

Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID: ACEI20818
Name: LAKESHORE NATURAL RESOURCES PARTNERSHIP INC.: Sheboygan-Manitowoc Bluff Shoreline Phragmites Control
Type: Aquatic Invasives Grant
Subtype: Aquatic Invasives Control
Status: ACTIVE
Start Date: 04/15/2018
End Date: 12/31/2020
Purpose: The Lakeshore Natural Resource Partnership is sponsoring a project to control Phragmites populations along the shoreline of Lake Michigan in both Manitowoc and Sheboygan counties between the Pidgeon River and Centerville Creek.

Project activities include: 1) Joining data collected by different organizations and compiling it into a collaborative GIS-based web mapping platform; 2) Collaborate with Stantec and UW-Green Bay on a large-scale research project by collecting and utilizing data from sites associated with this project; 3) Initial treatments of Phragmites, as well as follow-up treatments of stands that had been treated in 2017; 4) Identification of suitable re-vegetation sites and installation of native vegetation; 5) Identify and implement long term control strategies on a community level (private landowners, non-profits, local governments); 6) Disseminate materials for educational and outreach purposes, host restoration field days, enhance citizen science capabilities, and other activities as specified in Activity 1.f. of the application dated 02/01/2018.

Project Deliverables include: 1) A web map that will be made available to partners, and map figures/reported treatment results available to natural resource managers and the public; 2) Annual monitoring and treatment data (as inputs to the model), and the final predictive model that will guide broad-scale Phragmites management efforts (lead by USGS and GLC); and 3) Significant reduction of Phragmites in the project area.

Specific project conditions: A draft copy of the final report will be provided to the WDNR for review before the report is finalized. WDNR will be provided electronic and hard copies of data and reports/plans generated as a result of this project.

This scope summarizes the scope in the grant application and attachments and does not supersede those application tasks/deliverables.

Objective:

Comments: Grantee is LAKESHORE NATURAL RESOURCES PARTNERSHIP INC.

Outcome:

Study Design:

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
Lakeshore Natural Resource	GRANT_RECIPII	ACTIVE	02/04/2019		Lakeshore Natural Resource Partnership Inc	

Project Statuses

Date	Reported By	Status	Comments
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Actions

Action	Detailed Description	Start	End Date	Status
Grant Awarded	Grant ACEI20818 awarded	04/15/2018	12/31/2020	COMPLETE

**Wisconsin Department of Natural Resources
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Action	Detailed Description	Start	End Date	Status
APM Chemical Permit Request	Chemical Permit Details	07/11/2018	07/11/2018	APPROVED
Details:	Parameter	Value/Amount	Units	Comments
	APM Plan	N/A		
	Broad-leaved cattail (Typha latifolia)	N		
	Business Location License	N/A		
	CHEMICAL_PERMIT_ID	0		
	CO - # days	1		
	CO - Date Sent	7/11/2018		
	CO-Date_Received	7/11/2018		
	CONTROL_INVASIVES	N		
	CONTROL_OTHER	N		
	Category 5 Certification Number	N/A		
	Chemicals - Approved	Habitat, Aquaneat, Round-up		
	Chemicals Permitted Previous Year	All		
	Comments	N/A		
	Common arrowhead (Sagittaria latifolia)	N		
	Common reed (Phragmites australis)	Y		
	Common waterweed (Elodea canadensis)	N		
	Control - Algae	N		
	Control - Emergent water plants	Y		
	Control - Floating water plants	N		
	Control - Submerged water plants	N		
	Coontail (Ceratophyllum demersum)	N		
	Curly-leaf pondweed (Potamogeton crispus)	N		
	Estimated Acres	0		
	Eurasian water-milfoil (Myriophyllum spicatum)	N		
	Expiration Date	12/1/2018		
	Fee	1270		
	Field - # days	Y		
	Field Issued By	Craig_Helker		
	Filamentous Algae	N		
	Improvement - swimming	N		
	Lake Surface Area			
	Large Duckweed (Spirodela polyrhiza)	N		
	Large Scale Treatment Form	N		
	Large-leaf pondweed (Potamogeton amplifolius)	N		
	Maintain navigational channel	N		
	Maintain private access - boating	N		
	Maintain private access - fishing	N		

