

Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID: AIRR19516

Name: LONG LAKE PROTECTION DISTRICT: Identification and Suppression of SSW on Long Lake

Type: Aquatic Invasives Grant

Subtype: Aquatic Invasives Early Detection and Response

Status: COMPLETE

Start Date: 7/20/2015

End Date: 12/31/2016

Purpose: The Long Lake Protection District, in partnership with a consultant and the Wisconsin Department of Natural Resources, will undertake a rapid response project on Long Lake to control and prevent the spread of Starry Stonewort, listed in NR 40 as a prohibited species. The project will include hand pulling, a point intercept plant survey, mapping of Starry Stonewort beds and experimental chemical treatments. The project deliverable will be a report containing the results of the P/I survey (raw data, distribution/density maps of Starry Stonewort, EWM, CLP and the top 7 native plants in terms of frequency of occurrence), a map denoting the hand pulled areas, results of the chemical treatments, results of the snorkeling survey and a description of public outreach efforts.

Objective:

Comments: Grantee is LONG LAKE PROTECTION DISTRICT

Outcome:

Study Design:

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
Bunk, Heidi J	LAKE_BIOLOGIST	ACTIVE	8/19/2019		Wisconsin DNR	
KRETLOW, AMY L	TEAM_MEMBER	ACTIVE	8/19/2019		Wisconsin DNR	
Long Lake Protection District,	GRANT_RECIPIENT	ACTIVE	6/8/2016		Long Lake Protection District	

Project Statuses

Date	Reported By	Status	Comments
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Actions

Action	Detailed Description	Start Date	End Date	Status
Grant Awarded	Grant AIRR19516 awarded	7/20/2015	12/31/2015	COMPLETE
APM Chemical Permit Request	Chemical Permit Details	3/28/2016	10/1/2016	APPROVED

Details: Parameter	Value/Amount	Units	Comments
APM Plan	N		
APM Plan Agree	N		
Advance Notification	N		
Broad-leaved cattail (Typha latifolia)	Y		

**Wisconsin Department of Natural Resources
SWIMS Project Summary**

Details: Parameter	Value/Amount	Units	Comments
Business Location License	N/A		
CO - # days	2		
CO - 15 days	Y		
CO – Date Sent	3/30/2016		
CO-Date_Received	3/28/2016		
CONTROL_INVASIVES	N		
CONTROL_OTHER	N		
Category 5 Certification Number	N/A		
Chemical Permit ID	2825		
Chemicals - Approved	Earthtec,Algae Defense, Algimycin, Captain/XTR, Cleargate, Cutrine+/Ultra, F30,Green Clean,Komeen,Phycomycin,Ktea,SeClear/G,Aquastrike,Aquatholk/SuperK,Avast,DMA4,Habitat,Hydrothol,Navigate,Navitrol,Reward,SculpinG,Sonar,Stingray,WeedestroyAm40,Aquaneat,R		
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	Y		
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	N		
Estimated Acres	109.19		
Eurasian water-milfoil (Myriophyllum spicatum)	Y		
Expiration Date	10/1/2016		
Fee	1270		
Field - 15 days	N		
Field Issued By	Craig_Helker		
Filamentous Algae	N		
Improvement - swimming	N		

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Details: Parameter	Value/Amount	Units	Comments	
Lake Surface Area				
Large Duckweed (Spirodela polyrhiza)	N			
Large Scale Treatment Form	N			
Large-leaf pondweed (Potamogeton amplifolius)	N			
Maintain - Other Text	Starry Stonewort			
Maintain navigational channel	Y			
Maintain private access - boating	Y			
Maintain private access - fishing	Y			
Muskgrasses (Chara)	N			
NUISANCE_CAUSED_OTHER	Y			
Native Plants	N			
Next Steps	Sent to Craig			
Payment Number	13717			
Permit County	Racine			
Permit End Year	2016			
Permit Latitude	42.830671			
Permit Longitude	-88.172274			
Permit PLSS Section	7 04N20E			
Permit Start Year	2016			
Permit WBIC	761100			
Permit Year	2016			
Pithophora	N			
Planktonic Algae	N			
Private Pond	N			
Purple loosestrife (Lythrum salicaria)	N			
Sensitive Area	N			
Softstem bulrush (Schoenoplectus tabernaemontani)	N			
Sogo pondweed (Stuckenia pectinata)	N			
TREATMENT_AREA	Long Lake			
Treatment Date	N			
Treatment Date	N			
Treatment Record - Received	N			
Treatment Record - Scanned	N			
Waterbody Type	LAKE			
APM Chemical Treatment Record	Chemical treatment details	5/4/2016	5/4/2016	COMPLETE

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Details: Parameter	Value/Amount	Units	Comments
Air Temperature	44		
Air Temperature Units	F		
Aqua-Pro Acres	0		
Aqua-Pro Gallons	0		
Aquaneat Acres	0		
Aquaneat Gallons	0		
Aquashade Acres	0		
Aquashade Pounds	0		
Aquastar Acres	0		
Aquastar Gallons	0		
Aquathol Acres	0		
Aquathol Gallons	0		
Aquathol K Acres	0		
Aquathol K Gallons	1.75		
Aquathol Super K, # Acres	0		
Aquathol Super K, # Pounds	0		
Aquathol, # Acres Gallons	37.73		
Aquathol, # Pounds	0		
Avast Acres	0		
Avast Gallons	0		
Broad-leaved cattail (Typha latifolia)	SP		
Captain XTR, # Acres	0		
Captain XTR, # Gallons	0		
Clearcast Acres	0		
Clearcast Gallons	0		
Clearigate Acres	0		
Clearigate Gallons	0		
Common waterweed (Elodea canadensis)	SP		
Contains Herbicide totals	Y		
Control Comments	Navitrol DPF(Triclopyr) 37.73 acres @ 78lbs		
Coontail (Ceratophyllum demersum)	SP		
Copper Acres	0		
Copper Liquid, # Acres	0		
Copper Liquid, # Gallons	0		
Copper Pounds	0		
Curly-leaf pondweed (Potamogeton crispus)	TS		
Citrine Acres	0		
Citrine Liquid Acres	0		

