and South. The credit user (WWTP) and credit generator (project site) are in the same HUC 12 basin, and the credit generator is upstream of the credit user. Since the credit generator is upstream of the credit user and in the same HUC 12, the delivery factor is zero (0). See **Appendix 6-2** for the HUC 12 Watershed Basin Maps.

Parking Lot. The credit user and credit generator are in two (2) different HUC 12 basins, but the same HUC 10 basin. The credit generator is upstream of the credit user and the distance between the two is approximately 1.0 miles or 2.1 miles if the meandering path of the Buffalo River is measured. Per the *Guidance for Implementing Water Quality Trading in WPDES Permits*, the Delivery Factor in section 2.11.1 states “The delivery factor accounts for the distance between trading partners and the impact that this distance has on the fate and transport of the traded pollutant in surface waters” (pg. 14). Based upon the Sparrow fraction discussed previously in this report, the fraction for both HUC 12 basins are identical, which results in a delivery factor value of zero (0).

Campground. The credit user and credit generator are in two (2) different HUC 12 basins, but the same HUC 10 basin. The credit generator is upstream of the credit user. Based upon the identical Sparrow fraction for both HUC 12 basins, the delivery factor value is zero (0).

Kinville and Crawford. The credit user and credit generator are in two (2) different HUC 12 basins, but the same HUC 10 basin. The credit generator is upstream of the credit user. Based upon the identical Sparrow fraction for both HUC 12 basins, the delivery factor value is zero (0).

The delivery factor for each of the project sites is as follows:

Site	Delivery Fraction	Delivery Factor
WWTP	0.92	0
N and S of Dam	0.92	0
Parking Lot	0.92	0
Campground	0.92	0
Kinville and Crawford	0.92	0

The credit user and every site have the same delivery fraction, 0.92. The Delivery Factor is zero (0) for all sites.

6.2 Downstream Factor

The Department of Natural Resources guidance (2013) states, “The downstream factor is used to help prevent a violation of water quality criteria in the receiving water between the credit user and generator.” (pg. 16). The downstream factor is only measured when the credit generator is downstream of the credit user. If the credit generator is upstream of the user, then the downstream factor is zero. In this case, all the project sites are upstream of the credit user, therefore the downstream factor is zero (0).

6.3 Equivalency Factor

The WQT for the credit user is based upon total phosphorus (TP). When accounting for the equivalency factor for TP, the equivalency factor is zero. This is because the differences between the soluble and sediment-bound P have been accounted for in the Delivery Factor (pg. 17). The equivalency factor is zero (0).

6.4 Uncertainty Factor

The uncertainty factor is used to compensate for the uncertainty of the effectiveness of the WQT project/plan. The uncertainty, especially with non-point discharges, is because many factors which are not controllable determine the effectiveness of the implementation, such as climate, potential inaccuracies from field testing or the reliability of the management practice to perform under various hydrological conditions. The WDNR has established a table to help assign values to the uncertainty variable of the equation. The table can be seen on pages 20-23 in the *Guidance for Implementing Water Quality Trading in WPDES Permits* (Wisconsin Department of Natural Resources, 2013).

6.4.1 Bank Stabilization

For bank stabilizations, WDNR has assigned an Uncertainty Factor value of three (3) without aquatic habitat restoration. These WQT projects have an Uncertainty Factor value of three (3).

In addition to the bank stabilization, the project involved constructing a 30-foot wide vegetative buffer along the top of the bank. Based upon the above-mentioned table, an assigned Uncertainty Factor of three (3) applies to the buffers. There is no habitat adjustment for the buffers.

6.5 Habitat Adjustment

To be eligible to claim credit for habitat restoration the surface water where the project work is taking place must be listed by WDNR as an impaired water body due to the pollutant which the credit user is attempting to mitigate.

Per the WDNR website https://dnr.wi.gov/water/impairedDetail.aspx?key=14496, the waterbody of the Buffalo River is considered an impaired system (Degraded Biological Community) due to total phosphorus and would qualify for Aquatic Habitat Adjustment. The Buffalo River Impaired Water documentation can be seen in **Appendix 6-2**.

In order to obtain the Habitat Adjustment, best management practices must be implemented and established as part of the project. Per Table 4, pg. 21 of the *Guidance for Implementing Water Quality Trading in WPDES Permits*, the Uncertainty Factor for the Buffalo River can be reduced from a three (3) to a two (2) with aquatic habitat restoration.

Kinville and Crawford. This WQT project included construction of fish habitat features per NRCS guidance and those are still in place. The fish habitat at this site includes three (3) root wads. According to the landowner the habitat structures are still in place and functioning properly (December 2024). The Habitat Adjustment factor for this project is one (1).

All Other Sites. Due to the locations of the project sites, construction of fish habitat was not considered practical and those sites do not qualify for Habitat Adjustment credit.

6.6 Summary

Table 6.1 below summarizes the list of projects and their trade ratio. Not all projects have the same trade ratio.

TABLE 6.1: WATER QUALITY TRADING FACTORS

	Project	Delivery Factor	Downstream Factor	Equivalency Factor	Uncertainty Factor	Habitat Adjustment	Trade Ratio
1	Below Dam South Side	0	0	0	3	0	**3**
2	Below Dam North Side	0	0	0	3	0	**3**
3	Parking Lot	0	0	0	3	0	**3**
4	Crystal Lake Campground	0	0	0	3	0	**3**
5	Kinville and Crawford	0	0	0	3	1	**2**

7 LOCATIONS WHERE CREDITS ARE GENERATED

Credits are generated in different areas within the Eleva Strum Sanitary District WWTF HUC 12 and adjacent HUC 12. The Buffalo River and Crystal Lake are used to generate credits in this plan.

Below Dam – South Side. This site is located directly underneath the dam of Crystal Lake, in the Village of Strum. The site is depicted in **Appendix 7-1** and described as "Below Dam – South Side." The dam that goes underneath 5th Avenue in Strum is in the middle of the photo. The site was originally planned to have 192 feet of streambank, but the first ~50 feet of streambanks were already riprapped some time ago. The credit calculations for this project only includes the 140 feet of new work.

Below Dam – North Side. This site is located directly underneath the dam of Crystal Lake, in the Village of Strum. The site is depicted in **Appendix 7-1** and described as "Below Dam – North Side."

Parking Lot Site. This site is located along the banks of Crystal Lake, within Woodland Park in the Village of Strum. The site is depicted in **Appendix 7-1** and described as "Parking Lot." In the air photo, the old tennis court/parking lot can be seen, along with the banks of Woodland Park. The dam in Strum is on the far left in the photo.

Campground. This site is located directly on the northeast side of Crystal Lake, in the Village of Strum. The site is depicted in **Appendix 7-2** and described as "Campground Project Site." The dam is located to the west of the project. Geese congregate in this area, which produces a large amount of phosphorus that could be transported into the surface water. The installation of riprap helps prevent the geese from congregating at the edge and also reduces the phosphorus from sediment entering the water.

Kinville and Crawford. This site is located along Buffalo River, northeast of the Village of Strum. The site is depicted in **Appendix 7-3** and described as "Kinville and Crawford Project Location Map."

8 TIMELINE FOR CREDITS AND AGREEMENTS

All projects are completed and producing credits.

Streambank Stabilization. Since the sites are armored and performing as designed, they continue to generate credit on an annual basis as long as the riprap is maintained.

9 METHOD FOR QUANTIFYING CREDITS

Streambank Stabilization. Phosphorus loss for this streambank project was produced using the equation of P_L = (L) (H) (R) (P_c), as shown in the worksheet in **Appendix 5-1**. The data for the streambank in linear feet, the average stream bank height in feet, and the total soil phosphorus concentration in units of % P (see attached soil test data from the University of Wisconsin Soil Science Laboratory) were used to determine the phosphorus loss in pounds per year. The calculations showed the projects would withhold ~~**231**~~ 238 **pounds** of phosphorus from entering the Buffalo River and Crystal Lake each year.

10 TRACKING PROCEDURES

This project was tracked with photography before, during, and after riprap installation. The projects are monitored with annual inspections that are documented in a logbook, see **Appendix 10-1**. See the before photos in **Appendix 10-2**. Aquatic habitat features are included in the annual inspections. John Kinville and Tristi Crawford evaluate their WQT project site annually and send the inspection reports to the Trempealeau County Department of Land Management for review before submittal to Eleva-Strum.

The Kinville and Crawford banks are stable, and phosphorus is being prevented from entering the water each year. Eleva-Strum staff have annually inspected the other four WQT sites that are owned by the Village of Strum and documented that the banks are stable, and that phosphorus is prevented from entering the water each year. No deficiencies have been reported for any sites. No noncompliance or failure to implement any terms or conditions of the approved plan have occurred. The County and Eleva-Strum will continue to do annual inspections, including inspecting the aquatic habitat, as long as credits are being utilized. The 2024 Inspection Reports for the Below Dam-North Side, Below Dam-South Side, Crystal Lake Campground, Parking Lot, and Kinville WQT sites are attached. No deficiencies were reported in 2024.

11 CONDITIONS UNDER WHICH THE MANAGEMENT PRACTICES MAY BE INSPECTED

The riprap is inspected at least once per year in August-September and immediately after flood events. The velocity of Buffalo River through the Village of Strum increases greatly during flood events, and these portions of the streambank were eroding at alarming rates during heavy rains. The Village of Strum should continue to work with the Trempealeau County Department of Land Management to ensure that these sites are properly maintained and use the County for technical assistance if there are any concerns regarding the projects.

12 REPORTING REQUIREMENTS SHOULD THE MANAGEMENT PRACTICE FAIL

If the riprap were to fail at these sites, the landowners should immediately report the situation to the Trempealeau County Department of Land Management to develop a remediation action plan.

13 OPERATION AND MAINTENANCE PLAN FOR EACH MANAGEMENT PRACTICE

Maintenance of the riprap is the responsibility of the Village of Strum and the Commission with technical assistance from the Trempealeau County Department of Land Management. The maintenance consists of the following:

1. Inspect riprap annually and after heavy storms for any erosion or displacement of rocks. Repairs should be done immediately. Note that the Kinville-Crawford WQT Agreement excluded the landowners' obligation to make repairs at their cost. If damage occurs, Eleva-Strum may be responsibility for the cost of repairs necessary to maintain sufficient credits for the required offset.
2. Debris will be removed to prevent clogging or rerouting of water in the channel. Channel clearing to remove stumps, fallen trees, debris, and sediment bars will only be performed when they are causing or could cause unacceptable bank erosion, flow restriction, or damage to structures. Habitat forming elements that provide cover, food, pools, and water turbulence shall be retained or replaced to the extent possible.
3. Check for sloughing, erosion, or damage to vegetative cover. Damaged areas must be regraded, shaped, and re-vegetated as soon as possible.
4. Periodically cut grass to control weeds and invading brush.
5. Eliminate burrowing animals and repair damage.

14 LOCATION OF CREDIT GENERATOR IN PROXIMITY TO RECEIVING WATER AND CREDIT USER

Buffalo River and Crystal Lake. The projects are located two miles east, upstream from the Eleva Strum Wastewater Treatment Facility Discharge. The projects named "Below the Dam" are within the same HUC-12 (HUC 070400030105), the Trout Creek-Buffalo River Watershed. The projects named "Parking Lot," "Campground," and "Kinville and Crawford," are in the adjacent HUC 12 (HUC

070400030103), the Pine Creek-Buffalo River Watershed. The adjacent HUC 12 is upstream of the WWTF Discharge. See **Appendix 14-1** and **Appendix 7-3** for Location Maps.

15 PRACTICE REGISTRATION DOCUMENTS, IF AVAILABLE

Registration documents were submitted to the DNR. See registration documents in **Appendix 15-1.**

16 HISTORY OF PROJECT SITE(S)

Below Dam – Both North & South Side. This project site is owned by the Village of Strum and has been maintained as public property and a fishing area for many years. The streambanks of Crystal Lake within the Village of Strum have been having erosion problems due to an increasing number of flood events and heavy rainfalls. The streambanks are frequently used by fishing enthusiasts and outdoor recreationists.

Parking Lot. This project site is owned by the Village of Strum and has been maintained as a park for many years. The streambanks of Crystal Lake within the Village of Strum have been having erosion problems due to an increasing number of flood events and heavy rainfalls. The streambanks are frequently used by fishing enthusiasts and outdoor recreationists.

Campground. This project site is owned by the Village of Strum and has been maintained as a park and campground for many years. The streambanks of Crystal Lake within the Village of Strum have been having erosion problems due to an increasing number of flood events and heavy rainfalls. The streambanks are frequently used by fishing enthusiasts and outdoor recreationists. There are geese congregating on the banks in the campground, which explains the high phosphorus content in the soil samples.

Kinville and Crawford. These sites have been owned by John Kinville and Tristi Crawford for many years. They have had erosion problems due to an increasing number of flood events and heavy rainfalls.

17 REQUIRED PHOSPHORUS CREDITS

During the last permit term, the 2020-2024 Annual Average Flow was 0.11 MGD and the average effluent P concentration 0.126 mg/L, the phosphorus mass loadings and the required WQT are summarized in the following table:

TABLE 17.1: 2024 ANNUAL AVERAGE DATA – REQUIRED PHOSPHORUS MASS OFFSET

Description	Units	Amount
Annual Average Daily Existing Effluent Flow	MGD	0.11
Effluent Phosphorus Concentration	mg/L	0.126
Target P Concentration	mg/L	0.075
Annual Mass of Phosphorus	lbs/year	41
WQT Target Mass of Phosphorus	lbs/year	24
Baseline Mass (Existing - Target)	**lbs/year**	**17**

With a baseline of 17 credits and a 3:1 ratio, only 51 credits are needed. With 238 lbs./year in WQT credits available, the WWTP has met the credit offset through the WQT program.