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Action	Detailed Description	Start	End Date	Status
Details: Parameter	Value/Amount	Units	Comments	
Method of Application	N/A			
Muskgrasses (Chara)	N			
NUISANCE_CAUSED_OTHER	N			
Native Plants	N			
Other Plants	Phragmites and Japanese Knotwe			
Overflow Controlled	N/A			
Payment Number	WP-00014277			
Permit County	Sheboygan			
Permit End Year	2018			
Permit Latitude	44.0934			
Permit Longitude	-87.6561			
Permit PLSS Section	N/A			
Permit Start Year	2018			
Permit WBIC	N/A			
Pithophora	N			
Planktonic Algae	N			
Private Pond	N			
Purple loosestrife (Lythrum salicaria)	N			
Sensitive Area	N/A			
Softstem bulrush (Schoenoplectus tabernaemontani)	N			
Sogo pondweed (Stuckenia pectinata)	N			
Surface Water Discharge	N/A			
TREATMENT_AREA	Manitowoc and Sheboygan County			
Treatment Date	N			
Treatment Date	N			
WPDES Coverage	N/A			
Waterbody Type	WETLAND			

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Action	Detailed Description	Start	End Date	Status
APM Chemical Permit Request	Chemical permit details	02/06/2019	02/06/2019	APPROVED
Details:	Parameter	Value/Amount	Units	Comments
	APM Plan	N		
	Alternative - Drawdown	N		
	Alternative - Dredging	N		
	Alternative - Manual Removal	Y		
	Alternative - Mechanical Harvesting	Y		
	Alternative - Nutrient Controls	N		
	Alternative - Sediment Screens	N		
	Alternative - Why Not Drawdown	N/A, won't control exotics		
	Alternative - Why Not Dredging	N/A, too expensive to control		
	Alternative - Why Not Nutrient Control	N/A, stormwater pond is design		
	Alternative - Why Not Sediment Screens	N/A, won't control exotics		
	Broad-leaved cattail (Typha latifolia)	N		
	Business Location License	93-021156-018242		
	CHEMICAL_PERMIT_ID	0		
	CO - # days	2		
	CO - Date Sent	02/06/2019		
	CONTROL_INVASIVES	Y		
	CONTROL_OTHER	N		
	Category 5 Certification Number	106026		
	Chemicals - Approved	AquaNeat 228-365, Polaris 228-		
	Chemicals Permitted Previous Year	Some		
	Common arrowhead (Sagittaria latifolia)	N		
	Common reed (Phragmites australis)	N		
	Common waterweed (Elodea canadensis)	N		
	Control - Algae	Y		
	Control - Emergent water plants	Y		
	Control - Floating water plants	N		
	Control - Submerged water plants	N		
	Coontail (Ceratophyllum demersum)	N		
	Curly-leaf pondweed (Potamogeton crispus)	N		
	Estimated Acres	0.7		
	Eurasian water-milfoil (Myriophyllum spicatum)	N		
	Fee	45		
	Field - # days	6		
	Field - Date Issued	02/14/2019		
	Field - Date Received	02/06/2019		
	Field Issued By	Holly_Stegemann		

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Action	Detailed Description	Start	End Date	Status
Details: Parameter	Value/Amount	Units	Comments	
Filamentous Algae	N			
Improvement - swimming	N			
Lake Surface Area	1			
Large Duckweed (Spirodela polyrhiza)	N			
Large-leaf pondweed (Potamogeton amplifolius)	N			
Maintain navigational channel	N			
Maintain private access - boating	N			
Maintain private access - fishing	N			
Method of Application	ATV mounted sprayer, backpack			
More than 1 Property Owner	N			
Muskgrasses (Chara)	N			
NUISANCE_CAUSED_OTHER	N			
Native Plants	N			
Other Plants	Typha spp., Algae spp., Phalar			
Overflow Controlled	N			
Payment Number	123884			
Permit County	Brown			
Permit End Year	2019			
Permit Latitude	44.4525670			
Permit Longitude	-87.9303420			
Permit PLSS Section	22 T23N R21E			
Permit Start Year	2019			
Permit WBIC	N/A			
Pithophora	N			
Planktonic Algae	N			
Private Pond	N			
Purple loosestrife (Lythrum salicaria)	N			
Sensitive Area	N/A			
SharePoint_Number	AP-IP-NE-2019-05-1728			
Softstem bulrush (Schoenoplectus tabernaemontani)	N			
Sogo pondweed (Stuckenia pectinata)	N			
Surface Water Discharge	Y			
TREATMENT_AREA	Manitowoc Pond			
Treatment Area Greater Than 5%	N			
WPDES Coverage	N			
Waterbody Type	Pond			
Waterbody have Public Access	Y			
Wind Direction	106026			

