

DNR AIS Control Grant ACEI23219
Manitowoc County Collaborative Phragmites Project – Phase 3
Report: December 29, 2022

Grant Cycle: April 15, 2019 to December 31, 2022

Component 1: Education, Outreach, and Project Participation (2019 through 2021)

2019

We presented to the Manitowoc Highway Committee on June 11th 2019, with a follow up presentation to the Manitowoc County Board on June 18th 2019 with a request that \$10,000 be allocated as a cost share for ROW treatment and management. The allocation was approved during the September budget deliberations.

We also hosted three landowner workshops in June 2019. These educational workshops focused on landowner and community collaboration to control these invasive species in their communities. The workshop on June 25th was hosted at the Town of Maple Grove town hall in Manitowoc County focusing on Phragmites and Japanese knotweed control efforts in Manitowoc County and the need for landowner permissions.

Tom Ward presented to the Country Horizons Cooperative staff and invited agronomists in Reedsville on June 27th 2019. Tom also spent a considerable amount of time going door-to-door speaking with landowners where permission was still needed.

2020

Educational postcards were sent to all residents in Manitowoc County with documented Phragmites on April 14th, 2020. We sent two different postcards: those who have granted permission and those that have not. The postcards have slightly different language.

2021

Educational postcards were sent to all residents in Manitowoc County with documented Phragmites in April 2021. We sent two different postcards: those who have granted permission and those that have not. The postcards have slightly different language. In November, partner organization Glacierland RC&D sent letters to all residents requesting donations to establish a long-term management fund. Postcards reminding residents to contribute to the local fund were sent in December 2021. Glacierland RC&D is also working closely with local townships to contribute to the long-term fund.

2022

2022 was the first year working under minimal grant funding. Local Township contributions supported invasive retreatments in townships of Centerville, Franklin, Kossuth, Liberty, Maple Grove, Meeme, Newton, Two Creeks and Schleswig. Due to lack of additional funding, no educational postcards nor large outreach contributions took place during 2022.

Component 2: Management and Access Plan

The web-based Management Plan is updated weekly based on landowner permissions received, mapping edits, landowner concerns, and treatment progress. The public can access the interactive website at <http://bit.ly/InvasiveWebMap> to see if their property has had Phragmites identified, check if they have given permission for treatment, and follow treatment progress.

Treatment crews update the web map during the Phragmites treatments to include information such as photographs, stand density, treatment date, applicator name, treatment area extent, re-vegetation efforts, and post-treatment monitoring, if applicable. This information is recorded annually during each treatment year. LNRP will make available any information from the web-map as requested.

Component 3: Phragmites Treatment

Treatments were completed on participating landowner properties throughout the western half of Manitowoc County from July to October, in years 2019, 2020, and 2021. During 2022, treatments were completed on participating landowner properties within townships that provided additional funding support. Herbicide treatments were performed by pesticide applicators certified and licensed in the state of Wisconsin for aquatic applications. Several methods of herbicide control were used to treat Phragmites, which varied depending upon the location, access constraints, size/stage of the infestation, site dynamics and resources available. Foliar spray application via backpack or large volume spray tanks mounted on a tracked Utility Task Vehicle (UTV) and amphibious vehicle were primarily used. 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. Backpack spray application treatments were used for retreatments, or in areas with rough terrain, soft sediments, and wooded/shrubby vegetation where UTV access was not permissible. During foliar spray application, herbicide was applied to the leaf surface indirectly via airborne droplets, which may affect both target and non-target vegetation in the spray zone. Student intern support was used each year for retreatment sites. Staff and interns wore waders while completing backpack treatments in forested wetland sites where an amphibious/UTV vehicles could not access.