The WWTP Design Fow is 0.201 MGD. Below is the table for phosphorus mass loading requirements for the WWTP at design capacity.

TABLE 17.2: DESIGN FLOW DATA - REQUIRED PHOSPHORUS MASS OFFSET

Description	Units	Amount
Annual Average Daily Existing Flow	MGD	0.201
Effluent Phosphorus Concentration	mg/L	0.126
Target P Concentration	mg/L	0.075
Annual Mass of Phosphorus	lbs/year	77
WQT Target Mass of Phosphorus	lbs/year	46
Baseline Mass (Existing - Target)	**lbs/year**	**31**

With a baseline of 31 credits at a 3:1 ratio only 93 credits are needed, fewer than the 238 lbs./year available.

Overall, the WWTP has a more than adequate number of credits. The WWTP was designed to produce an effluent Phosphorus concentration of <0.5 mg/l biologically. With some supplemental chemical addition during supernatant return, the facility produces a much better effluent than planned. The operator does an excellent job in optimizing the performance. The WWTP does not need many credits as the effluent phosphorus concentrations are low following treatment. Generally, there have been higher levels of phosphorus in late summer and early fall in comparison to the rest of the year, however, still low levels overall. The monthly effluent flows were also consistent throughout the years, none nearing the design flow of 0.201 MGD on a monthly average. See below for a table showing the credit usage over the last 5 years.

From 2020-2024, the credit use was consistent, ranged from 0 to 5.13 credits per month with one outlier of 15.4 credits in August of 2020. There are no significant increases in flow expected in the next permit term. There may be slight increases as new construction in some residential developments has occurred.

The Eleva Strum operator notes that both the influent mag meters need replacement. Flows are expected to look different once replaced, but it will only appear different numerically, not as an actual increase of flow. Treatment performance is expected to be maintained.

See Table 17.4 below for the WQT phosphorus mass credits generated and implemented.

TABLE 17.3: CREDIT USAGE (2020-2024)- Pounds Per Month

MONTH (2023)	CREDITS USED	Credits Available	Credits Remaining
January	0	238	238
February	0	238	238
March	0.38	238	237.62
April	0.84	237.62	236.78
May	0.94	236.78	235.84
June	0	235.84	235.84
July	5	235.84	230.84
August	1.5	230.84	229.34
September	1	229.34	228.34
October	2	228.34	226.34
November	1	226.34	225.34
December	1	225.34	224.34
MONTH (2024)	**CREDITS USED**	**Credits Available**	**Credits Remaining**
January	0	238	238
February	0.7	238	237.3
March	0.58	237.3	236.72
April	0.77	236.72	235.95
May	1.34	235.95	234.61
June	1	234.61	233.61
July	3	233.61	230.61
August	6	231.29	225.32
September	3	225.32	221.83
October	0	221.83	221.83
November	17	221.76	204.44
December			

17. AVAILABLE PHOSPHORUS CREDITS

TABLE 17.4: WATER QUALITY TRADING PROJECT PHOSPHORUS MASS CREDITS

	Project	BMP Type	TR	P lbs/year	TRxP lbs/year
1	Below Dam - South Side	Streambank Stabilization	3	17	6
2	Below Dam - North Side	Streambank Stabilization	3	48	16
3	Parking Lot	Streambank Stabilization	3	14	5
4	Crystal Lake Campground	Streambank Stabilization	3	147	49
5	Kinville and Crawford	Streambank Stabilization	2	325	163
	Total			**531**	~~**231**~~ 238

The required phosphorus credits needed were 97 pounds of phosphorus per year based upon the data used in the first approved WQT plan. With the most recent data, 31 pounds is needed to satisfy the credit needs at the WWTP at design flow. The amount of phosphorus prevented from entering the waterways due to the constructed WQT projects is ~~231~~ pounds per year with the trade ratio applied. Therefore, the District far exceeds the required WQT. No additional credits are anticipated to be needed. The District explored selling excess credits through the Clearinghouse but that was denied as the intent was not stated in advance. 238

17.1 Identification of Noncompliance

The Eleva-Strum wastewater treatment facility has been consistently in compliance with the TP Monthly Average Concentration limit of 1.0 mg/L and the Monthly Average WQT Computed Compliance concentration limit of 0.225 mg/L, 6-Month Average WQT Computed Compliance concentration limit of 0.075 mg/L, 6-Month Average WQT Computed Compliance mass limit of 0.126 lbs./day and the Annual WQT Credits Used of <238 lbs./year. (Note that there is no Monthly Average Mass Limit).

17.2 Agreements with Property Owners

With the Village of Strum being part of the Eleva-Strum Sewer Commission, there are no formal WQT Agreements for the Village owned sites. The Agreement with Kinville-Crawford is included in **Appendix 17-1**. The 2020 agreement has a term of 20 years. Note that the Kinville-Crawford WQT Agreement excluded the landowners' obligation to make repairs at their cost. If damage occurs, Eleva-Strum may be responsibility for the cost of repairs necessary to maintain sufficient credits for the required offset.

17.3 Summary 238

The completed projects create ~~231~~ phosphorus credits, which is enough to comply with the water quality trade program given the current flow, design flow and the current treatment performance of the Eleva-Strum WWTP. The influent mag meters are being replaced to produce reliable Flow data.

18 COMPLIANCE WITH WATER QUALITY TRADING CHECKLIST

The original Water Quality Trading Plan was produced in accordance with the Wisconsin Department of Natural Resources, *Guidance for Implementing Water Quality Trading in WPDES Permits* based upon Table 8 (2013, p. 37). Table 8 contains several columns of checklist items, but this plan must adhere to column (e), which states "credits are obtained from a construction project or implementation of a plan undertaken by the credit user for sources other than that covered by the credit user's WPDES permit." The Villages of Eleva and Strum constructed rip rap bank stabilization at several locations to generate credits for the WWTP.

Below is a list of the requirements to be included in a WQT plan per column (e) of Table 8. This list includes a brief statement of where to find the information in this plan.

- Permittee's / credit user's WPDES Permit number. The Eleva-Strum WWTP WPDES permit number is WI-0064998-01-0 and is referenced in Section 2.
- Permittee's / credit user's contact information. The contact information is included in Section 19.
- Pollutants for which credits will be generated. Credits will be generated for total phosphorus, which is discussed in Section 5.
- Amounts of credits available from each location / management practice / local governmental unit when acting as a broker. The amount of credit available is discussed in Section 17.
- Certification that the content of the trading application is accurate and correct. The certification is included in Section 19.
- Signature and date of the permittee's / credit user's authorized representative. The signature of the authorized representative is included in Section 19.
- Location where credits will be generated (i.e. map of site where management practice will be applied including major drainage ways from the project). The location where credits are generated are discussed in Section 7 and 14. A map is located in Appendix 14-1.
- Identification of method(s) including management practice(s) that will be used to generate credits at each location. Identifications of methods are discussed in Section 9.
- Duration of agreement (i.e. the design life of the management practice) with each credit generator. The duration of the agreement is discussed in Section 4.1.
- Schedule for installation / construction of each management practice. The schedule is discussed in Section 8.
- Operation and maintenance plan for each management practice used to generate credits. The operation and maintenance plan are discussed in Section 13.
- Date when credits become available for each management practice (i.e. when practice is established and effective). The date when the credits become effective is September 1, 2020 when the permit is modified, and this date is referenced in Section 8.
- Models used to derive the amount of credits. The model used to derive the amount of credits is a scientific equation for phosphorus loss. This is discussed in Section 9.
- The applicable trade ratio for each management practice includes supporting technical basis (see Table 4 on p. 20 of the WQT Guidance). The applicable trade ration is 3:1 and the technical basis and calculation of the trade ratio is discussed in Section 6.

19 CERTIFICATION OF WATER QUALITY TRADING PLAN

This plan was prepared by Davy Engineering Co. This Water Quality Trading Plan is complete, accurate and correct, to the best of our knowledge and belief.

Prepared By: Davy Engineering Co., Inc.

By: Rachel A Jaeger

Rachel Jaeger, E.I.T.
Project Engineer
Davy Engineering Co.
115 6th Street South
La Crosse, WI 54601
Telephone: 608.782.3130

Owner: Eleva Strum Sanitary District

By: Dean Boehne

Dean Boehne
Strum Village President
Eleva Strum Joint Sewerage Commission
N4937 CTH V
Strum, WI 54770
Telephone: 715.737.4069

Reviewed by: Michael Davy, P.E.

References

Wisconsin Department of Natural Resources. (2013). *A Water Quality Trading How To Manual.* doi:Guidance Number: 3400-2013-03

Wisconsin Department of Natural Resources. (2013). *Guidance for Implementing Water Quality Trading in WPDES Permits.* doi:Guidance Number: 3800-2013-04

APPENDIX 5-1

Stream Bank Restoration Projects
Below Dam - South Side of River
Calculation of Phosphorus Loss
May 2017

P_L-Phosphorus Loss for Stream Bank Restoration Projects

$$P_L = (L)\ (H)\ (R)\ (P_c)$$

L = Stream bank length in linear feet	100
H = Average stream bank height in feet	3.5
R = Annual recession rate of stream bank in $\frac{\text{feet}}{\text{year}}$	0.3
P_c = Total soil phosphorus concentration in units of % P	0.13
P_L = Phosphorus loss in lbs P/year	14

Example:

L = 825 Feet
H = 5.75 Feet
R = 0.3 Feet/Year
P_C = 0.13%
P_L - 185 lb P/Year
P Credit at 2:1 Trade Ratio
P Credit = $\frac{185}{2}$ = 92.5 lb P/Year

Note:

P Credit = $\frac{P_L}{\text{Trade Ratio}}$

Trade Ratio - dependent upon the location of the stream bank improvement in relation to the location of the WWTF point of discharge

Stream Bank Restoration Projects
Below Dam - South Side of River Site 2
Calculation of Phosphorus Loss
May 2017

P_L-Phosphorus Loss for Stream Bank Restoration Projects

$$P_L = (L)\ (H)\ (R)\ (P_c)$$

L = Stream bank length in linear feet	40
H = Average stream bank height in feet	3
R = Annual recession rate of stream bank in $\frac{\text{feet}}{\text{year}}$	0.5
P_c = Total soil phosphorus concentration in units of % P	0.05
P_L = Phosphorus loss in lbs P/year	3

Example:

L = 825 Feet
H = 5.75 Feet
R = 0.3 Feet/Year
P_C = 0.13%
P_L - 185 lb P/Year
P Credit at 2:1 Trade Ratio
P Credit = $\frac{185}{2}$ = 92.5 lb P/Year

Note:

P Credit = $\frac{P_L}{\text{Trade Ratio}}$

Trade Ratio - dependent upon the location of the stream bank improvement in relation to the location of the WWTF point of discharge

Stream Bank Restoration Projects
Calculation of Phosphorus Loss
May 2017
P_L-Phosphorus Loss for Stream Bank Restoration Projects
Below Dam on North Side of Buffalo River

$$P_L = (L)\ (H)\ (R)\ (P_c)$$

L = Stream bank length in linear feet	250
H = Average stream bank height in feet	6
R = Annual recession rate of stream bank in $\frac{\text{feet}}{\text{year}}$	0.4
P_c = Total soil phosphorus concentration in units of % P	0.08
P_L = Phosphorus loss in lbs P/year	48

Example:

L = 825 Feet
H = 5.75 Feet
R = 0.3 Feet/Year
P_C = 0.13%
P_L - 185 lb P/Year
P Credit at 2:1 Trade Ratio
P Credit = $\frac{185}{2}$ = 92.5 lb P/Year

Note:

P Credit = $\frac{P_L}{\text{Trade Ratio}}$

Trade Ratio - dependent upon the location of the stream bank improvement in relation to the location of the WWTF point of discharge

NRCS Streambank and Irrigation Ditch Erosion Estimator (Direct Volume Method)

Farmer / Cooperator Name:	Eleva-Strum WQT	Evaluated By:	Kirstie Heidenreich
Tract Number:	John Kinville_US Hwy 10 - Buffalo River	Evaluation Date:	June 10, 2020

Field Number	*Eroding Strmbnk Reach #; or Ditch Side/Bottom*	*Eroding Bank or Ditch Length (Feet)*	*Eroding Bank Height; or Ditch Bottom Width* (Feet)*	*Area of Eroding Strmbank or Ditch (FT^2)*	*Lateral or Ditch Bottom Recession Rate (Estimated) (FT / Year)*	*Estimated Volume (FT^3) Eroded Annually*	*Soil Texture*	*Approximate Pounds of Soil per FT^3*	*Estimated Soil Loss (Tons/Year)*
	1	300.0	12.0	3,600	0.40	1,440.0	Sand	105	75.6

Total Estimated Annual Streambank or Ditch Erosion Soil Loss (Tons):	75.6
Percent Leachable Phosphorus in the Soil (nitric/peroxide):	0.22%
Total Estimated Annual Streambank or Ditch Erosion Phosphorus Loss (Tons):	0.163
Total Estimated Annual Streambank or Ditch Erosion Phosphorus Loss (lbs):	**325**

Total Phosphorus Loss for sum of reaches (lbs/yr):	**325**

* Eroding bank height is measured along the bank, not the vertical height of bank.