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Action	Detailed Description	Start	End Date	Status
APM Chemical Permit Request	Chemical permit details	02/08/2019	02/08/2019	APPROVED
Details:	Parameter	Value/Amount	Units	Comments
	APM Plan	N		
	Algae	N		
	Algimycin PWF Algaecide / Cyanobactericide	N		
	Alternative - Drawdown	N		
	Alternative - Dredging	N		
	Alternative - Manual Removal	N		
	Alternative - Mechanical Harvesting	N		
	Alternative - Nutrient Controls	N		
	Alternative - Other	N		
	Alternative - Sediment Screens	N		
	Alternative - Why Not Drawdown	no control structure		
	Alternative - Why Not Dredging	cost prohibitive		
	Alternative - Why Not Manual Mechanical	too labor intensive and will n		
	Alternative - Why Not Nutrient Control	too small and no suitable acce		
	Alternative - Why Not Other Sediment Screens	natural edge was left around p		
	Aqua Star	n/a		
	AquaPro Herbicide	cost prohibitive		
	AquaShade Aquatic Plant Growth Control	N		
	AquaStrike	N		
	Aquaneat Aquatic Herbicide	N		
	Aquashadow Black Pond Colorant	N		
	Aquathol K Aquatic Herbicide	N		
	Aquathol Super K Granular Aquatic Herbicide	N		
	Avast! SC Aquatic Herbicide	N		
	Business Location License	93-010049-019614		
	CHEMICAL_PERMIT_ID	0		
	CO - # days	14		
	CO - Date Sent	2/19/2019		
	CONTROL_INVASIVES	N		
	CONTROL_OTHER	Y		
	Captain Liquid Copper Algaecide	N		
	Captain XTR Liquid Copper Algaecide	N		
	Category 5 Certification Number	97415		
	Chemicals - Approved	Algimycin, Aquashade, Aquashad		
	Chemicals Permitted Previous Year	Some		
	Chinook	N		

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Action	Detailed Description	Start	End Date	Status
Details: Parameter	Value/Amount	Units	Comments	
	Clearcast (general)	N		
	Clearigate	N		
	Clipper Herbicide	N		
	Clipper SC Aquatic Herbicide	N		
	Common reed (Phragmites australis)	N		
	Common waterweed (Elodea canadensis)	N		
	Common/Glossy Buckthorn	N		
	Control - Algae	Y		
	Control - Emergent water plants	Y		
	Control - Floating water plants	Y		
	Control - Submerged water plants	Y		
	Coontail (Ceratophyllum demersum)	N		
	Curly-leaf pondweed (Potamogeton crispus)	N		
	Current	N		
	Citrine-Plus Algaecide and Herbicide	N		
	Citrine-Plus Granular Algaecide	N		
	Citrine-Ultra Algaecide / Herbicide / cyanobactericide	N		
	DMA 4 IVM Herbicide	N		
	Earthtec Algaecide / Bactericide	N		
	Element 3A Herbicide	N		
	Estimated Acres	0.685215794306703		
	Eurasian water-milfoil (Myriophyllum spicatum)	N		
	Fee	20		
	Field - # days	0		
	Field - Date Issued	2/19/2019		
	Field - Date Received	2/19/2019		
	Field Issued By	CI_Kristina_Femal		
	Flowering Rush	N		
	Flumioxazin 51% WDG - NonCrop	N		
	Formula F-30 Algae Control	N		
	Garlon 3A Herbicide	N		
	Green Clean (general)	N		
	Habitat (general)	N		
	Harpoon (general)	N		
	Harvester Landscape and Aquatic Herbicide	N		
	Havoc Amine	N		
	Hybrid Cattail	N		
	Hybrid Watermilfoil	N		
	Hydrothol 191 Aquatic Algicide and Herbicide	N		

