

Wetland Reserve Easement Management Plan

Natural Resources Conservation Service

Wisconsin



Revised: December 2017

Landowner: Wings Over Wisconsin	
Legacy Number: 66-5F48-7-062	Easement Length: Permanent
NEST Number: 665F4897007P7	Plan Date: June 26, 2018
Developed By: WI Wetlands Association	Plan Type: Management Plan

County: Dane		
T: 9 N	R: 12 E	S: 5,6
Acres: 440		
Year Restored: 1997		

History

Easement completed in 1997. CUA for food plots and invasive species management approved in 2015

Restoration Techniques

Ditch Plug	Scrape Yes	Microtopography	Tile Break
Ditch Fill Yes	Seeding Yes	Berm Yes	Control Structure Yes

Goals and Objectives

1. Fluctuate hydrology in emergent marsh habitat to promote native plant communities and control infestation of hybrid cattail.
2. Remove biomass of reed canary grass and hybrid cattail in fresh (wet) meadows and emergent marshes (if possible).
3. Maintain and enhance grassland habitat through mowing and/or burning.
4. Maintain hydrology in calcareous fen (FM7) to sustain plant diversity and control invasive plants with selective herbicide treatments.

Threatened, Endangered, or Species of Concern

N/A.

Noted Invasive Plants

Common reed (Phragmites), reed canary grass, hybrid cattail, giant ragweed, nettles.



Summary of Plant Community Types

Community Type A: EM2/3	Acres: 130.6
Description: Consists of deeper water areas held behind levee and smaller scrapes. These occur mostly on northern portion of easement.	
Management Regime: 1. Implement annual water fluctuation as much as possible with current control structure. 2. Control invasive hybrid cattail and RCG according to ERC management plan (2016). 3. Conduct summer drawdown every 5 years as needed. 4. Monitor results of management actions.	
Dominant Plants: Hybrid cattail Reed canary grass	

Community Type B: FM7 (fen)	Acres: 3.1
Description: Rare calcareous fen in relatively good health/condition. Plant diversity and resilient to encroaching invasive plants.	
Management Regime: 1. Conduct invase species management actions as described in ERC plan (2016). 2. Monitor results of management actions.	
Dominant Plants: Native sedges, grasses, and forbs—many of which are unique to calcareous fens. See WoW management plans for more info.	

Community Type C: FM5 (phrag)	Acres: 45.6
Description: Shallow water and moist soil areas. These are mostly dominated by Phragmites, though native sedges and grasses occur in small areas.	
Management Regime: 1. Conduct invase species management actions as described in ERC plan (2016). 2. Monitor results of management actions.	
Dominant Plants: Phragmites, Reed Canary Grass, Common Nettle, Giant Ragweed.	

Community Type D: WS12	Acres: 240.0
Description: Forested upland and wetland areas. Areas dominated by willow are included in this acreage.	
Management Regime: 1. Conduct invase species management actions as described in ERC plan (2016). 2. Monitor results of management actions.	
Dominant Plants: Hardwood trees, upland grasses, willow.	

Community Type E:	Acres:
Description:	
Management Regime:	
Dominant Plants:	

Community Type F:	Acres:
Description:	
Management Regime:	
Dominant Plants:	



Community Type G:	Acres:
Description:	
Management Regime:	
Dominant Plants:	

Community Type H:	Acres:
Description:	
Management Regime:	
Dominant Plants:	

Embankment/Water Control Structure	
Structure Guidance:	Structure no longer provides water level control and thus should be used to provide passive water flow into wetland. The development of a new structure allowing water outflow should be installed to facilitate water level fluctuation and periodic summer drawdown actions. The possibility of installing additional water intake structures along the agricultural drainage ditch should be explored as funds become available.

CUA(s): CUAs related to invasive plant control should be developed and maintained according to ERC plan.

Additional Notes
This large property has the potential to provide healthy wildlife habitat. With the exception of deep water emergent areas and one of the fens, the wetland vegetation is dominated by invasive plants. The landowners hired a firm to develop a vegetation management plan in 2016. This plan should be used to guide vegetation management and the development of CUAs.

**In order to meet the objectives of the wetland reserve plan of operations, mowing, haying, and/or grazing activities that benefit the wetland functions and values of the easement may be acceptable practices approved through the compatible use authorization process. In addition, areas invaded by exotic species such as Phragmites, Canada thistle or reed canary grass may also be managed by mowing/haying or grazed as needed to reduce/eliminate exotic species occurrence through the compatible use authorization process.