Streambank or Ditch Erosion Calculation Formula:

$$\frac{\text{Eroding Bank/Ditch Length} \times \text{Eroding Bank Ht or Ditch Bottom Width} \times \text{Lateral or Ditch Bottom Recession Rate (FT/YR)} \times \text{Soil Weight (lbs/ft}^3\text{)}}{2000} = \text{Estimated Soil Loss Per Year (Tons)}$$

Stream Bank Restoration Projects
Crystal Lake Parking Lot
Calculation of Phosphorus Loss
May 2017

P_L-Phosphorus Loss for Stream Bank Restoration Projects

$$P_L = (L)\ (H)\ (R)\ (P_c)$$

L = Stream bank length in linear feet	45
H = Average stream bank height in feet	5
R = Annual recession rate of stream bank in $\frac{\text{feet}}{\text{year}}$	0.6
P_c = Total soil phosphorus concentration in units of % P	0.1
P_L = Phosphorus loss in lbs P/year	14

Example:

L = 825 Feet
H = 5.75 Feet
R = 0.3 Feet/Year
P_C = 0.13%
P_L - 185 lb P/Year
P Credit at 2:1 Trade Ratio
P Credit = $\frac{185}{2}$ = 92.5 lb P/Year

Note:

P Credit = $\frac{P_L}{\text{Trade Ratio}}$

Trade Ratio - dependent upon the location of the stream bank improvement in relation to the location of the WWTF point of discharge

NRCS Streambank and Irrigation Ditch Erosion Estimator (Direct Volume Method)

Farmer / Cooperator Name:	Village of Strum - Crystal Lake	Evaluated By:	Kirstie Heidenreich
Tract Number:	Campground Park	Evaluation Date:	July 8, 2019

Field Number	*Eroding Strmbnk Reach #; or Ditch Side/Bottom*	*Eroding Bank or Ditch Length (Feet)*	*Eroding Bank Height; or Ditch Bottom Width* (Feet)*	*Area of Eroding Strmbank or Ditch (FT^2)*	*Lateral or Ditch Bottom Recession Rate (Estimated) (FT / Year)*	*Estimated Volume (FT^3) Eroded Annually*	*Soil Texture*	*Approximate Pounds of Soil per FT^3*	*Estimated Soil Loss (Tons/Year)*
	1	310.0	6.0	1,860	0.20	372.0	Sandy Loam	100	18.6
	2	88.0	6.0	528	0.20	105.6	Sandy Loam	100	5.3
	3	60.0	4.0	240	0.20	48.0	Sandy Loam	100	2.4
			Total Estimated Annual Streambank or Ditch Erosion Soil Loss (Tons):						26.3
			Percent Leachable Phosphorus in the Soil (nitric/peroxide):						0.28%
			Total Estimated Annual Streambank or Ditch Erosion Phosphorus Loss (Tons):						0.074
			Total Estimated Annual Streambank or Ditch Erosion Phosphorus Loss (lbs):						**147**

Total Phosphorus Loss for sum of reaches (lbs/yr):	**147**

* Eroding bank height is measured along the bank, not the vertical height of bank.

Streambank or Ditch Erosion Calculation Formula:

$$\frac{\text{Eroding Bank/Ditch Length} \times \text{Eroding Bank Ht or Ditch Bottom Width} \times \text{Lateral or Ditch Bottom Recession Rate (FT/YR)} \times \text{Soil Weight (lbs/ft}^3\text{)}}{2000} = \text{Estimated Soil Loss Per Year (Tons)}$$

APPENDIX 5-2

Soil and Forage Analysis Lab
COLLEGE OF AGRICULTURAL & LIFE SCIENCES
UNIVERSITY OF WISCONSIN-MADISON

2611 Yellowstone Drive
Marshfield WI 54449
715-387-2523
http://uwlab.soils.wisc.edu

Trempealeau County Land Management
PO Box 67
Whitehall WI 54773
Eleva-Strum WQT Project

Date 6/19/2020
Acct # 558613
Lab # **2047**

Soil Nutrient Analysis

Sample	Total Leachable P nitric/peroxide %
1	0.22
2	0.21
Average	**0.22**

Soil and Forage Analysis Laboratory
2611 Yellowstone Dr, Marshfield, WI 54449
Phone 715-387-2523

University of Wisconsin
Madison/Extension

Trempealeau County
Kirstie Heidenreich
36245 Main St
Whitehall WI 54773
Eleva Strum Riprap Project
Below Dam, North Side

Date 10/25/17
Acct # 558646
Lab # **6037**

Soil Nutrient Analysis

Sample	Total Leachable P nitric/peroxide %
1	0.09
2	0.07
Average	**0.08**

Soil and Forage Analysis Laboratory
2611 Yellowstone Dr, Marshfield, WI 54449
Phone 715-387-2523

University of Wisconsin
Madison/Extension

Trempealeau County Land Management
PO Box 67
Whitehall WI 54773
Eleva-Strum Riprap Project
Campground Park Soil Samples

Date 7/15/19
Acct # 558654
Lab # **3383**

Soil Nutrient Analysis

Sample	Total Leachable P nitric/peroxide %
1	0.25
2	0.31
3	0.27
Average	**0.28**

Soil and Forage Analysis Laboratory
2611 Yellowstone Dr, Marshfield, WI 54449
Phone 715-387-2523

University of Wisconsin
Madison/Extension

Kirstie Heidenreich, Trempealeau County
36245 Main St, Whitehall WI 54773

Bill to Village of Strum, Michelle Loken

Date 6/22/17
Acct # 558613
Lab # **3498**

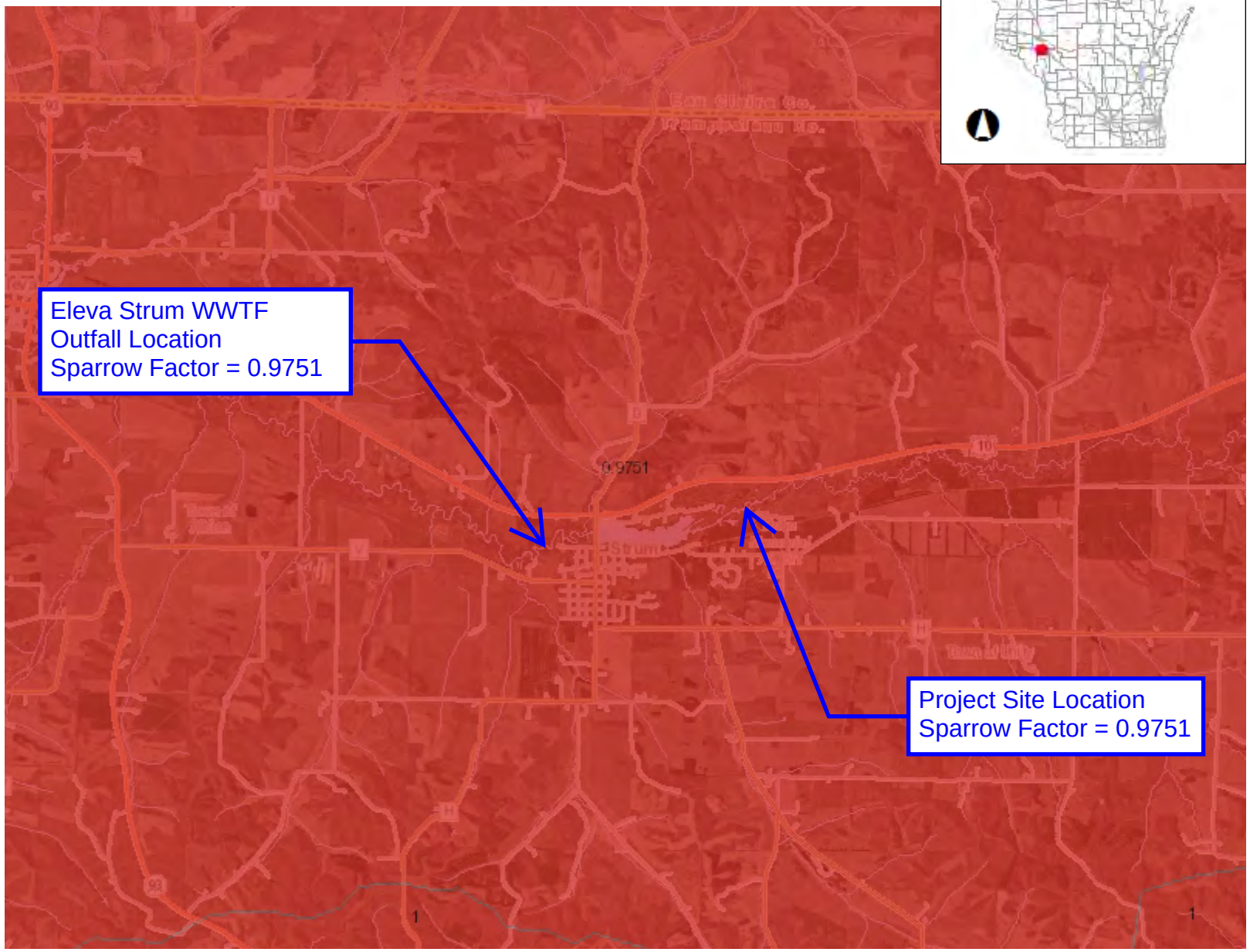
Project ID Eleva-Strum Riprap

Soil Nutrient Analysis

Sample	P nitric/peroxide %	Sample	P nitric/peroxide %
near parking lot	0.10		
beach	< 0.03		
below dam 1 - South Side	0.13		
below dam 2 - South Side	0.05		
Nelson property	0.07		

APPENDIX 6-1

Sparrow Model



Legend

SPARROW Model Catchment
- 0.092600 - 0.459700
- 0.459701 - 0.621400
- 0.621401 - 0.825600
- 0.825601 - 0.947100
- 0.947101 - 1.000000

Municipality
State Boundaries
County Boundaries
Major Roads
- Interstate Highway
- State Highway
- US Highway

County and Local Roads
- County HWY
- Local Road

Railroads
Tribal Lands
Rivers and Streams
Intermittent Streams
Lakes and Open water
Index to EN_Image_Basemap_Leaf_Off

Notes

2.0 0 1.00 2.0 Miles

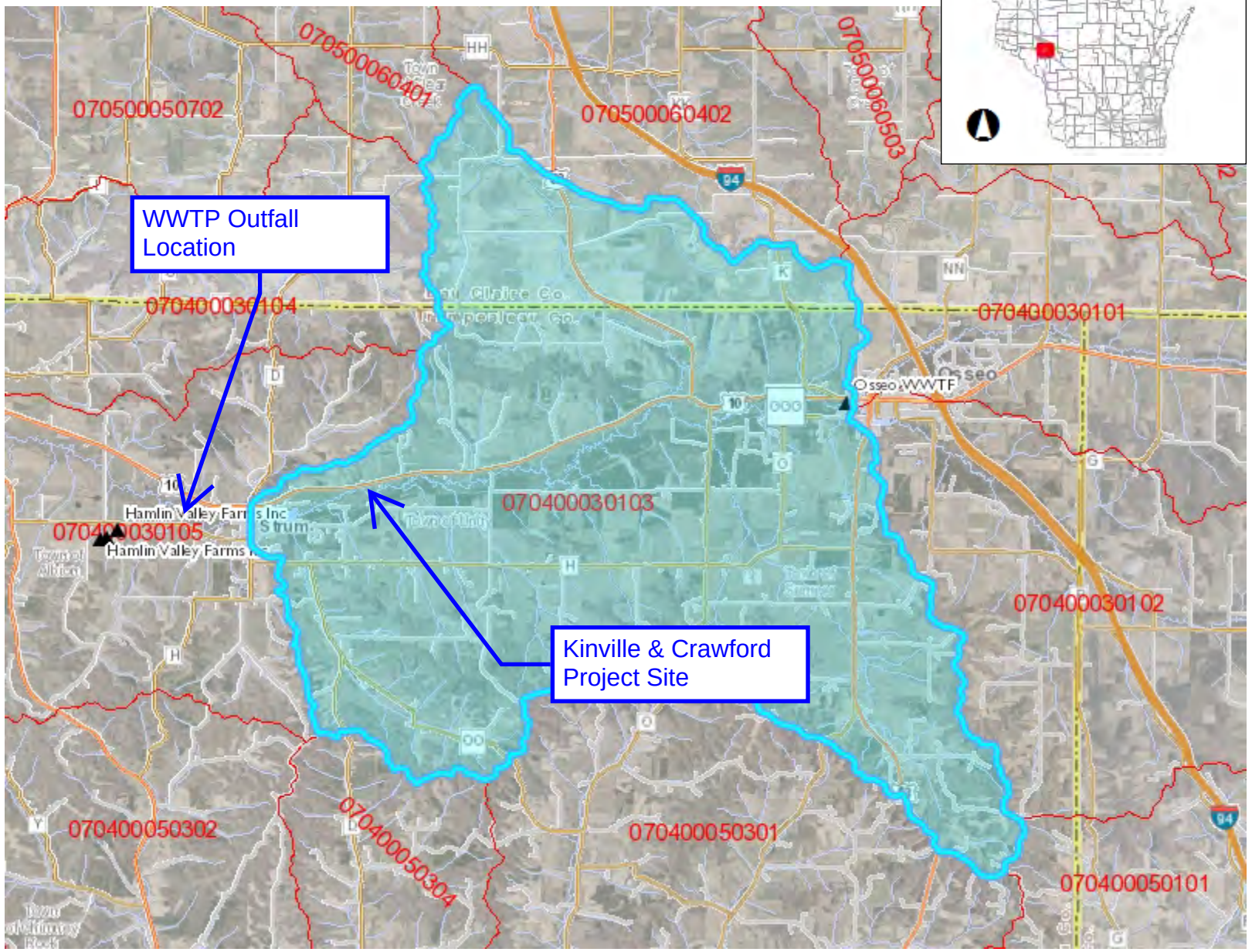
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1: 63,360