The Phase 3 grant included all western Manitowoc County municipalities and townships including Kiel, Cato, Cooperstown, Eaton, Franklin, Gibson, Kossuth, Liberty, Maple Grove, Meeme, Rockland, Schleswig, Kellnersville, Maribel, St. Nazianz, Valdars, and Whitelaw. During 2019, 246.16 acres of Phragmites were treated. Due to lack of funding in 2022, treatments were completed within Townships that provided additional funding (Franklin, Kossuth, Liberty, Maple Grove, Meeme, and Schleswig). The following tables illustrate treatment results from 2020, 2021 and 2022. Treatments performed outside of the Phase 3 project area were completed using federal funds or local donations from municipalities or private landowners.

Table 1. 2020 Phragmites Treatment Progress.

Municipality	Total # of Parcels with Phragmites	Permission Not Granted	# of Parcels Treated in 2020	# of Phragmites polygons Treated in 2020	Acreage of Phragmites Treated in 2020
CATO	64	18	49	60	14.58
CENTERVILLE	93	22	65	98	26.29
Cleveland	19	7	16	14	4.41
COOPERSTOWN	139	17	108	168	46.10
EATON	46	6	39	44	14.34
Francis Creek	5	2	3	5	1.18
FRANKLIN	85	25	62	69	25.20
GIBSON	132	27	107	179	37.44
Kellnersville	6	2	5	7	0.42
Kiel	1	1		1	0.10
KOSSUTH	93	26	81	135	34.79
LIBERTY	101	20	72	104	63.14
MANITOWOC	129	52	74	132	24.90
MANITOWOC RAPIDS	96	26	85	135	33.32
MAPLE GROVE	103	24	75	123	22.48
Maribel	4	2	2	1	0.13
MEEME	43	12	33	45	10.16
MISHICOT	83	16	72	148	29.30
NEWTON	118	35	84	138	24.25
Reedsville	1	1		1	0.34
ROCKLAND	43	16	24	39	22.31
SCHLESWIG	26	11	16	22	4.27
St. Nazianz	3	1	2	5	1.88
TWO CREEKS	50	22	37	55	6.63
Two Rivers	332	117	278	596	186.01
Valders	6		6	9	1.17
Whitelaw	1		1	1	0.05
Totals	1822	508	1396	2334	635.18

Table 2. 2021 Phragmites Treatment Progress

Municipality	Total # of Parcels with Phragmites	Permission Not Granted	# of Parcels Treated in 2021	# of Phragmites Polygons Treated in 2021	Acreage of Phragmites Treated in 2021
CATO	65	18	38	46	5.94
CENTERVILLE	79	19	46	64	13.30
Cleveland	28	11	18	16	4.59
COOPERSTOWN	150	26	69	127	24.33
EATON	53	14	33	41	6.12
Francis Creek	10	6	7	8	1.22
FRANKLIN	97	38	60	74	20.82

Municipality	Total # of Parcels with Phragmites	Permission Not Granted	# of Parcels Treated in 2021	# of Phragmites Polygons Treated in 2021	Acreage of Phragmites Treated in 2021
GIBSON	142	33	93	151	21.48
Kellnersville	6	2	2	2	0.05
Kiel	1		1	3	0.29
KOSSUTH	109	41	59	74	15.63
LIBERTY	100	15	48	75	29.25
Manitowoc	134	57	52	86	16.41
MANITOWOC RAPIDS	98	28	66	94	16.23
MAPLE GROVE	113	24	66	109	24.55
Maribel	5	3	1	2	0.13
MEEME	51	20	29	40	9.47
MISHICOT	89	18	56	90	19.01
NEWTON	128	42	76	117	25.64
Reedsville	1	1			
ROCKLAND	44	16	24	44	10.86
SCHLESWIG	29	13	13	21	5.66
St. Nazianz	3	1	2	8	2.11
TWO CREEKS	56	28	25	48	6.69
TWO RIVERS	342	117	104	385	94.40
Valders	5				
Whitelaw	1				
	1939	591	988	1725	374.18

