

Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID: ACEI20118

Name: DEER LAKE IMPROVEMENT ASSOCIATION: Deer Lake Curlyleaf Pondweed Control

Type: Aquatic Invasives Grant

Subtype: Aquatic Invasives Control

Status: ACTIVE

Start Date: 4/15/2018

End Date: 12/31/2023

Purpose: The Deer Lake Improvement Association is sponsoring a 3-yr project to implement approved activities from the Deer Lake Aquatic Plant Management Plan.

Project deliverables include GIS data & maps of areas monitored, aquatic plant & turion monitoring results, AIS monitoring data in SWIMS, management/treatment summaries.

Specific project activities include: 1) Curly-leaf pondweed herbicide control; 2) Knotweed control; 3) Pre-post treatment aquatic plant monitoring; 4) CLP bed mapping; 5) Turion monitoring; 6) AIS monitoring.

Special Conditions: 1) WDNR\2019s Aquatic Plant Management in Wisconsin guidance shall be followed for aquatic plant monitoring; 2) Sponsor shall contact DNR immediately if a new AIS is found; 3) AIS monitoring personnel shall be trained and follow DNR approved protocols; 4) AIS monitoring data shall be entered in SWIMS.

This scope summarizes the project detail provided in the application and does not negate tasks/deliverables described therein. Data, records, and reports, including GIS-based maps, and digital images, must be submitted to the Department in a format specified by the regional Lakes Biologist.

Objective:**Comments:** Grantee is DEER LAKE IMPROVEMENT ASSOCIATION**Outcome:****Study Design:****QA Measures:**

People

Name	Role	Status	Start Date	End Date	Organization	Comments
Deer Lake Improvement Associat	GRANT_RECIPIENT	ACTIVE	4/15/2018	12/31/2020	Deer Lake Improvement Association	

Project Statuses

Date	Reported By	Status	Comments
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Actions

Action	Detailed Description	Start Date	End Date	Status
APM Chemical Permit Request	Chemical Permit Details	2/28/2018	2/28/2018	APPROVED

Details: Parameter	Value/Amount	Units	Comments
Broad-leaved cattail (Typha latifolia)	N		
Business Location License	N/A		

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SWIMS Project Summary**

Details: Parameter	Value/Amount	Units	Comments
CO - # days	0		
CO - 15 days	Y		
CO – Date Sent	2/28/2018		
CO-Date_Received	2/28/2018		
CONTROL_OTHER	N		
Category 5 Certification Number	N/A		
Chemical Permit ID	5517		
Chemicals - Approved	Aquathol K		
Comments	N/A		
Common arrowhead (Sagittaria latifolia)	N		
Common reed (Phragmites australis)	N		
Common waterweed (Elodea canadensis)	N		
Control - Algae	N		
Control - Emergent water plants	N		
Control - Floating water plants	N		
Control - Nuisance algae	N		
Control - PL	N		
Control - Submerged water plants	Y		
Coontail (Ceratophyllum demersum)	N		
Curly-leaf pondweed (Potamogeton crispus)	Y		
Entered in SharePoint	Y		
Estimated Acres	24		
Eurasian water-milfoil (Myriophyllum spicatum)	N		
Fee	620		
Field - # days	Y		
Field Issued By	Mark_Sundeen		
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		

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Details: Parameter	Value/Amount	Units	Comments
Maintain private access - fishing	N		
Muskgrasses (Chara)	N		
NUISANCE_CAUSED_OTHER	N		
Native Plants	N		
Next Steps	Mark Sundeen		
Other Plants	CLP		
PLSS_DIRECTION	W		
PLSS_RANGE	18		
PLSS_SECTION	25		
PLSS_TOWNSHIP	35		
Payment Number	1834		
Permit County	Polk		
Permit End Year	2018		
Permit Latitude	45.4084		
Permit Longitude	-92.5493		
Permit PLSS Section	25 35N18W		
Permit Start Year	2018		
Permit WBIC	2619400		
Pithophora	N		
Planktonic Algae	N		
Private Pond	N		
Purple loosestrife (Lythrum salicaria)	N		
SharePoint Submittal	N		
Softstem bulrush (Schoenoplectus tabernaemontani)	N		
Sogo pondweed (Stuckenia pectinata)	N		
TREATMENT_AREA	Deer Lake		
Treatment Date	N		
Treatment Date	N		
Treatment Record - Received	N		
Treatment Record - Scanned	N		
Waterbody Type	LAKE		