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APPENDIX 6-2

Kinville & Crawford Project Site HUC 12 Map



Legend

- Surface Water Outfalls
- 12-digit HUCs (Subwatersheds)
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

Notes

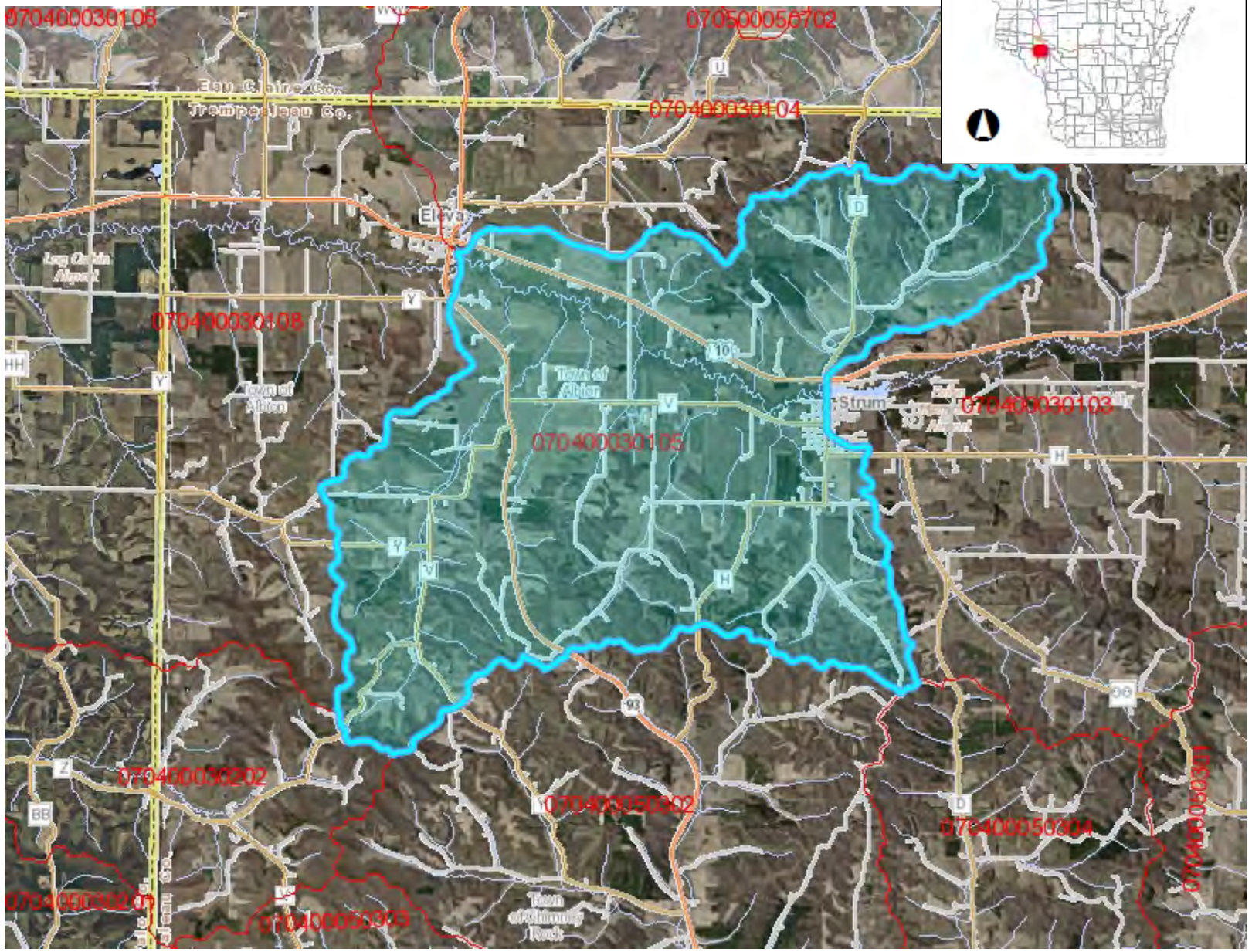
4.0 0 2.00 4.0 Miles

NAD_1983_HARN_Wisconsin_TM

1: 126,720

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HUC 12 Watershed Map



Legend

- 12-digit HUCs (Subwatersheds)
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

Notes

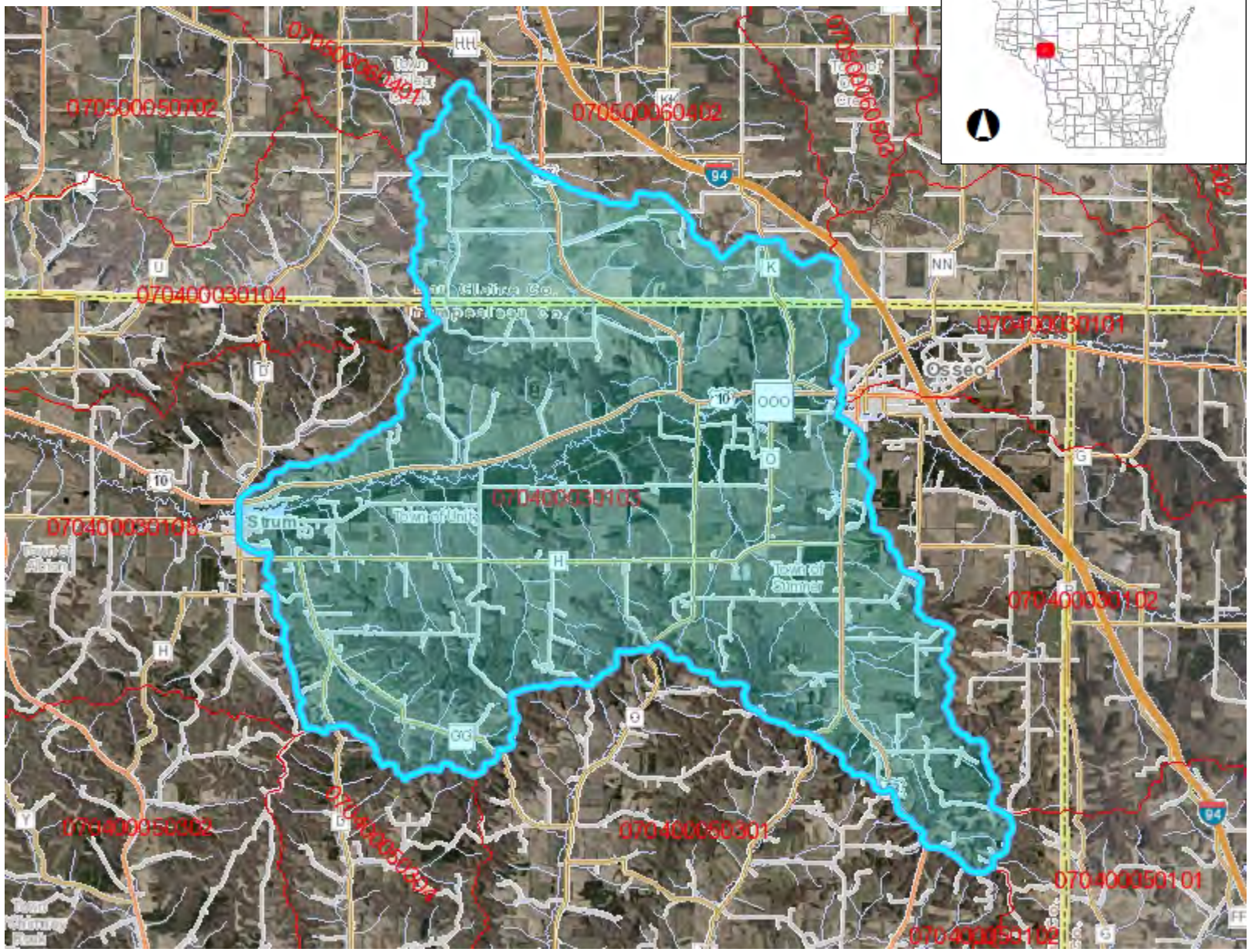
3.0 0 1.50 3.0 Miles

NAD_1983_HARN_Wisconsin_TM

1: 95,040

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HUC 12 Watershed Map



Legend

- 12-digit HUCs (Subwatersheds)
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

Notes

4.0 0 2.00 4.0 Miles

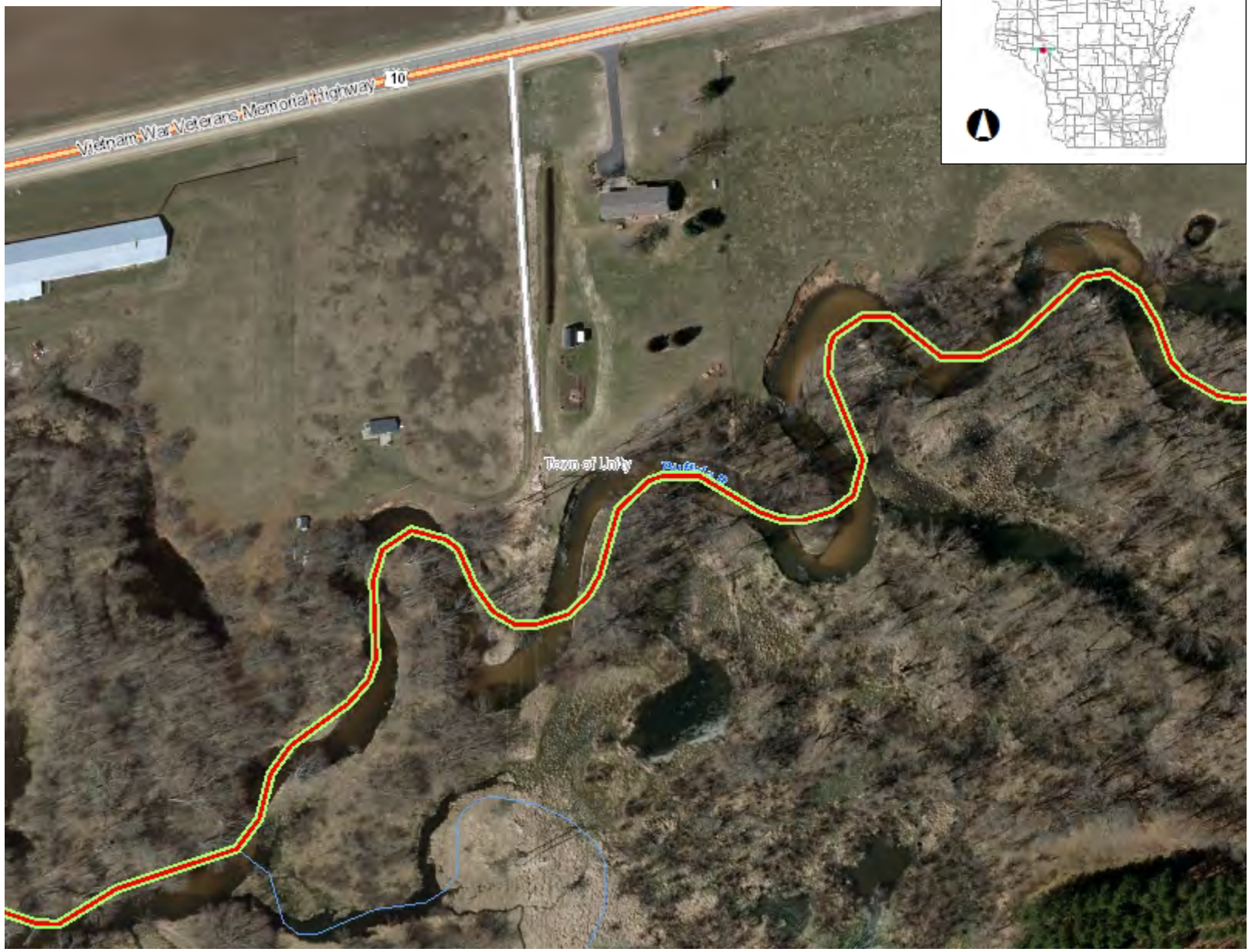
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1: 126,720

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APPENDIX 6-3

Buffalo River Total Phosphorus Impairment Map



Legend

- Impaired Rivers and Streams
- Impaired Lakes
- Stream Assessments
- Lake Assessments
- Surface Water Outfalls
- Index to EN_Image_Basemap_Leaf_Off