Landowner Signature	Date
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NRCS Representative Signature	Date
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Title



Supplement: WREP Management Recommendations

Landowner: Wings Over Wisconsin	Monitored and Developed By: Tracy Hames and Kyle Magyera, Wisconsin Wetlands Association	Date of Site Visit: June 18, 2018
Legacy Number: 66-5F48-7-062	Agreement Number: 665F4897007P7	

Overall Restoration Progress:

The site is unique and contains a healthy calcareous fen. The majority of site, however, is dominated by invasive plants. The landowners have invested in actions, including the development of a detailed invasive plant-focused management plan completed by Eco-Resource Consulting, Inc. (ERC) in 2016. This plan is aimed at producing viable waterfowl habitat (e.g., open water, mudflats, etc.) and curtailing further widespread infestation of common reed (*Phragmites*), reed canary grass (RCG), hybrid cattail, and giant ragweed. The plan provides details of techniques that can effectively reduce the biomass of these species.

Additional Compatible Use Authorizations could be developed for managed haying or grazing and prescribed burning as described in the ERC plan. The landowners are currently investing in selective herbicide treatments, which will only provide temporary benefits if hydrologic improvements are not implemented.



Two active members of Wings Over Wisconsin stand on top of the mound in rare calcareous fen that's located in southwestern corner of site. This unique habitat needs to be carefully managed to prevent degradation.

The current water control structure alone is insufficient to effectively reduce the static water levels that are producing conditions most suitable for invasive plants. If funds become available, we recommend that the current water control structure be left in place, and that it be supplemented with the installation of an additional structure along the eastern boundary of the easement. The two structures will allow water flow across the emergent wetland area and will help develop the ability to conduct periodic drawdowns. The possibility of placing one or more additional water delivery structures in the agricultural drainage ditch that flows along the northern boundary should be explored. The structures could serve to direct drain flows into wetland areas at strategic locations, providing more water control than is currently possible.

Goals and Objectives:

1. Seasonally fluctuate water levels in emergent marsh habitat to promote native plant communities and control infestation of hybrid cattail.
2. Remove biomass of reed canary grass and hybrid cattail in fresh (wet) meadows and emergent marshes as guided by ERC plan.
3. Maintain and enhance calcareous fens through prescribed burning and select herbicide treatments.

Recommended Management Actions:

These actions should be implemented to compliment the Site Management Plan created by Eco-Resource Consulting, Inc. The ERC plan is advised to be fully implemented—particularly to control the spread of Phragmites.

1. **Expand annual mowing activities** to include current trail locations and other areas infested by invasive plants. Mowing activities should be extended to all areas where RCG is present and conducted as early as possible during the growing season. These activities should occur annually and be monitored to determine effectiveness.
2. **Develop and implement a drawdown schedule** to facilitate water level fluctuations and invasive plant control throughout the site. Invasive plants management will be much less effective if not combined with water level fluctuation. Controlled draining of the wetland in late summer may help equipment access to the emergent wetland for vegetation management (cattail mowing, etc.).

As a rule of thumb, water levels should be held high in the spring and slowly released to the lowest level possible in late August to early September. Water levels can be raised back to full pool by the end of September. Total summer drawdowns should be implemented approximately every five years.

3. **Reduce the biomass of hybrid cattail, RCG, and Phragmites** throughout WREP site by allowing the landowner to hay or mow during drawdowns or other desired/effective times. Prescribed burning of mowed areas dominated by hybrid cattails is an effective way to remove biomass and create open water conditions in the fall. Haying and prescribed fire may be impractical in the deeper water scrapes – unless new and/or improved water control structures are implemented. Managed grazing is likely the most practical way of managing the RCG in areas that are too wet for equipment access, but would need to be carefully designed and monitored. Periodic short-duration grazing as early in the growing season as possible would provide the greatest benefits. A detailed map of invasive-dominated areas is in the ERC plan.

Additional Restoration Activities:

- **Repair the dike breach along northern edge of property**
- **Install new water control structures** to enable more of the site to be flooded during planned water level fluctuations and give more control over the site's inflows and outflows.



RCG, giant ragweed, and Phragmites dominate fresh (wet) meadow areas, but small patches of native sedges, such as lake sedge (middle photo) and native grasses (e.g., bluejoint grass) can be found.

Other Images:



Fresh (wet) meadow degraded by RCG.



Phragmites area managed by herbicide treatments.



Open water pools in emergent marsh areas are in relatively good condition and not extensively infested by hybrid cattail. These habitats would benefit from regular drawdowns and water level fluctuations.



Existing water control structure.