Grant Awarded	Grant ACEI20118 awarded	4/15/2018	12/31/2020	COMPLETE
APM Chemical Permit Request	Chemical permit details	2/21/2019	2/21/2019	APPROVED

Details: Parameter	Value/Amount	Units	Comments
APM Plan	Y		
Algae	N		
Algimycin PWF Algaecide / Cyanobactericide	N		

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Details: Parameter	Value/Amount	Units	Comments
Alternative - Drawdown	N		
Alternative - Dredging	N		
Alternative - Manual Removal	N		
Alternative - Mechanical Harvesting	N		
Alternative - Nutrient Controls	Y		
Alternative - Sediment Screens	N		
Aqua Star	N		
AquaPro Herbicide	N		
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	N/A		
CO - # days	1		
CO – Date Sent	02/21/2019		
CONTROL_INVASIVES	Y		
CONTROL_OTHER	N		
Captain Liquid Copper Algaecide	N		
Captain XTR Liquid Copper Algaecide	N		
Category 5 Certification Number	61742		
Chemical Permit ID	0		
Chemicals - Approved	Aquathol K		
Chemicals Permitted Previous Year	All		
Chinook	N		
Clearcast (general)	N		
Clearigate	N		
Clipper Herbicide	N		
Clipper SC Aquatic Herbicide	N		
Comments	MISSING - Large-Scale Treatment Worksheet, Form 3200-004A		
Common reed (Phragmites australis)	N		
Common waterweed (Elodea canadensis)	N		

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Details: Parameter	Value/Amount	Units	Comments
Common/Glossy Buckthorn	N		
Control - Algae	N		
Control - Emergent water plants	N		
Control - Floating water plants	N		
Control - Submerged water plants	Y		
Coontail (Ceratophyllum demersum)	N		
Curly-leaf pondweed (Potamogeton crispus)	Y		
Current	N		
Cutrine-Plus Algaecide and Herbicide	N		
Cutrine-Plus Granular Algaecide	N		
Cutrine-Ultra Algaecide / Herbicide / cyanobactericide	N		
DMA 4 IVM Herbicide	N		
Earthtec Algaecide / Bactericide	N		
Element 3A Herbicide	N		
Estimated Acres	20		
Eurasian water-milfoil (Myriophyllum spicatum)	N		
Fee	520		
Field - Date Issued	03/12/2019		
Field - Date Received	02/21/2019		
Field Issued By	Mark_Sundeen		
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		
Hydrothol Granular Aquatic Algaecide and Herbicide	N		

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Details: Parameter	Value/Amount	Units	Comments
Improvement - swimming	N		
Japanese Knotweed	N		
K-Tea Aquatic Algaecide	N		
Komeen Aquatic Herbicide	N		
Komeen Crystal Aquatic Herbicide	N		
Lake Surface Area	812		
Large Duckweed (Spirodela polyrhiza)	N		
Maintain navigational channel	N		
Maintain private access - boating	N		
Maintain private access - fishing	N		
Method of Application	Subsurface application using weighted drop lines from a metered pump on a gps guided boat		
Milestone Herbicide	N		
More than 1 Property Owner	Y		
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	N		
PLSS_DIRECTION	W		
PLSS_RANGE	18		
PLSS_SECTION	25		
PLSS_TOWNSHIP	35		
Payment Number	1873		
Permit County	Polk		
Permit End Year	2019		
Permit Latitude	45.4084000		
Permit Longitude	-92.5493000		
Permit PLSS Section	25 T35N R18W		
Permit Start Year	2019		
Permit WBIC	2619400		
Phycomycin SCP Algaecide and Oxidizer	N		

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Details: Parameter	Value/Amount	Units	Comments
Polaris	N		
Polaris AC	N		
Pond-Klear	N		
Pondweeds	N		
Private Pond	N		
ProcellaCOR EC	N		
Purple loosestrife (Lythrum salicaria)	N		
Reed Canary Grass	N		
Reed Manna Grass	N		
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		
Sculpin G Aquatic Herbicide	N		
SeClear (general)	N		
SeClear G Algaecide and Water Quality Enhancer	N		
Sensitive Area	Y		
SharePoint_Number	AP-IP-NO-2019-49-2033		
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		