Notes

0.1 0 0.03 0.1 Miles

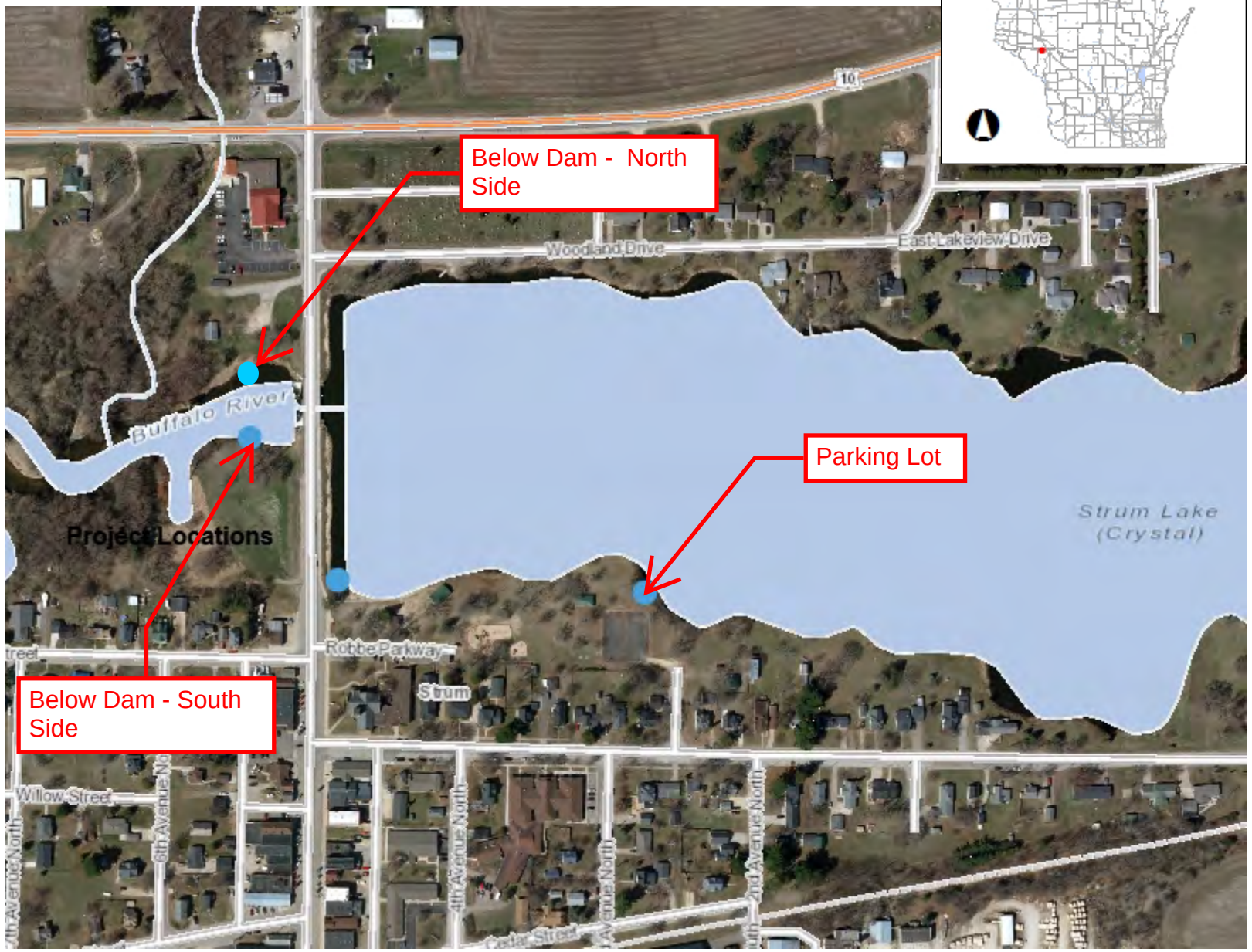
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1: 1,980

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APPENDIX 7-1

Surface Water Data Viewer Map-Project Locations



Legend

- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

Notes

0.1 0 0.06 0.1 Miles

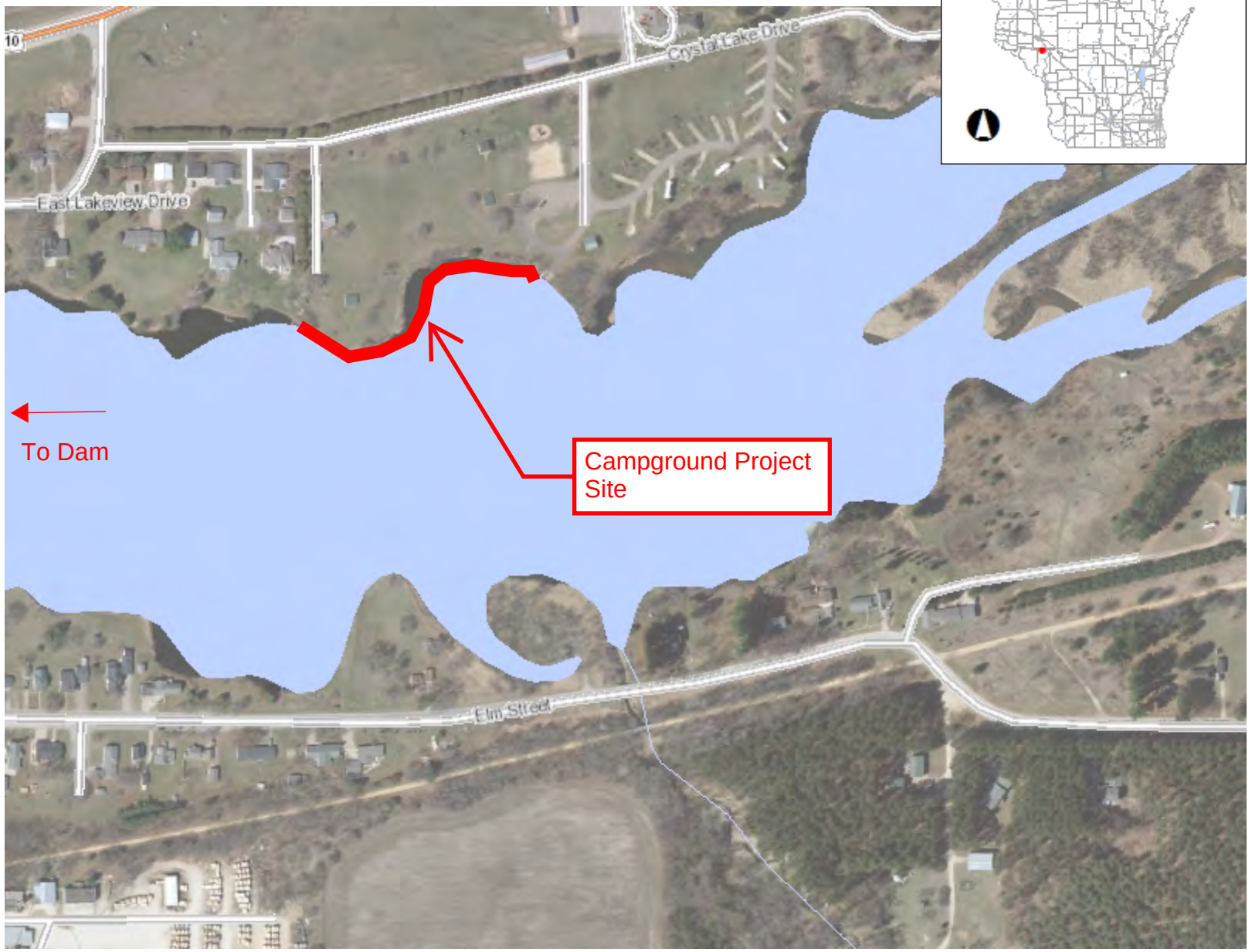
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1: 3,960

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APPENDIX 7-2

Campground Site Map



Legend

- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

Notes

0.1 0 0.06 0.1 Miles

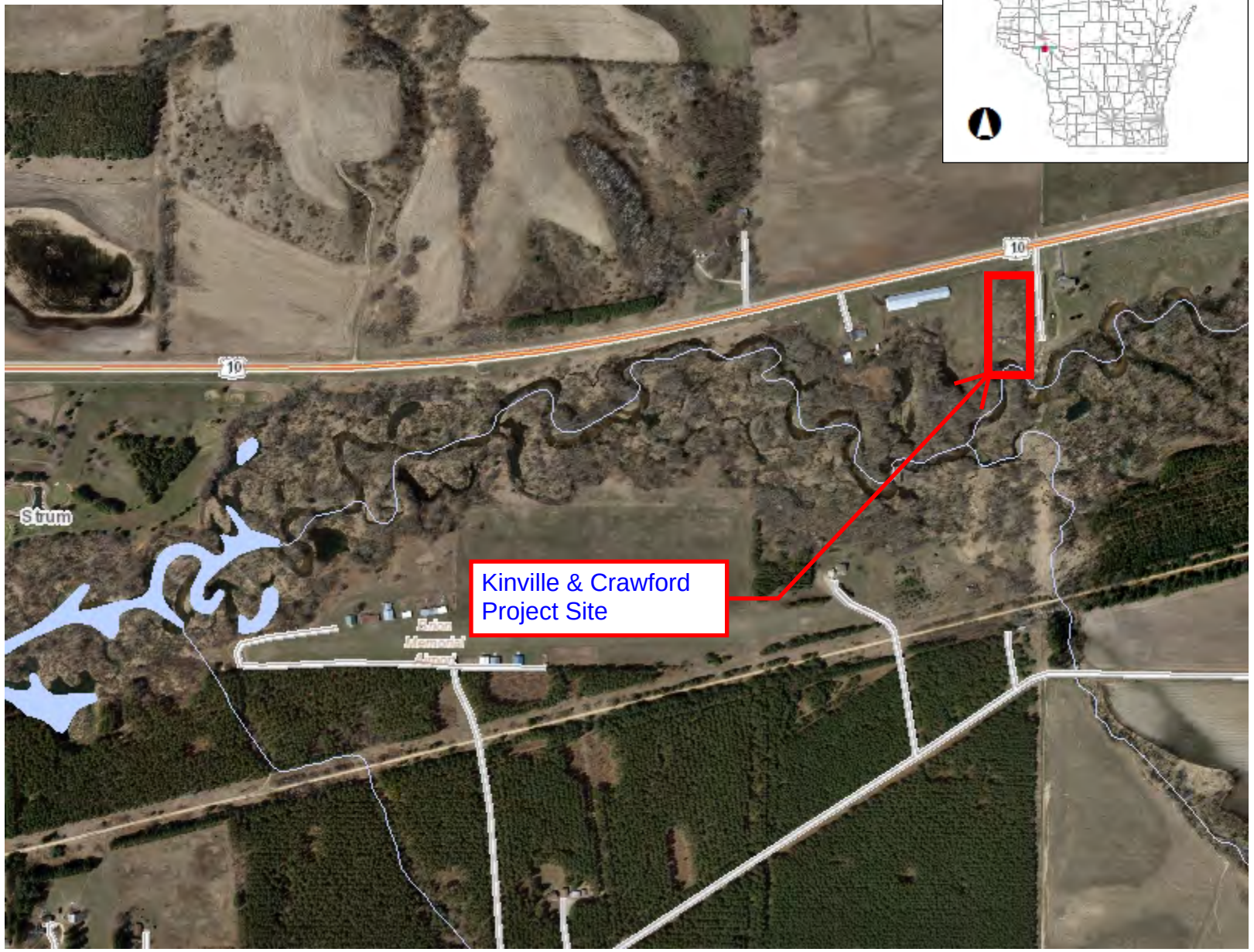
NAD_1983_HARN_Wisconsin_TM

1: 3,960

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APPENDIX 7-3

Kinville & Crawford Project Location Map



Legend

- Surface Water Outfalls
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

Notes

0.3 0 0.13 0.3 Miles

NAD_1983_HARN_Wisconsin_TM

1: 7,920

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APPENDIX 10-1

Water Quality Trading

Annual Conservation Best Management Practice (BMP) Compliance Certification

Wisconsin Pollutant Discharge Elimination System (WPDES) Permittees need to submit annual reports as part of their permit requirements. The purpose of the annual report is to inform WDNR of the status of management practices, provide Wisconsin Department of Natural Resources (WDNR) with an update of the trading project overall, and submit any needed changes to the plan to WDNR.

The following should be included in the annual report that is submitted by the landowner to the WPDES Permittee:

- Verification that site inspections occurred
- Brief summary of site inspection findings
- Photos from the site inspection

Location(s) of land for which Water Quality Trading credit is claimed:

LOCATION	*IN COMPLIANCE*	*NOT COMPLIANT*
BELOW DAM-NORTH SIDE	***YES***	
BELOW DAM- SOUTH SIDE	***YES***	
CRYSTAL LAKE CAMPGROUND	***YES***	
PARKING LOT	***YES***	
KINVILLE SITE	***YES***	

Certification and Signatures

The landowner(s) certify that the Best Management Practices used in Water Quality Trading efforts with a WPDES permit holder are in compliance with the applicable conservation standards.

VILLAGE OF STRUM
Landowner

Brad Olson
Representative

10-6-2020
Date

Best Management Practice (BMP) Conservation Compliance Checklist

Conservation Standards	In Compliance	Not Compliant
There is no trash and unwanted debris.	☒	☐
There is no grazing of animals will occur within 30 feet of the stream channel.	☒	☐
There is no soil erosion and accumulation, especially at the top and bottom of the slope.	☒	☐
There are no invasive weeds.	☒	☐
There are no animal burrows, holes or mounds.	☒	☐
Facilities have no visible signs of leakage or failure.	☒	☐
There are no dislodged or unstable rocks which could pose a safety hazard.	☒	☐
There are no unusual or unsafe conditions structural damage, dumping, tree establishment, etc.	☒	☐
Project has been monitored with inspections and documented with dates in a log book, to ensure the preservation of the site.	☒	☐
Project has been inspected after flood events.	☒	☐
20 foot vegetative buffer has been periodically mowed to control weeds and invading brush.	☒	☐
Farm equipment and row crops have remained outside of the agreed upon 20 foot vegetated buffer from the top of the bank.	☒	☐

Water Quality Trading

Annual Conservation Best Management Practice (BMP) Compliance Certification

Wisconsin Pollutant Discharge Elimination System (WPDES) Permittees need to submit annual reports as part of their permit requirements. The purpose of the annual report is to inform WDNR of the status of management practices, provide Wisconsin Department of Natural Resources (WDNR) with an update of the trading project overall, and submit any needed changes to the plan to WDNR.

The following should be included in the annual report that is submitted by the landowner to the WPDES Permittee:

- Verification that site inspections occurred
- Brief summary of site inspection findings
- Photos from the site inspection

Location(s) of land for which Water Quality Trading credit is claimed:

LOCATION	*IN COMPLIANCE*	*NOT COMPLIANT*
BELOW DAM-NORTH SIDE	***YES***	
BELOW DAM- SOUTH SIDE	***YES***	
CRYSTAL LAKE CAMPGROUND	***YES***	
PARKING LOT	***YES***	
KINVILLE SITE	***YES***	

Certification and Signatures

The landowner(s) certify that the Best Management Practices used in Water Quality Trading efforts with a WPDES permit holder are in compliance with the applicable conservation standards.

