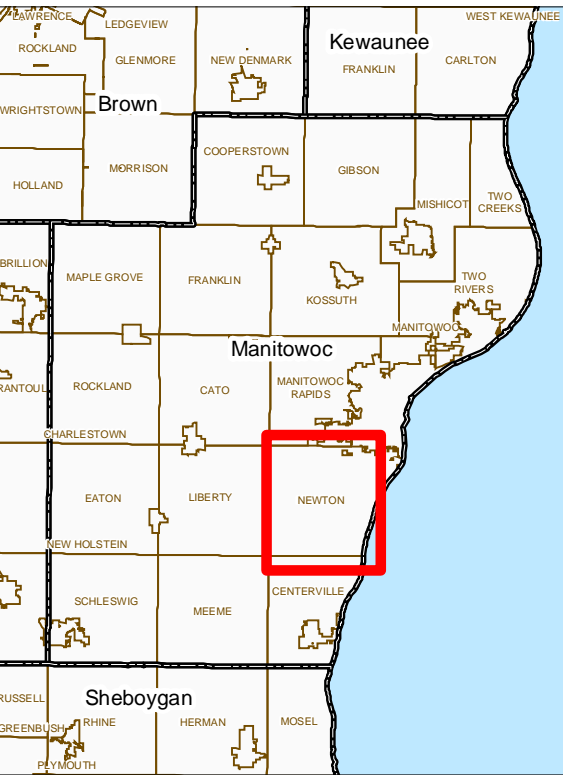
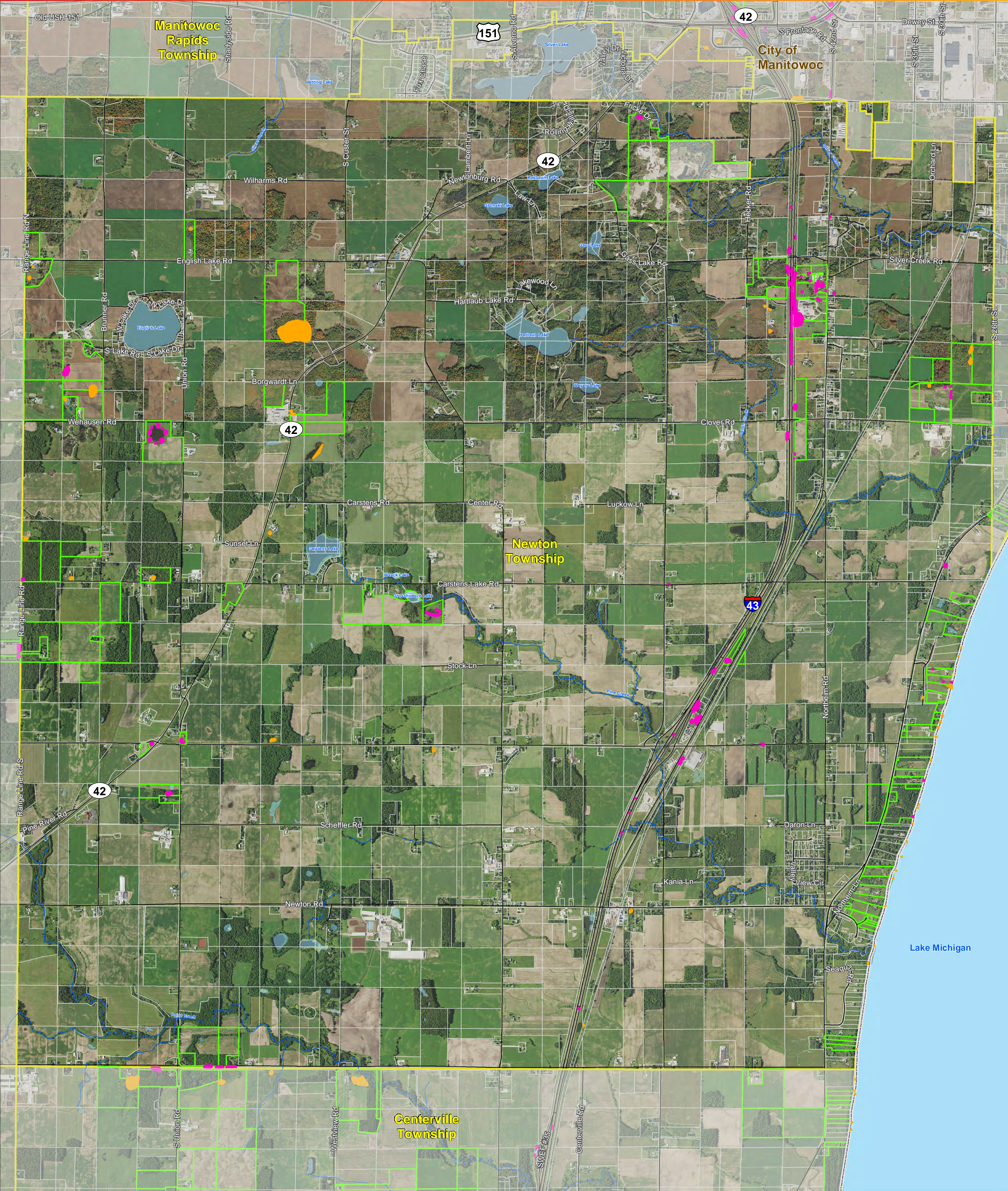