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Details: Parameter	Value/Amount	Units	Comments
Stingray Aquatic Herbicide	N		
Surface Water Discharge	Y		
Symmetry NXG	N		
TREATMENT_AREA	Deer Lake		
Touchdown Pro	N		
Treatment Area Greater Than 5%	N		
Tribune Herbicide	N		
WPDES Coverage	N		
Waterbody Type	Lake		
Waterbody have Public Access	Y		
Weedar 64 Broadleaf Herbicide	N		
Weedestroy AM-40 Amine Salt - Selective Weed Killer	N		
Wind Direction	61742		
Yellow Floating Heart	N		
Yellow Iris	N		
APM Chemical Treatment Record		6/28/2019	COMPLETE

Details: Parameter	Value/Amount	Units	Comments
Air Temperature	65		
Air Temperature Units	F		
COONTAIL_SITE	abcd		
CURLY_LEAF_PONDWEED_SITE	all		
Contains Herbicide totals	Y		
Coontail (Ceratophyllum demersum)	SP		
Curly-leaf pondweed (Potamogeton crispus)	TS		
Did Treatments Occur	Y		
Duration of Chemical Residualts	24 hours		
FLAMENTOUS_ALGAE_SITE	all		
Filamentous Algae	SP		
Herbicide Treatment and Water Use Restriction Signs Posted in Accordance with NR 107?	Y		
Permit County	Polk		
Permit Year	2018		
Person Completing Form	Dale Dressel		
Treatment Date	05/21/2018		
Treatment End Time	12:00		
Treatment Start Time	9:00		

8/28/2024

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Details: Parameter	Value/Amount	Units	Comments
WHITE_WATER_LILY_SITE	abcd		
Water Temperature	58.2		
Water Temperature Units	F		
Wind Direction	E		
Wind Speed	0-4		

Monitoring Stations

Station ID	Name	Comments
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Assessment Units

WBIC	Segment	Local Name	Official Name
2619200	1	Deer Creek	Deer Creek
2619400	1	Deer Lake	Deer Lake
2619500	1	Rock Creek	Rock Creek
5006098	1	Local Water	Unnamed

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	Method Description
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Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name
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Documents

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Title	Description	Author	Published	Comments
Herbicide Treatment Analysis for Potamogeton crispus (Curly-leaf pondweed) - Deer Lake, Polk County Wisconsin [2018]	On May 21, 2018 18.8 acres of Potamogeton crispus-curly leaf pondweed (CLP) were treated with endothall (broad spectrum herbicide sold commercially as Aquatholl K®) to reduce the frequency and density of the CLP within 5 different beds. The treatment resulted in a significant reduction (based upon chi-square analysis) comparing the frequency of occurrence before treatment from April 2018 to after treatment surveyed June 2018. There was also a significant reduction comparing the pretreatment survey frequency in 2017 to the pretreatment frequency in 2018, reflecting some long term reduction. There was no change in post treatment CLP frequency from 2017 to 2018, but there was only one sample point with CLP after treatment each year, not allowing for a reduction. There was a significant reduction in three native species from 2017 to 2018. No beds of CLP were observed in Deer Lake outside of the treatment areas. Only a few single CLP plants were observed throughout the lake. A turion analysis in October showed a small increase in turion density from 2017 to 2018 (41.7 turions/m ² to 55.2 turions/m ²).	Ecological Integrity Service, LLC	1/1/2018	

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<p>Herbicide Treatment Analysis for Potamogeton crispus (Curly-leaf pondweed) - Deer Lake, Polk County Wisconsin [2019]</p>	<p>On May 29, 2019 12.5 acres (four beds) of Potamogeton crispus-curly leaf pondweed (CLP) were treated with endothall (broad spectrum herbicide sold commercially as Aquathol K®) to reduce the frequency and density of the CLP within 5 different beds. The treatment resulted in a significant reduction (based upon chi-square analysis) comparing the frequency of occurrence before treatment from April 2019 to after treatment surveyed June 2019. There was a frequency increase (not significant) comparing the pretreatment survey frequency in 2018 to the pretreatment frequency in 2019. There was a frequency increase in post treatment CLP frequency from 2018 to 2019, which was statistically significant. There was no significant reduction in any native species from 2018 to 2019 post treatment surveys. Two small beds of CLP were observed in Deer Lake outside of the treatment areas. A turion density analysis in October showed a small increase in turion density in 2019 compared to 2018 (55.2 turions per square meter in 2018 compared to 78.6 turions per square meter in 2019).</p>	<p>Ecological Integrity Service, LLC</p>	<p>1/1/2019</p>	
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Budget

Combined Budgets:

Combined WSLH:

Combined Total: \$0.00

Funding

Organization	Source	Type	Amount	Start Date	End Date
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