VILLAGE OF STRUM
Landowner

Brad Olson
Representative

9-23-2021
Date

Best Management Practice (BMP) Conservation Compliance Checklist

Conservation Standards	In Compliance	Not Compliant
There is no trash and unwanted debris.	☒	☐
There is no grazing of animals will occur within 30 feet of the stream channel.	☒	☐
There is no soil erosion and accumulation, especially at the top and bottom of the slope.	☒	☐
There are no invasive weeds.	☒	☐
There are no animal burrows, holes or mounds.	☒	☐
Facilities have no visible signs of leakage or failure.	☒	☐
There are no dislodged or unstable rocks which could pose a safety hazard.	☒	☐
There are no unusual or unsafe conditions structural damage, dumping, tree establishment, etc.	☒	☐
Project has been monitored with inspections and documented with dates in a log book, to ensure the preservation of the site.	☒	☐
Project has been inspected after flood events.	☒	☐
20 foot vegetative buffer has been periodically mowed to control weeds and invading brush.	☒	☐
Farm equipment and row crops have remained outside of the agreed upon 20 foot vegetated buffer from the top of the bank.	☒	☐

Water Quality Trading

Annual Conservation Best Management Practice (BMP) Compliance Certification

Wisconsin Pollutant Discharge Elimination System (WPDES) Permittees need to submit annual reports as part of their permit requirements. The purpose of the annual report is to inform WDNR of the status of management practices, provide Wisconsin Department of Natural Resources (WDNR) with an update of the trading project overall, and submit any needed changes to the plan to WDNR.

The following should be included in the annual report that is submitted by the landowner to the WPDES Permittee:

- Verification that site inspections occurred
- Brief summary of site inspection findings
- Photos from the site inspection

If you are unsure of your compliance status or have questions as you complete the following checklist, please contact your county conservation office at (715) 538-2311, ext 321.

Please complete this form and send it to the WI DNR specialist for Water Quality Trading.

Landowner and Property Information

Name(s): Village of Strum

Phone: Office: 715-695-3601 E-mail: strumbrad@tcc.coop

LOCATION	*COMPLIANCE*	
BELOW DAM - NORTH SIDE	***YES***	
BELOW DAM – SOUTH SIDE	***YES***	
CRYSTAL LAKECAMPGROUND	***YES***	
PARKING LOT	***YES***	
KINVILLE SITE	***YES***	

Certification and Signatures

The landowner(s) certify that the Best Management Practices used in Water Quality Trading efforts with a WPDES permit holder are in compliance with the applicable conservation standards.

Village of Strum
Landowner

Brad Olson — 7-26-2022
Representative — Date

Best Management Practice (BMP) Conservation Compliance Checklist

Conservation Standards	In Compliance	Not Compliant
There is no trash and unwanted debris.	☒	☐
There is no grazing of animals will occur within 30 feet of the stream channel.	☒	☐
There is no soil erosion and accumulation, especially at the top and bottom of the slope.	☒	☐
There are no invasive weeds.	☒	☐
There are no animal burrows, holes or mounds.	☒	☐
Facilities have no visible signs of leakage or failure.	☒	☐
There are no dislodged or unstable rocks which could pose a safety hazard.	☒	☐
There are no unusual or unsafe conditions structural damage, dumping, tree establishment, etc.	☒	☐
Project has been monitored with inspections and documented with dates in a log book, to ensure the preservation of the site.	☒	☐
Project has been inspected after flood events.	☒	☐
20 foot vegetative buffer has been periodically mowed to control weeds and invading brush.	☒	☐
Farm equipment and row crops have remained outside of the agreed upon 20 foot vegetated buffer from the top of the bank.	☒	☐

Water Quality Trading

Annual Conservation Best Management Practice (BMP) Compliance Certification

Wisconsin Pollutant Discharge Elimination System (WPDES) Permittees need to submit annual reports as part of their permit requirements. The purpose of the annual report is to inform WDNR of the status of management practices, provide Wisconsin Department of Natural Resources (WDNR) with an update of the trading project overall, and submit any needed changes to the plan to WDNR.

The following should be included in the annual report that is submitted by the landowner to the WPDES Permittee:

- Verification that site inspections occurred
- Brief summary of site inspection findings
- Photos from the site inspection

Location(s) of land for which Water Quality Trading credit is claimed:

LOCATION	*IN COMPLIANCE*	*NOT COMPLIANT*
BELOW DAM-NORTH SIDE	***YES***	
BELOW DAM- SOUTH SIDE	***YES***	
CRYSTAL LAKE CAMPGROUND	***YES***	
PARKING LOT	***YES***	
KINVILLE SITE	***YES***	

Certification and Signatures

The landowner(s) certify that the Best Management Practices used in Water Quality Trading efforts with a WPDES permit holder are in compliance with the applicable conservation standards.

VILLAGE OF STRUM
Landowner

Brad Olson
Representative

9-13-2023
Date

Best Management Practice (BMP) Conservation Compliance Checklist

Conservation Standards	In Compliance	Not Compliant
There is no trash and unwanted debris.	☒	☐
There is no grazing of animals will occur within 30 feet of the stream channel.	☒	☐
There is no soil erosion and accumulation, especially at the top and bottom of the slope.	☒	☐
There are no invasive weeds.	☒	☐
There are no animal burrows, holes or mounds.	☒	☐
Facilities have no visible signs of leakage or failure.	☒	☐
There are no dislodged or unstable rocks which could pose a safety hazard.	☒	☐
There are no unusual or unsafe conditions structural damage, dumping, tree establishment, etc.	☒	☐
Project has been monitored with inspections and documented with dates in a log book, to ensure the preservation of the site.	☒	☐
Project has been inspected after flood events.	☒	☐
20 foot vegetative buffer has been periodically mowed to control weeds and invading brush.	☒	☐
Farm equipment and row crops have remained outside of the agreed upon 20 foot vegetated buffer from the top of the bank.	☒	☐

2020 and 2021 Inspection Photos









2020 and 2021 Inspection Photos





2022 Inspection Photos









2023 Inspection Photos







Water Quality Trading

Annual Conservation Best Management Practice (BMP) Compliance Certification

Wisconsin Pollutant Discharge Elimination System (WPDES) Permittees need to submit annual reports as part of their permit requirements. The purpose of the annual report is to inform WDNR of the status of management practices, provide Wisconsin Department of Natural Resources (WDNR) with an update of the trading project overall, and submit any needed changes to the plan to WDNR.

The following should be included in the annual report that is submitted by the landowner to the WPDES Permittee:

- Verification that site inspections occurred
- Brief summary of site inspection findings
- Photos from the site inspection

If you are unsure of your compliance status or have questions as you complete the following checklist, please contact your county conservation office at (715) 538-1917.

Please complete and return this form by September 29, 2023 to the Trempealeau County Land Management Department at the following address or email at haillie.passow@co.trempealeau.wi.us:

Trempealeau County Land Management
Attn: Haillie Passow
36245 Main St
PO Box 67
Whitehall WI 54773

Landowner and Property Information

Name(s): John Kimilk & Tristi Crawford

Address: 7374 203rd St., Chippewa Falls, WI. 54729

Phone: 715-226-0449 E-mail: kimilk.socialstudies@gmail.com

Location(s) of land for which Water Quality Trading credit is claimed:

TOWNSHIP	RANGE	SECTION	TOWN, VILLAGE, CITY	PARCEL ID #'S
24N	8W	16	UNITY	030-00333-0005

Certification and Signatures

The landowner(s) certify that the Best Management Practices used in Water Quality Trading efforts with a WPDES permit holder are in compliance with the applicable conservation standards.

Landowner — Date: 08/04/2023

Landowner — Date: 8/10/2023

Best Management Practice (BMP) Conservation Compliance Checklist

Conservation Standards	In Compliance	Not Compliant
There is no trash and unwanted debris.	☒	☐
There is no grazing of animals will occur within 30 feet of the stream channel.	☒	☐
There is no soil erosion and accumulation, especially at the top and bottom of the slope.	☒	☐
There are no invasive weeds.	☒	☐
There are no animal burrows, holes or mounds.	☒	☐
Facilities have no visible signs of leakage or failure.	☒	☐
There are no dislodged or unstable rocks which could pose a safety hazard.	☒	☐
There are no unusual or unsafe conditions structural damage, dumping, tree establishment, etc.	☒	☐
Project has been monitored with inspections and documented with dates in a log book, to ensure the preservation of the site.	☒	☐
Project has been inspected after flood events.	☒	☐
20 foot vegetative buffer has been periodically mowed to control weeds and invading brush.	☒	☐
Farm equipment and row crops have remained outside of the agreed upon 20 foot vegetated buffer from the top of the bank.	☒	☐













Water Quality Trading

Annual Conservation Best Management Practice (BMP) Compliance Certification

Wisconsin Pollutant Discharge Elimination System (WPDES) Permittees need to submit annual reports as part of their permit requirements. The purpose of the annual report is to inform WDNR of the status of management practices, provide Wisconsin Department of Natural Resources (WDNR) with an update of the trading project overall, and submit any needed changes to the plan to WDNR.

The following should be included in the annual report that is submitted by the landowner to the WPDES Permittee:

- Verification that site inspections occurred
- Brief summary of site inspection findings
- Photos from the site inspection

If you are unsure of your compliance status or have questions as you complete the following checklist, please contact your county conservation office at (715) 538-1917.

Please complete and return this form by September 25, 2024 to the Trempealeau County Land Management Department at the following address or email at haillie.passow@co.trempealeau.wi.us:

Trempealeau County Land Management
Attn: Haillie Passow
18600 Hobson St
Whitehall WI 54773

Landowner and Property Information

Name(s): John E. Kinville

Mailing Address: 7374 203RD St., Chippewa Falls, WI. 54729

Phone: 715-226-0449 E-mail: kinville.socialstudies@gmail.com

Location(s) of land for which Water Quality Trading credit is claimed:

TOWNSHIP	RANGE	SECTION	TOWN, VILLAGE, CITY	PARCEL ID #'S
24N	8W	16	UNITY	030-00333-0005

Certification and Signatures

The landowner(s) certify that the Best Management Practices used in Water Quality Trading efforts with a WPDES permit holder are in compliance with the applicable conservation standards.

Landowner — Date: 6-30-24

Landowner — Date: 6/30/24

Best Management Practice (BMP) Conservation Compliance Checklist

Conservation Standards	In Compliance	Not Compliant
There is no trash and unwanted debris.	☒	☐
There is no grazing of animals will occur within 30 feet of the stream channel.	☒	☐
There is no soil erosion and accumulation, especially at the top and bottom of the slope.	☒	☐
There are no invasive weeds.	☒	☐
There are no animal burrows, holes or mounds.	☒	☐
Facilities have no visible signs of leakage or failure.	☒	☐
There are no dislodged or unstable rocks which could pose a safety hazard.	☒	☐
There are no unusual or unsafe conditions structural damage, dumping, tree establishment, etc.	☒	☐
Project has been monitored with inspections and documented with dates in a log book, to ensure the preservation of the site.	☒	☐
Project has been inspected after flood events.	☒	☐
20 foot vegetative buffer has been periodically mowed to control weeds and invading brush.	☒	☐
Farm equipment and row crops have remained outside of the agreed upon 20 foot vegetated buffer from the top of the bank.	☒	☐

2024 Kinville Annual Inspection









Water Quality Trading

Annual Conservation Best Management Practice (BMP) Compliance Certification

Wisconsin Pollutant Discharge Elimination System (WPDES) Permittees need to submit annual reports as part of their permit requirements. The purpose of the annual report is to inform WDNR of the status of management practices, provide Wisconsin Department of Natural Resources (WDNR) with an update of the trading project overall, and submit any needed changes to the plan to WDNR.

The following should be included in the annual report that is submitted by the landowner to the WPDES Permittee:

- Verification that site inspections occurred
- Brief summary of site inspection findings
- Photos from the site inspection

Landowner and Property Information

Name(s): Village of Strum

Address: 202 5th Avenue South P.O. Box 25

Phone: 715-695-3601 Office 715-797-1387 Cell E-mail: strumbrad@tcc.coop esww@tcc.coop

Location(s) of land for which Water Quality Trading credit is claimed:

LOCATION	*COMPLIANCE YES*	*COMPLIANCE NO*		
BELOW DAM-NORTH SIDE	***YES***			
BELOW DAM- SOUTH SIDE	***YES***			
CRYSTAL LAKE CAMPGROUND	***YES***			
PARKING LOT	***YES***			
KINVILLE SITE	***YES***			

2024







2024





Certification and Signatures

The landowner(s) certify that the Best Management Practices used in Water Quality Trading efforts with a WPDES permit holder are in compliance with the applicable conservation standards.