# Manitowoc County Phragmites Control: Newton Township



**Legend**

- Parcel Boundary
- Parcel Access Granted
- Perennial Stream
- Waterbody
- Phragmites Area
  - Untreated
  - Treated

**Need a permission form? Have questions?**  
For permission forms and to report populations, contact:  
Melissa Curran, Environmental Scientist  
(920) 841-1072 | [Melissa.curran@stantec.com](mailto:Melissa.curran@stantec.com)

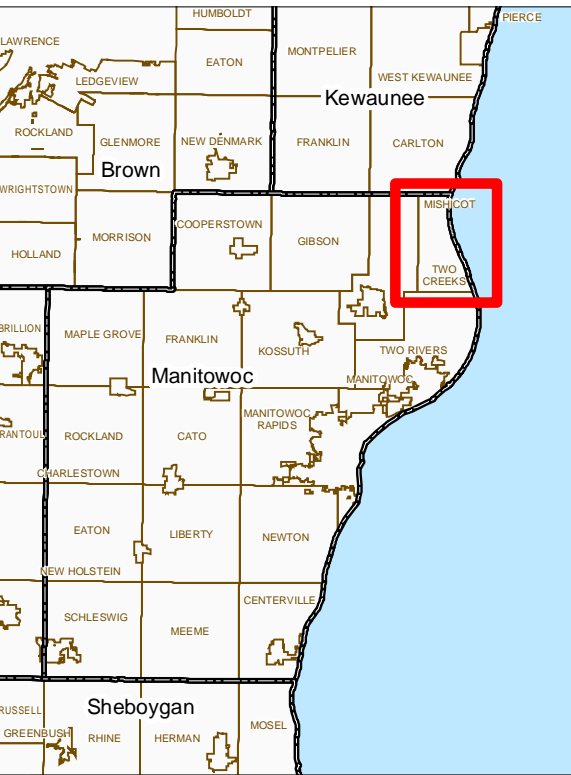
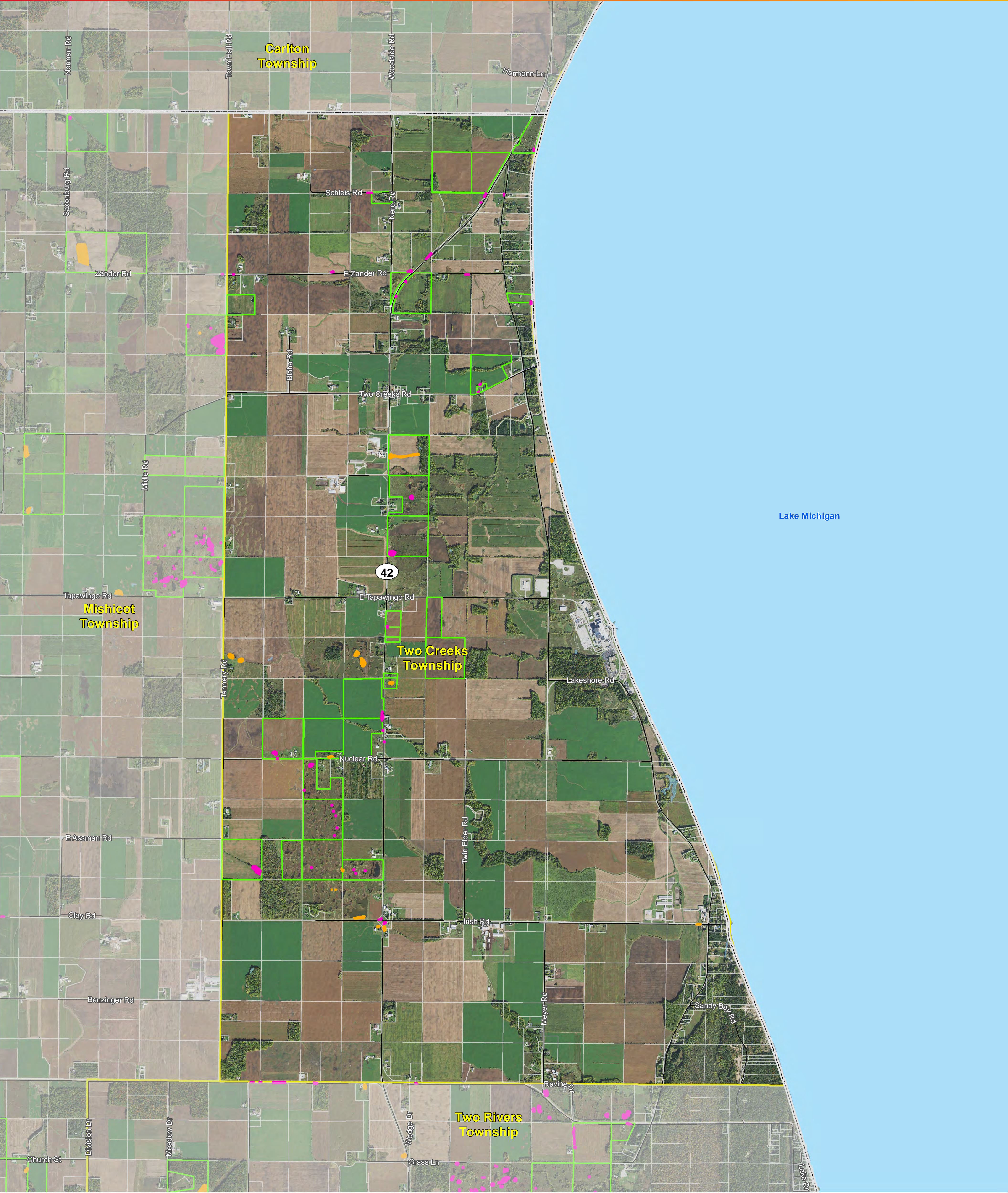
For general questions, contact:  
Tom Ward (or your Township representative)  
(920) 588-0047 | [tomward@tm.net](mailto:tomward@tm.net)