Table 3. 2022 Phragmites Treatment Progress

Municipality	Total # of Parcels with Phragmites	Permission Not Granted	# of Parcels Treated in 2022	Acreage of Phragmites Treated in 2022
C of Kiel	1	0	1	0.235
C of Manitowoc	88	47	3	0.069
C of Two Rivers	113	40	1	0.041
T of CATO	66	19	3	2.224
T of CENTERVILLE	81	20	47	23.583
T of COOPERSTOWN	150	26	2	0.507
T of EATON	55	16	4	5.025
T of FRANKLIN	104	43	59	21.908
T of GIBSON	142	33	6	1.057
T of KOSSUTH	109	41	22	8.655
T of LIBERTY	103	18	55	59.754
T of MANITOWOC	55	15	11	0.680

Municipality	Total # of Parcels with Phragmites	Permission Not Granted	# of Parcels Treated in 2022	Acreage of Phragmites Treated in 2022
T of MANITOWOC RAPIDS	98	28	0	0.000
T of MAPLE GROVE	119	28	85	36.737
T of MEEME	59	26	32	11.288
T of MISHICOT	84	14	2	0.783
T of MORRISON	9	9	0	0.000
T of NEWTON	140	52	96	32.494
T of ROCKLAND	44	16	4	1.498
T of SCHLESWIG	31	15	15	5.955
T of TWO CREEKS	55	28	23	5.791
T of TWO RIVERS	230	78	13	15.756
V of Cleveland	31	13	14	1.361
V of Francis Creek	10	5	5	2.204
V of Kellnersville	6	2	5	0.233
V of Maribel	5	3	0	0.000
V of Mishicot	5	3	0	0.000
V of Reedsville	1	1	0	0.338*
V of St. Nazianz	3	1	1	2.310
V of Valders	5	0	0	0.007*
V of Whitelaw	1	0	0	0.000
	2003	640	509	240.493

*Treatments conducted in road right-of-way, not within a private parcel

Component 4: Post-Treatment Monitoring

Post treatment monitoring was completed during the 2021 treatment event for all 2019 and 2020 treatment areas using methodology incorporated into the web-map design. 2022 post treatment monitoring was completed at treatment areas within the townships of Franklin, Kossuth, Liberty, Maple Grove, Meeme, and Schleswig. During each treatment event, the treatment contractor/intern is required to complete the following: verify pre-treatment percent cover; landscape position; ROW status (in, outside or both); name of applicator; date/time of treatment; in-year or annual percent cover; treatment method; recommendations for revegetation and photographic documentation. This data is collected and stored in the online web-map developed specifically for this project.

Component 5: Revegetation

Restoration and revegetation efforts on treatment areas were performed as needed using DNR funds following successful control of Phragmites. The need for revegetation depends on treatment success, native seed bank response, hydrologic regime, presence of other non-native species and landscape position. During the 2021 monitoring process, sites that were recommended for revegetation in 2020 were revegetated, and additional sites were identified

where revegetation was recommended. Tables below illustrate revegetated acres in 2021 and 2022.

Table 4. 2021 Revegetated Acres

Municipality	Acreage Revegetated in 2021
LIBERTY	1.35
Manitowoc	3.43
MEEME	1.25
SCHLESWIG	0.94
TWO RIVERS	1.80
Total	8.77

Table 5. 2022 Revegetated Acres

Municipality	Acreage Revegetated in 2022
T of CENTERVILLE	1.650
T of COOPERSTOWN	0.251
T of LIBERTY	20.366
T of MAPLE GROVE	0.395
T of MEEME	0.012
T of NEWTON	2.744
T of ROCKLAND	0.101
T of SCHLESWIG	0.898
T of TWO RIVERS	0.135
V of Cleveland	0.065
V of Valders	0.007
Total	26.625

Additional Funding

LNRP received a Sustain Our Great Lakes grant for both Manitowoc and Sheboygan Counties for continued Phragmites and Japanese knotweed control in 2019 through 2021. This funding was used to support match for the WDNR-funded project.

The Towns of Franklin, Kossuth, Liberty, Maple Grove, Meeme, and Schleswig provided additional funding to continue invasive treatments during 2022.