VILLAGE OF STRUM
Landowner

Brad Olson
Representative

9-17-2024
Date

Best Management Practice (BMP) Conservation Compliance Checklist

Conservation Standards	In Compliance	Not Compliant
There is no trash and unwanted debris.	☒	☐
There is no grazing of animals will occur within 30 feet of the stream channel.	☒	☐
There is no soil erosion and accumulation, especially at the top and bottom of the slope.	☒	☐
There are no invasive weeds.	☒	☐
There are no animal burrows, holes or mounds.	☒	☐
Facilities have no visible signs of leakage or failure.	☒	☐
There are no dislodged or unstable rocks which could pose a safety hazard.	☒	☐
There are no unusual or unsafe conditions structural damage, dumping, tree establishment, etc.	☒	☐
Project has been monitored with inspections and documented with dates in a log book, to ensure the preservation of the site.	☒	☐
Project has been inspected after flood events.	☒	☐
20 foot vegetative buffer has been periodically mowed to control weeds and invading brush.	☒	☐
Farm equipment and row crops have remained outside of the agreed upon 20 foot vegetated buffer from the top of the bank.	☒	☐

APPENDIX 10-2

KINVILLE AND CRAWFORD BEFORE PHOTOS









Before Photos




5/ 3/2016 14:07


5/ 3/2016 14:09





APPENDIX 14-1

Project Location Map



Legend

- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

Notes

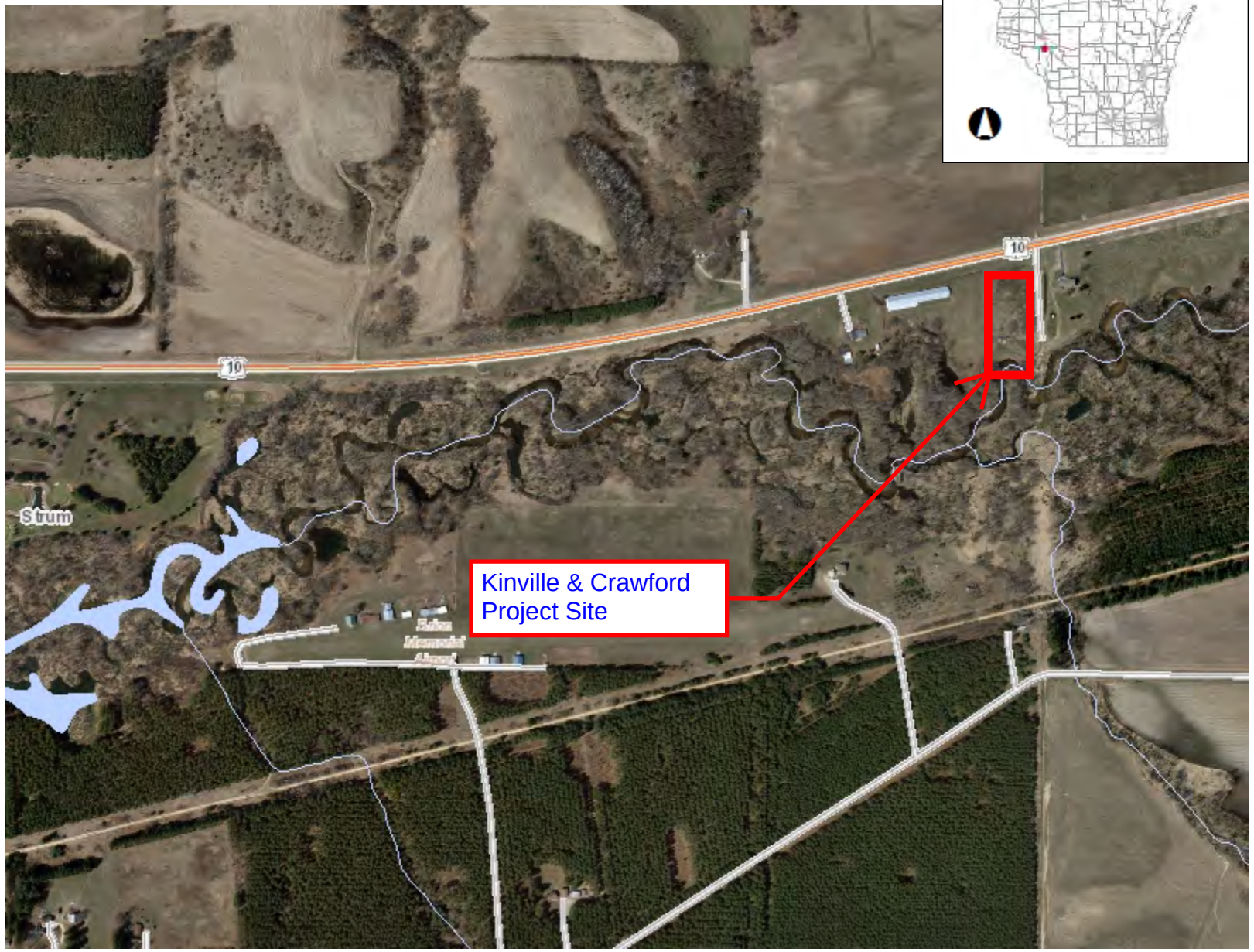
1.0 0 0.50 1.0 Miles

NAD_1983_HARN_Wisconsin_TM

1: 31,680

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: http://dnr.wi.gov/legal/

Kinville & Crawford Project Location Map



Legend

- Surface Water Outfalls
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

Notes

0.3 0 0.13 0.3 Miles

NAD_1983_HARN_Wisconsin_TM

1: 7,920

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: http://dnr.wi.gov/legal/

APPENDIX 15-1

State of Wisconsin
Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921
dnr.wi.gov

Water Quality Trading Management Practice Registration

Form 3400-207 (R 1/14)

Notice: Pursuant to s. 283.84, Wis. Stats., this form must be completed by any WPDES permittee that is using water quality trading as a method of complying with a permit limitation. Failure to complete this form would not result in penalties. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Applicant Information

Permittee Name	Permit Number	Facility Site Number
Eleva Strum Joint Sewerage Commission	WI- 0064998-02-0	

Facility Address	City	State	ZIP Code
N49237 County Rd V	Strum	WI	54770

Project Contact Name (if applicable)	Address	City	State	ZIP Code
Brad Olsen				

Project Name
Eleva Strum Water Quality Trade

Broker/Exchange Information (if applicable)

Was a broker/exchange be used to facilitate trade? (●) Yes ( ) No

Broker/Exchange Organization Name	Contact Name	
Trempealeau County Land Conservation Dept	Tess Johnson	
Address	**Phone Number**	**Email**
PO Box 67, Whitehall, WI 54773	(715) 538-1917	tess.johnson@co.trempealeau.wi.us

Trade Registration Information (Use a separate form for each trade agreement)

Type	Trade Agreement Number	Practices Used to Generate Credits	Anticipated Load Reduction	Trade Ratio	Method of Quantification
( ) Urban NPS ( ) Agricultural NPS (●) Other		Streambank Restoration Below Dam - N. Side Completed: Nov 2019	48	3:1	NRCS Soil Loss Spreadsheet

County	Closest Receiving Water Name	Land Parcel ID(s)	Parameter(s) being traded
Trempealeau	Buffalo River		Phosphorus

The preparer certifies all of the following:

- I have completed this document to the best of my knowledge and have not excluded pertinent information.
- I certify that the information in this document is true to the best of my knowledge.

Signature of Preparer	Date Signed
Bruce A. Nelson	10/23/2020

Authorized Representative Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of those persons directly responsible for gathering and entering the Information, the information is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Authorized Representative	Date Signed
Matthew L. Nelson	10/29/2020

Leave Blank – For Department Use Only

Date Received		Trade Docket Number
Entered in Tracking System ☐ Yes	Date Entered	Name of Department Reviewer

State of Wisconsin
Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921
dnr.wi.gov

Water Quality Trading Management Practice Registration

Form 3400-207 (R 1/14)

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Applicant Information

Permittee Name	Permit Number	Facility Site Number
Eleva Strum Joint Sewerage Commission	WI- 0064998-02-0	

Facility Address	City	State	ZIP Code
N49237 County Rd V	Strum	WI	54770

Project Contact Name (if applicable)	Address	City	State	ZIP Code
Brad Olsen				

Project Name
Eleva Strum Water Quality Trade

Broker/Exchange Information (if applicable)

Was a broker/exchange be used to facilitate trade? (●) Yes ( ) No

Broker/Exchange Organization Name	Contact Name	
Trempealeau County Land Conservation Dept	Tess Johnson	
Address	**Phone Number**	**Email**
PO Box 67, Whitehall, WI 54773	(715) 538-1917	tess.johnson@co.trempealeau.wi.us

Trade Registration Information (Use a separate form for each trade agreement)

Type	Trade Agreement Number	Practices Used to Generate Credits	Anticipated Load Reduction	Trade Ratio	Method of Quantification
( ) Urban NPS ( ) Agricultural NPS (●) Other		Streambank Restoration Below Dam - S. Side Completed: Nov 2017	17	3:1	NRCS Soil Loss Spreadsheet

County	Closest Receiving Water Name	Land Parcel ID(s)	Parameter(s) being traded
Trempealeau	Buffalo River		Phosphorus

The preparer certifies all of the following:

- I have completed this document to the best of my knowledge and have not excluded pertinent information.
- I certify that the information in this document is true to the best of my knowledge.

Signature of Preparer	Date Signed
Bruce A. Olson	10/23/2020

Authorized Representative Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of those persons directly responsible for gathering and entering the information, the information is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Authorized Representative	Date Signed
Matthew B. Nelson	10/29/2020

Leave Blank – For Department Use Only

Date Received		Trade Docket Number
Entered in Tracking System ☐ Yes	Date Entered	Name of Department Reviewer

State of Wisconsin
Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921
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Water Quality Trading Management Practice Registration

Form 3400-207 (R 1/14)

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Applicant Information

Permittee Name	Permit Number	Facility Site Number
Eleva Strum Joint Sewerage Commission	WI- 0064998-02-0	

Facility Address	City	State	ZIP Code
N49237 County Rd V	Strum	WI	54770

Project Contact Name (if applicable)	Address	City	State	ZIP Code
Brad Olsen				

Project Name
Eleva Strum Water Quality Trade

Broker/Exchange Information (if applicable)

Was a broker/exchange be used to facilitate trade? (●) Yes ( ) No

Broker/Exchange Organization Name	Contact Name	
Trempealeau County Land Conservation Dept	Tess Johnson	
Address	**Phone Number**	**Email**
PO Box 67, Whitehall, WI 54773	(715) 538-1917	tess.johnson@co.trempealeau.wi.us

Trade Registration Information (Use a separate form for each trade agreement)

Type	Trade Agreement Number	Practices Used to Generate Credits	Anticipated Load Reduction	Trade Ratio	Method of Quantification
( ) Urban NPS ( ) Agricultural NPS (●) Other		Streambank Restoration Crystal Lake Campground Completed: August 2020	127	3:1	NRCS Soil Loss Spreadsheet

County	Closest Receiving Water Name	Land Parcel ID(s)	Parameter(s) being traded
Trempealeau	Buffalo River		Phosphorus

The preparer certifies all of the following:

- I have completed this document to the best of my knowledge and have not excluded pertinent information.
- I certify that the information in this document is true to the best of my knowledge.

Signature of Preparer	Date Signed
Brad A. Nelson	10/23/2020

Authorized Representative Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of those persons directly responsible for gathering and entering the information, the information is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Authorized Representative	Date Signed
Matthew B. Nelson	10/29/2020

Leave Blank – For Department Use Only

Date Received		Trade Docket Number
Entered In Tracking System ☐ Yes	Date Entered	Name of Department Reviewer

State of Wisconsin
Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921
dnr.wi.gov

Water Quality Trading Management Practice Registration

Form 3400-207 (R 1/14)

Notice: Pursuant to s. 283.84, Wis. Stats., this form must be completed by any WPDES permittee that is using water quality trading as a method of complying with a permit limitation. Failure to complete this form would not result in penalties. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Applicant Information

Permittee Name	Permit Number	Facility Site Number
Eleva Strum Joint Sewerage Commission	WI- 0064998-02-0	

Facility Address	City	State	ZIP Code
N49237 County Rd V	Strum	WI	54770

Project Contact Name (if applicable)	Address	City	State	ZIP Code
Brad Olsen				

Project Name
Eleva Strum Water Quality Trade

Broker/Exchange Information (if applicable)

Was a broker/exchange be used to facilitate trade? (●) Yes ( ) No

Broker/Exchange Organization Name	Contact Name	
Trempealeau County Land Conservation Dept	Tess Johnson	
Address	**Phone Number**	**Email**
PO Box 67, Whitehall, WI 54773	(715) 538-1917	tess.johnson@co.trempealeau.wi.us

Trade Registration Information (Use a separate form for each trade agreement)

Type	Trade Agreement Number	Practices Used to Generate Credits	Anticipated Load Reduction	Trade Ratio	Method of Quantification
( ) Urban NPS ( ) Agricultural NPS (●) Other	WQT-0064998-02	Streambank Restoration Kinville & Crawford Hwy 10 Completed: Sept 2020	325	2:1	NRCS Soil Loss Spreadsheet

County	Closest Receiving Water Name	Land Parcel ID(s)	Parameter(s) being traded
Trempealeau	Buffalo River		Phosphorus

The preparer certifies all of the following:

- I have completed this document to the best of my knowledge and have not excluded pertinent information.
- I certify that the information in this document is true to the best of my knowledge.

Signature of Preparer	Date Signed
Bruce A. Nelson	10/23/2020

Authorized Representative Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of those persons directly responsible for gathering and entering the information, the information is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Authorized Representative	Date Signed
Matthew B. Nelson	10/29/2020

Leave Blank – For Department Use Only

Date Received		Trade Docket Number
Entered in Tracking System ☐ Yes	Date Entered	Name of Department Reviewer

State of Wisconsin
Department of Natural Resources
101 South Webster Street
Madison WI 53707-7921
dnr.wi.gov

Water Quality Trading Management Practice Registration

Form 3400-207 (R 1/14)

Notice: Pursuant to s. 283.84, Wis. Stats., this form must be completed by any WPDES permittee that is using water quality trading as a method of complying with a permit limitation. Failure to complete this form would not result in penalties. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.).