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Action	Detailed Description	Start	End Date	Status
Details: Parameter	Value/Amount	Units	Comments	
Hydrothol Granular Aquatic Algaecide and Herbicide Improvement - swimming	N			
Japanese Knotweed	N			
K-Tea Aquatic Algaecide	N			
Komeen Aquatic Herbicide	N			
Komeen Crystal Aquatic Herbicide	N			
Lake Surface Area	1			
Large Duckweed (Spirodela polyrhiza)	N			
Maintain navigational channel	N			
Maintain private access - boating	N			
Maintain private access - fishing	Y			
Method of Application	gasoline powered spray pump or			
Milestone Herbicide	N			
More than 1 Property Owner	N			
NUISANCE_CAUSED_OTHER	N			
Naiad	N			
Narrow-Leaf Cattail	N			
Nautique Aquatic Herbicide	N			
Navigate	N			
Navitrol DPF Aquatic Herbicide	N			
Navitrol Landscape and Aquatic Herbicide	N			
Nutri-Sorb	N			
Orb-3 (general)	N			
Overflow Controlled	Y			
Payment Number	WP-00016533			
Permit County	Waukesha			
Permit End Year	2019			
Permit Latitude	43.1043			
Permit Longitude	-88.5242			
Permit PLSS Section	0607N17			
Permit Start Year	2019			
Permit WBIC	N/A			
Phycomycin SCP Algaecide and Oxidizer	N			
Polaris	N			
Polaris AC	N			
Pond-Klear	N			
Pondweeds	N			
Private Pond	Y			
ProcellaCOR EC	N			
Purple loosestrife (Lythrum salicaria)	N			
Reed Canary Grass	N			
Reed Manna Grass	N			

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Action	Detailed Description	Start	End Date	Status
Details: Parameter	Value/Amount	Units	Comments	
Refuge Herbicide	N			
Renovate 3	N			
Renovate LZR Aquatic Herbicide	N			
Renovate LZR Max Aquatic Herbicide	N			
Renovate Max G Aquatic Herbicide	N			
Renovate OTF Aquatic Herbicide	N			
Reward Landscape and Aquatic Herbicide	N			
Rodeo Herbicide	N			
Roundup Custom for Aquatic & Terrestrial Use	N			
SCI-62 Algicide / Bactericide	N			
SP_Document_ID	YTHQS767HR6T-42-471477			
Sculpin G Aquatic Herbicide	N			
SeClear (general)	N			
SeClear G Algaecide and Water Quality Enhancer	N			
Sensitive Area	N			
SharePoint_Number	AP-IP-SE-2019-68-X01-30T13-21-			
Shoreklear-Plus Aquatic Herbicide	N			
Shredder Amine 4	N			
Sonar A.S.	N			
Sonar Genesis Aquatic Herbicide	N			
Sonar H4C Aquatic Herbicide	N			
Sonar PR Precision Release	N			
Sonar Q Aquatic Herbicide	N			
Sonar RTU Aquatic Weed Herbicide	N			
Sonar SRP Aquatic Herbicide	N			
SonarOne Aquatic Herbicide	N			
Starry Stonewort	N			
Stingray Aquatic Herbicide	N			
Surface Water Discharge	N			
Symmetry NXG	N			
TREATMENT_AREA	River Bluff Ponds			
Touchdown Pro	N			
Treatment Area Greater Than 5%	N/A			
Tribune Herbicide	N			
WPDES Coverage	N			
Waterbody Type	Pond			
Waterbody have Public Access	N			
Weedar 64 Broadleaf Herbicide	N			
Weedestroy AM-40 Amine Salt - Selective Weed Killer	N			

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Action		Detailed Description		Start	End Date	Status
Details:	Parameter	Value/Amount	Units	Comments		
	Wind Direction	97415				
	Yellow Floating Heart	N				
	Yellow Iris	N				