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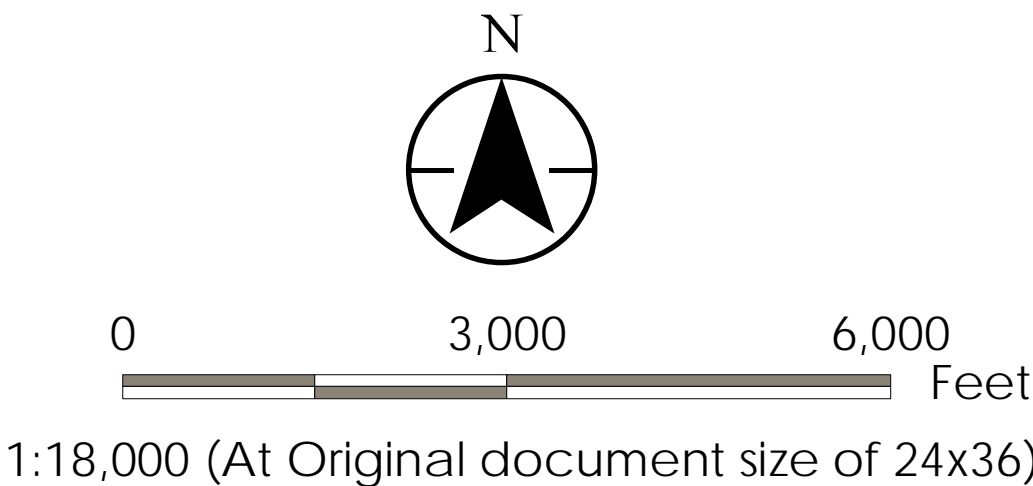
# Manitowoc County Phragmites Control: Two Creeks Township