Applicant Information

Permittee Name	Permit Number	Facility Site Number
Eleva Strum Joint Sewerage Commission	WI- 0064998-02-0	

Facility Address	City	State	ZIP Code
N49237 County Rd V	Strum	WI	54770

Project Contact Name (if applicable)	Address	City	State	ZIP Code
Brad Olsen				

Project Name
Eleva Strum Water Quality Trade

Broker/Exchange Information (if applicable)

Was a broker/exchange be used to facilitate trade? (●) Yes ( ) No

Broker/Exchange Organization Name	Contact Name
Trempealeau County Land Conservation Dept	Tess Johnson

Address	Phone Number	Email
PO Box 67, Whitehall, WI 54773	(715) 538-1917	tess.johnson@co.trempealeau.wi.us

Trade Registration Information (Use a separate form for each trade agreement)

Type	Trade Agreement Number	Practices Used to Generate Credits	Anticipated Load Reduction	Trade Ratio	Method of Quantification
( ) Urban NPS ( ) Agricultural NPS (●) Other		Streambank Restoration Parking Lot Completed: Nov 2019	14	3:1	NRCS Soil Loss Spreadsheet

County	Closest Receiving Water Name	Land Parcel ID(s)	Parameter(s) being traded
Trempealeau	Crystal Lake		Phosphorus

The preparer certifies all of the following:

- I have completed this document to the best of my knowledge and have not excluded pertinent information.
- I certify that the information in this document is true to the best of my knowledge.

Signature of Preparer	Date Signed
Bruce A. Olson	10/23/2020

Authorized Representative Signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. Based on my inquiry of those persons directly responsible for gathering and entering the information, the information is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Authorized Representative	Date Signed
Matthew B. Olson	10/29/2020

Leave Blank – For Department Use Only

Date Received		Trade Docket Number
Entered in Tracking System ☐ Yes	Date Entered	Name of Department Reviewer

APPENDIX 17-1

Water Quality Trading Agreement: Eleva-Strum Joint Sewerage Commission and John Kinville, Tristi Crawford

Permittee Information

Credit User Name (Permittee)	Permit Number
Eleva-Strum Joint Sewerage Commission	WI-0064998-02-0

Credit User Address

202 5th Ave S., Strum, WI 54770

Broker Name	Trade Agreement Number
Trempealeau County Dept. of Land Management	WQT-64998020-02

Broker Address

Street Address	City	State	ZIP Code
36245 Main St.	Whitehall	WI	54773

Project Name

Kinville & Crawford Buffalo River Bank Stabilization

Name of Credit Generator (Landowner/Operator) (Last, First, M.I.)

Kinville. John E. and Crawford. Tristi L.

Street Address	City	State	ZIP Code
7375 203RD	Chippewa Falls	WI	54729

Property Information

Name of Landowner(s) (if not Operator) (Last, First, M.I.)

Street Address	City	State	ZIP Code
W20511 US HWY 10	Strum	WI	54770

Legal Description of Property - Contiguous sites under the same ownership: (add additional sheets if necessary)

Parcel 030-00333-0005
PT SE NW Sec 16, T24N, R08W

Parcel ID(s):
030003330005

Site Locator for Construction Projects

County	Township	Range E/ W	Section	Quarter/Quarter (e.g., NW ¼ of the NE ¼)
Trempealeau	24N	08W	16	SE1/4 of the NW 1/4
	N			
	N			
	N			

Agreement

The property described above is enrolled in a Water Quality Trade Agreement. Funds are provided by the credit user in return for the installation (by the broker), operation and maintenance (by the landowner) of best management practices (BMPs) designed to enhance water quality. This agreement commits the landowner/operator, their heirs, successors and assigns to fulfill the trade agreement until a satisfaction or release is filed by the credit user.

Addenda which describe the BMPs, costs, installation schedule, and conditions are hereby incorporated into this agreement and are on file with the credit user and may be given to Wisconsin DNR upon request by the Department.

Landowner/Operator

Signed this 13th day of July, 20 20.

Signature of Operator

John E. Kinville, Operator/Landowner
Typed Name of Operator

Signature of Landowner/Operator

Tristi L. Crawford, Operator/Landowner
Typed Name of Landowner/Operator

STATE OF WISCONSIN)
) ss.
Trempealeau County)

Personally came before me this 13th day of July, 2020.

The above named Tristi L. Crawford + John E. Kinville to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

Signature of Notary Public

Michelle A. Loken
Typed Name of Notary Public

Notary Public Trempealeau County, Wisconsin

My commission (is permanent) (expires 7-1-2021).

Landowners (if not operator)

If the landowner section is not completed, check (X) one or both of the following that apply

☐ Landowner is also operator

☐ Trade agreement contains only high residue management, nutrient management, pesticide management, cropland protection cover (green manure)

Signed this _____ day of _____, 20_____.

Signature of Landowner (if not operator)

Signature of Landowner (if not operator)

Typed Name of Landowner (if not operator)

Typed Name of Landowner (if not operator)

STATE OF ILLINOIS)
) ss.
_____ County)

Personally came before me this _____ day of _____, 20 20.

The above named _____ to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

Signature of Notary Public

Typed Name of Notary Public

Notary Public _____ County, Wisconsin

My commission (is permanent) (expires _____).

Credit User

Signed this 13 day of July, 20 20.

Signature of credit user

Eleva-Strum Joint Sewerage Commission
Typed Name of credit user/broker/exchange

STATE OF WISCONSIN)
) ss.
Trempealeau County)

Personally came before me this 13th day of July, 20 20.

The above named Eleva-Strum Joint Sewerage Commission to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

Signature of Notary Public

Notary Public Trempealeau County, Wisconsin

My commission (is permanent) (expires 7-1-2021).

Other Signer- Specify title or relationship: Trempealeau County Dept. of Land Management – Broker

Signed this 13th day of July, 20 20.

Kirstie Heidenreich
Signature

Signature

Kirstie Heidenreich, Planning & Conservation Coordinator
Typed Name

Typed Name

STATE OF WISCONSIN)
) ss.
Trempealeau County)

Personally came before me this 13th day of July, 20 20.

The above named Kirstie Heidenreich to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

Michelle A. Loken
Signature of Notary Public

Michelle A. Loken
Typed Name of Notary Public

Notary Public Trempealeau County, Wisconsin

My commission (is permanent) (expires).

Other Signer- Specify title or relationship:

Signed this day of, 20.

Signature

Signature

Typed Name

Typed Name

STATE OF WISCONSIN)
) ss.
County)

Personally came before me this day of, 20.

The above named to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

Signature of Notary Public

Typed Name of Notary Public

Notary Public County, Wisconsin

My commission (is permanent) (expires).

Other Signer- Specify title or relationship:

Signed this day of, 20.

Signature

Signature

Typed Name

Typed Name

STATE OF WISCONSIN)
) ss.
County)

Personally came before me this day of, 20.

The above named to me known to be the person(s) who executed the foregoing instrument and acknowledge the same.

Signature of Notary Public

Typed Name of Notary Public

Notary Public County, Wisconsin

My commission (is permanent) (expires).

☐ Check this box if this page is purposely left blank.

Section A – General Requirements

1. The following relationship has been established for this Water Quality Trading Agreement:
A. The Eleva-Strum Joint Sewerage Commission will hereby be known as the Credit User. They will hereby be responsible for all monetary costs incurred with the BMP practice installation, which includes but is not limited to: site preparation, clearing, and finished to planned grades; stream shaping; limestone rock riprap and installation; liming, fertilizing, seeding and mulching. The Credit User shall have the right to access the property for inspection or maintenance.
B. The Trempealeau County Department of Land Management will be known as the Broker. The Broker will be responsible for the oversight of the BMP practice design, contractor bidding process and signed agreements, inspection of site preparation and design installation, regulation of applicable performance standards, and monitoring of landowners' obligations in the form of performing on-site checks as needed and as stated in Section B. The Broker shall not have any financial obligation for this project except as expressly stated in this agreement.
C. John E. Kinville and Tristi L. Crawford will be known as the Landowners/Operators. Landowners will be responsible for all aspects of the operation and maintenance of BMP practices as outlined in Section B below.
    1. If any land covered by this agreement is transferred or otherwise changes ownership, this agreement will be held in obligation with the land for the full 20 years and the new owners will be obligated to comply with this agreement. Landowners are obligated to notify any prospective buyers of this agreement and their responsibilities under this agreement and applicable law.
    2. The Landowners agree to repay all project costs to the credit user, upon demand by the Broker, if the Landowner fails to comply with the terms of this agreement. Repayment shall not be required if a practice(s) is rendered ineffective by circumstances which are beyond the control of the Landowner.
    3. This contract will be recorded in the Trempealeau County Register of Deeds office.
2. This contract may be amended, by written mutual agreement of the parties, during the installation or maintenance period, if the proposed changes will provide equal or greater control of water pollution. For any changes in practice components or costs, the County will determine eligibility and whether to approve such changes. Any increases to the project cost shall be approved in advance in writing by the Credit User.
3. By request of the landowners/operators, the Eleva-Strum Joint Sewerage Commission agrees to fully remediate the driveway (leading up to the cabin) and parkway (mowed area in front of the cabin and shed) after completion of the project, ensuring that no gullies or ruts remain from construction equipment.
4. The Broker reserves the right to enter the property to verify the information on the inspection report is accurate.
5. Any duly authorized officer, employee or representative of WDNR shall have the right to access and inspect the practices pursuant to Wis. Stat. 283.55(2) so long as this Agreement remains in effect.

Section B – Landowner/Operator Shall:

1. Inspect riprap annually and after heavy storms for any erosion or displacement of rocks. The Broker should be contacted immediately and directly if any damage has occurred. ~~Repairs should be done immediately by Landowner, at Landowner's cost.~~ 7-13-2020
2. Ensure that no grazing of animals will occur within 30 feet of the stream channel to prevent clogging or rerouting of water in the channel.
3. Ensure that debris is removed from the channel and that vegetation is controlled around the channel only when the vegetation or obstructions are threatening stream function. Invasive vegetation should be controlled and channel obstructions deemed harmful may be removed. Channel clearing to remove stumps, fallen trees, debris, and sediment bars shall only be performed when they are causing or could cause unacceptable bank erosion, flow restriction, or damage to structures. Habitat forming elements that provide cover, food, pools, and water turbulence shall be retained or replaced to the extent possible.
4. Check for sloughing, erosion, or damage to vegetative cover. Damaged areas shall be graded, shaped, and replanted by Landowner as soon as possible with a seed mix pre-approved by the broker.
5. If cattle are introduced to the stream corridor, fencing must be installed to prevent unlimited access of cattle to waters of the State. If fences are installed, they shall be maintained to prevent unauthorized human or livestock access. Fencing shall be set back to allow for a 30-foot vegetative buffer along the stream corridor.
6. Periodically, mow vegetative buffer to control weeds and invading brush. All farm equipment and row crops must remain outside of the agreed upon 30-foot vegetated buffer from the top of the bank.
7. Eliminate all burrowing rodents and repair damage caused by them.
8. Maintain the project consistent with NRCS technical standard 580.
9. Installation of this practice allows the Landowner to comply with the applicable state/local performance standard. Compliance with this performance standard shall be for a period of 20 years. This practice must be maintained or replaced with a practice which ensures continued compliance with the applicable performance standard.
10. The landowner agrees that the annual inspections are to be performed on inspection forms, which will be provided by the Broker. The landowner will be required to take pictures of the BMP for the annual report, which will be submitted with the inspection form to the Broker. **The landowner agrees to submit the annual inspection and pictures by September 30th each year.** Should the landowner fail to submit the annual inspection to the Broker within 30 days of the due date, then the Broker may enter the Landowner's property to perform the inspection. Should the Broker need to perform the inspection due to failure of the Landowner to submit the inspection, then the **Landowner will be responsible for a $250 inspection fee payable to the Broker.**

TA Number	Typed Name of Landowner/Operator	Initials of Landowner/Operator	Date
	John E. Kinville and Tristi L. Crawford		7/13/2020

7/13/2020

The cost-share recipient shall implement and maintain all best management practices listed in this Addendum, unless otherwise amended in accordance with this agreement.							Installation Period			
							From (MM/YY) 08/20		To (MM/YY) 10/20	
Field #	DNR BMP Code	Practice Name	Quantity	Unit	Unit Cost	Estimated Total Cost	Reimbursement Rate (%)	Estimated Cost-Share Amount	Cost-Share Amt. From Other Programs*	Estimated Year to be Installed
	NRCS 580	Mobilization	1	L.S.	$ 500.00	$ 500.00				2020
	NRCS 580	Site Preparation, clearing, and grading	1	L.S.	$ 1556.00	$ 1556.00				2020
	NRCS 580	Limestone rock riprap D50 size 10" Diameter	699	cu. yd.	$ 40.00	$ 27,960.00				2020
	NRCS 580	Geotextile Fabric, Type SAS	922	sq. yd.	$ 2.50	$ 2,305.00				2020
	NRCS 580	Liming, fertilizing, seeding and mulching	0.8	Acre	$ 1500.00	$ 1,200.00				2020
	NRCS 395	Root Wads	3	Each	$ 500.00	$ 1,500.00				2020
		Sub-Total				**$ 35,021.00**				
		Contingencies (10%)				$ 38,523.10				
Note: These estimates are based on an overall project of three parcels of land. The estimated values were broken up through an assumed percentage of land. The exact values in the field may differ from above.										
* Identify Program Names:					**TOTALS**	**$ 38,523.10**	$ -	$ -	$ -	

CSA Number	Typed Name of Landowner / Operator	Initials of Landowner/Operator	Date
	John E. Kinville and Tristi L. Crawford	7/13/2020	07/13/2020