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Action	Detailed Description	Start	End Date	Status
APM Chemical Permit Request	Chemical permit details	06/21/2019	06/21/2019	APPROVED
Details:	Parameter	Value/Amount	Units	Comments
	APM Plan	N,N		
	Alternative - Drawdown	N		
	Alternative - Dredging	N		
	Alternative - Manual Removal	N		
	Alternative - Mechanical Harvesting	N		
	Alternative - Nutrient Controls	N		
	Alternative - Sediment Screens	N		
	Alternative - Why Not Drawdown	High quality wetland. Drawdown		
	Alternative - Why Not Dredging	Ineffective, impractical		
	Alternative - Why Not Manual	Ineffective. Plant will regrow		
	Alternative - Why Not Mechanical	Mechanical harvesting alone is		
	Alternative - Why Not Nutrient Control	Ineffective		
	Alternative - Why Not Sediment Screens	Ineffective		
	Broad-leaved cattail (<i>Typha latifolia</i>)	N		
	Business Location License	N/A		
	CHEMICAL_PERMIT_ID	0		
	CO - # days	1		
	CO - Date Sent	06/21/2019		
	CONTROL_INVASIVES	Y		
	CONTROL_OTHER	N		
	Category 5 Certification Number	89768		
	Chemicals - Approved	Garlon 3A, Vastlan, Habitat, P		
	Chemicals Permitted Previous Year	None		
	Common arrowhead (<i>Sagittaria latifolia</i>)	N		
	Common reed (<i>Phragmites australis</i>)	Y		
	Common waterweed (<i>Elodea canadensis</i>)	N		
	Control - Algae	N		
	Control - Emergent water plants	Y		
	Control - Floating water plants	N		
	Control - Submerged water plants	N		
	Coontail (<i>Ceratophyllum demersum</i>)	N		
	Curly-leaf pondweed (<i>Potamogeton crispus</i>)	N		
	Estimated Acres	8		
	Eurasian water-milfoil (<i>Myriophyllum spicatum</i>)	N		
	Fee	0		
	Field - # days	2		
	Field - Date Issued	06/24/2019		

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Action	Detailed Description	Start	End Date	Status
Details: Parameter	Value/Amount	Units	Comments	
Field - Date Received	06/21/2019			
Field Issued By	Heidi_Bunk			
Filamentous Algae	N			
Improvement - swimming	N			
Lake Surface Area	215			
Large Duckweed (Spirodela polyrhiza)	N			
Large-leaf pondweed (Potamogeton amplifolius)	N			
Maintain - Other Text	Vast majority of plants to be			
Maintain navigational channel	N			
Maintain private access - boating	N			
Maintain private access - fishing	N			
Method of Application	Spot application. Treating cut			
More than 1 Property Owner	N			
Muskgrasses (Chara)	N			
NUISANCE_CAUSED_OTHER	Y			
Native Plants	N			
Other Plants	Reed Canary Grass, Rhamnus sp.			
Overflow Controlled	N			
Payment Number	EXEMPT			
Permit County	Walworth			
Permit End Year	2019			
Permit Latitude	42.796155			
Permit Longitude	-88.692892			
Permit PLSS Section	23 04N15E			
Permit Start Year	2019			
Permit WBIC	N/A			
Pithophora	N			
Planktonic Algae	N			
Private Pond	N			
Purple loosestrife (Lythrum salicaria)	Y			
Sensitive Area	N			
SharePoint_Number	AP-IP-SE-2019-65-5095			
Softstem bulrush (Schoenoplectus tabernaemontani)	N			
Sogo pondweed (Stuckenia pectinata)	N			
Surface Water Discharge	Y			
TREATMENT_AREA	Bluff Creek State Natural Area			
Treatment Area Greater Than 5%	N			
WPDES Coverage	N			
Waterbody Type	WETLAND			
Waterbody have Public Access	Y			
Wind Direction	89768			

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Monitoring Stations

Station ID	Name	Comments
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Assessment Units

WBIC	Segment	Local Name	Official Name
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Lab Account Codes

Account Code	Description	Start Date	End Date
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Forms

Form Code	Form Name
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Methods

Method Code	Description
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Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name
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Documents

Title	Description	Author	Published	Comments
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Budget

Combined Budgets:

Combined SLOH:

Combined Total:

Funding

Organization	Source	Type	Amount	Start Date	End Date
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