- Legend**
- Parcel Boundary
  - Parcel Access Granted
  - Perennial Stream
  - Waterbody
  - Phragmites Area
    - Untreated
    - Treated

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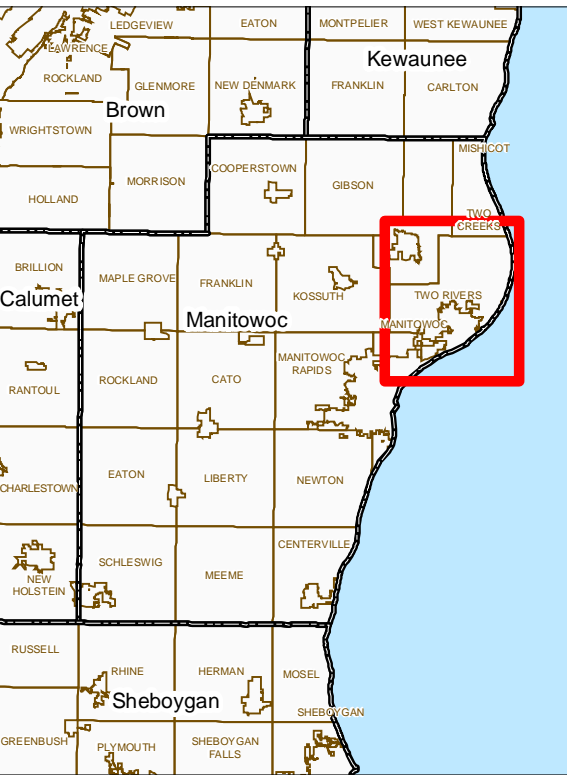
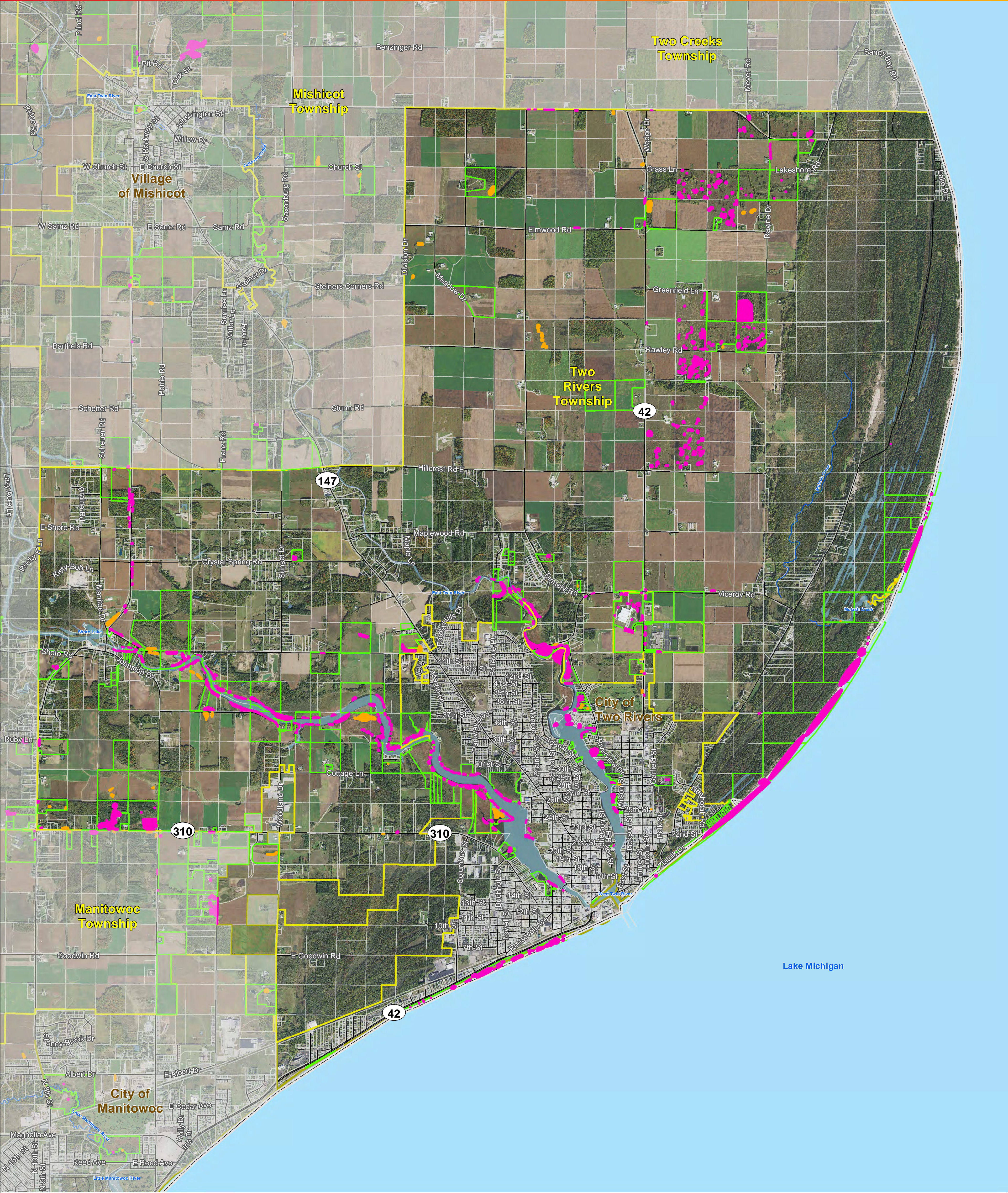
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(920) 588-0047 | [tomward@tm.net](mailto:tomward@tm.net)