Dike along northern edge of property is breached and allowing consistent inflows from drainage ditch and Mauneshia River.

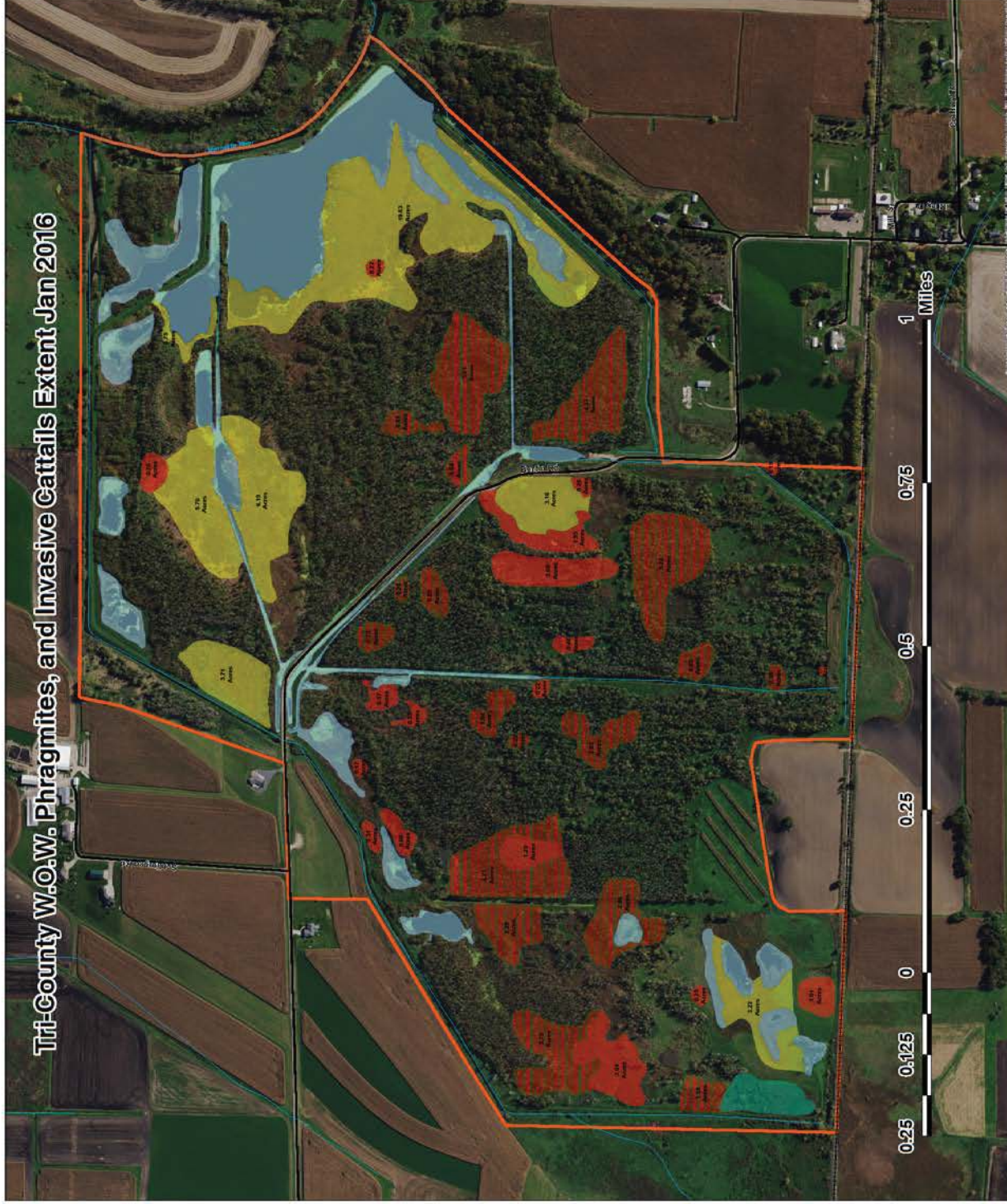
Agree_num: 665F4897007P7

Jefferson

Legacy: 66-5F48-7-062



Tri-County W.O.W. Phragmites, and Invasive Cattails Extent Jan 2016



Acreages

Phragmites Under Cover	37.18
Phragmites In The Open	13.59
Invasive Cattails	38.64
Fen	2.2
Open Water	46.96
Property Acreage	440

Legend

Streams

Property Boundary

WOW_Invasive_Veg

TYPEC

Phragmites Under Cover

Phragmites In The Open

Invasive Cattails

Fen

Open Water

Cartography By Zach Hassler
219-508-4349