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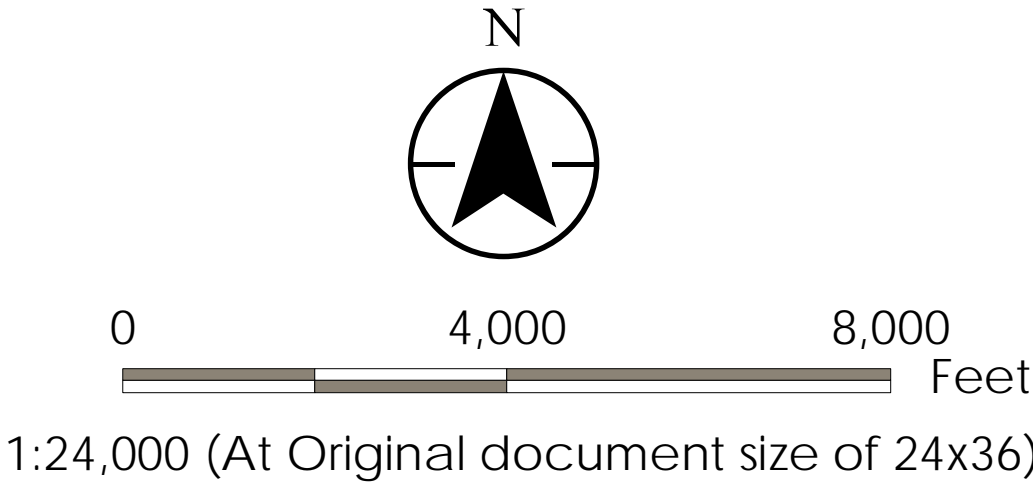
# Manitowoc County Phragmites Control: Two Rivers Township



- Legend**
- Parcel Boundary
  - Parcel Access Granted
  - Perennial Stream
  - Waterbody
  - Phragmites Area
    - Untreated
    - Treated

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For general questions, contact:  
Tom Ward (or your Township representative)  
(920) 588-0047 | [tomward@tm.net](mailto:tomward@tm.net)



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To:	Mary Gansberg Wisconsin Department of Natural Resources 2984 Shawano Avenue Green Bay, WI 54313	From:	Melissa Curran Stantec Consulting Services Inc. 1165 Scheuring Road De Pere, WI 54115
File:	AI5 Grant ACEI-189-17 Stantec Project# 193703791	Date:	April 26, 2018

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Reference: ***Aquatic Invasive Species Control Grant ACEI-167-15 – 2017 Annual Project Summary, Manitowoc County Collaborative Phragmites Project - Phase 2***

Lakeshore Natural Resource Partnership (LNRP) was awarded Wisconsin Department of Natural Resources (WDNR) Aquatic Invasive Species (AIS) Established Population Control grant funding in 2017 (ACEI-189-17) to treat the invasive European subspecies of common reed grass (*Phragmites australis* subsp. *australis*) as part of the County-wide Phase 2 project area. More specifically, Phase 2 includes: 1) Lake Michigan shoreline from the Kewaunee/Manitowoc county line south to Point Beach State Forest; 2) 11.3 miles of shoreline from the southern limits of the City of Manitowoc to the northern limits of the Village of Cleveland; and 3) inland populations throughout the near-lake shore townships, which include the Towns of Centerville, Newton, Manitowoc Rapids, Two Rivers, Two Creeks and Mishicot. This technical memorandum summarizes the first year of treatments under this grant.

## **BACKGROUND**

LNRP has been controlling common reed grass in Manitowoc County since 2013. In 2015, LNRP received Phase 1 project funding (ACEI-167-15 and AIRR20216) from WDNR to control common reed grass along portions of the Lake Michigan shoreline, including the shorelines within the City of Two Rivers, City of Manitowoc and Point Beach State Forest (approx.15 continuous shoreline miles). The Phase 1 treatments were completed in 2015, 2016 and 2017.

Phase 2 funding will build upon the initial success of Phase 1 by expanding the control efforts westward. The purpose of treating common reed grass is to make beaches useable; to improve shoreline and wetland habitat for plant and animal species; to improve riverfront and lakefront property values and maintain a tax base; to promote tourist amenities; to ensure recreational, birding and fishing access; to promote an ecological balance and natural aesthetics; and to minimize the spread of common reed grass to other wetlands, rivers and waterbodies. The spread and colonization of common reed grass has severe consequences to native ecosystems. Control efforts will continue in 2018 and 2019 under this grant opportunity.

## **MANAGEMENT CONDUCTED**

Chemical treatments were performed by pesticide applicators certified and licensed in the state of Wisconsin for aquatic applications. Treatments were conducted from August 22 to October 3, 2017.

Several methods of chemical (herbicide) control were used to treat common reed grass within the Project Area. The control methods selected for a given site varied depending upon the location, size/stage of the infestation, site dynamics, the presence of rare biotic communities, threatened, endangered or special concern plant or animal species, sensitive natural resources, and resources available.

Reference: ***Aquatic Invasive Species Control Grant ACEI-167-15 – 2017 Annual Project Summary, Manitowoc County Collaborative Phragmites Project - Phase 2***

Wick application via backpack and rubber-tracked, low-ground pressure Utility Task Vehicle (UTV) was used where access permitted, such as on sand or rock beach, solid soils, and herbaceous-dominated communities. Wicking typically uses a higher concentration of active ingredient than foliar spray application (label-suggested rate: 33% glyphosate) which produces a rapid and effective kill on target common reed grass with little to no residual action. UTVs with rubber tracks allow for very low ground pressures (0.5 lbs/sq. in.) and reduced rutting and soil compaction relative to wheeled vehicles. The wick is mounted on the front of the UTV and can be manually raised or lowered to the height of the target vegetation. Wicking was used where common reed grass populations were scattered and mixed with native, short-stature vegetation.

Foliar spray application via backpack or spray gun was used for populations where the target vegetation was greater than 8 ft. in height, and the potential to impact sensitive resources was low. During foliar spray application, herbicide is applied to the leaf surface indirectly via airborne droplets, which may affect both target and non-target vegetation in the spray zone. Backpack spray application treatments were used in areas with rough terrain, soft sediments, and wooded/shrubby vegetation where UTV access was not permissible.

## **CONCLUSION**

Stantec performed invasive common reed grass herbicide treatments within the Phase 2 project area on behalf of LNRP with support from WDNR AIS Established Population Control grant funding. Phase 1 treatments were initiated in fall 2015 to treat populations of invasive common reed grass along the Lake Michigan shoreline, with follow-up treatments in 2016 and 2017 to target regrowth. LNRP was successful in securing Phase 2 and additional federal funding to expand treatment westward. Phase 2 treatments were initiated in 2017.

Please contact me or Jim Kettler (920-304-1919, [jim@lnrp.org](mailto:jim@lnrp.org)) if you need any additional information regarding the herbicide treatments performed as part of this project.

## **STANTEC CONSULTING SERVICES INC.**



Melissa Curran  
Environmental Scientist/Botanist  
[Melissa.Curran@stantec.com](mailto:Melissa.Curran@stantec.com)

Attachments: Photographs  
Treatment Records

c. Jim Kettler ([jjim@lnrp.org](mailto:jjim@lnrp.org)) – electronic copy

## Photographs

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**Photo 1.** Roadside common reed grass population



**Photo 2.** Pre-treatment common reed grass

## Photographs

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**Photo 3.** Common reed grass within shallow marsh complex



**Photo 4.** Bluff shoreline common reed grass