**Wisconsin Department of Natural Resources
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Details: Parameter	Value/Amount	Units	Comments
Citrine Liquid Gallons	0		
Citrine Plus Acres	0		
Citrine Plus Liquid Acres	0		
Citrine Plus Liquid Gallons	0		
Citrine Plus Pounds	0		
Citrine Pounds	0		
Citrine Ultra Acres	0		
Citrine Ultra Gallons	0		
DMA 4 IVM Acres	0		
DMA 4 IVM Gallons	0		
Diquat Acres	0		
Diquat Gallons	0		
Diquat Liquid Acres	0		
Diquat Pounds	0		
Endothol Acres	0		
Endothol Liquid Acres	0		
Endothol Liquid Gallons	0		
Endothol Pounds	0		
Eurasian water-milfoil (Myriophyllum spicatum)	TS		
Filamentous Algae	SP		
Floridone Acres	0		
Floridone Gallons	0		
Glyphosate Acres	0		
Glyphosate Gallons	0		
Glyphosate Liquid Acres	0		
Glyphosate Pounds	0		
Green Clean Acres	0		
Green Clean Gallons	0		
H2O2 Acres	0		
H2O2 Pounds	0		
Habitat Acres	0		
Habitat Gallons	0		
Harvester Acres	0		
Harvester Gallons	0		
Herbicide Treatment and Water Use Restriction Signs Posted in Accordance with NR 107?	Y		
Hydrothol Acres	0		
Hydrothol Gallons	0		
Illinois pondweed (Potamogeton illinoensis)	SP		

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Details: Parameter	Value/Amount	Units	Comments
Imazapyr Acres	0		
Imazapyr Gallons	0		
Large Duckweed (Spirodela polyrhiza)	SP		
Muskgrasses (Chara)	SP		
Nautique Acres	0		
Nautique Gallons	0		
Navigate Acres	0		
Navigate, # Pounds	0		
OTHER_Aquatics	SP		
OTHER_Aquatics_Desc	Watermeal		
Onsite Supervision	No		
Permit County	Racine		
Permit Year	2016		
Person Completing Form	Jeff Stelzer		
Phycomycin Acres	0		
Phycomycin Pounds	0		
Polaris Acres	0		
Polaris Gallons	0		
Refuge Acres	0		
Refuge Gallons	0		
Reward Acres	0		
Reward Gallons	0		
Reward Liquid Acres	0		
Reward Pounds	0		
Rodeo Acres	0		
Rodeo Gallons	0		
SCI-62 Acres	0		
SCI-62 Gallons	0		
Sculpin G Acres	0		
Sculpin G Pounds	0		
SeClear Acres	0		
SeClear Gallons	0		
ShoreKlear Acres	0		
ShoreKlear Gallons	0		
Sonar AS Gallons	0		
Sonar AS Acres	0		
Touchdown Pro Acres	0		
Touchdown Pro Gallons	0		
Treatment Date	5/4/2016		
Treatment End Time	1:05		

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Details: Parameter	Value/Amount	Units	Comments
Treatment Start Time	8:37		
Tribune Acres	0		
Tribune Gallons	0		
Vectobac Acres	0		
Vectobac Gallons	0		
Water Temperature	53.4		
Water Temperature Units	F		
Water Use Restriction - Animal Water	N		
Water Use Restriction - Crop Irrigation	N		
Water Use Restriction - Drinking Water	N		
Water Use Restriction - Fish Consumption	N		
Water Use Restriction - None	N		
Water Use Restriction - Other Irrigation	N		
Water Use Restriction - Swimming	N		
White water lily (Nymphaea odorata)	TS		
Wind Direction	N		
Wind Speed	15		

APM Chemical Treatment Record	Chemical treatment details	6/16/2016	6/16/2016	COMPLETE
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Details: Parameter	Value/Amount	Units	Comments
Air Temperature	64		
Air Temperature Units	F		
Aqua-Pro Acres	0		
Aqua-Pro Gallons	0		
Aquaneat Acres	0		
Aquaneat Gallons	0		
Aquashade Acres	0		
Aquashade Pounds	0		
Aquastar Acres	0		
Aquastar Gallons	0		
Aquathol Acres	0		
Aquathol Gallons	0		
Aquathol K Acres	0		
Aquathol K Gallons	0		
Aquathol Super K, # Acres	0		
Aquathol Super K, # Pounds	0		
Aquathol, # Acres Gallons	0		
Aquathol, # Pounds	0		

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Details: Parameter	Value/Amount	Units	Comments
Avast Acres	0		
Avast Gallons	0		
Broad-leaved cattail (Typha latifolia)	SP		
Captain XTR, # Acres	1.02		
Captain XTR, # Gallons	10		
Clearcast Acres	0		
Clearcast Gallons	0		
Clearigate Acres	0		
Clearigate Gallons	0		
Contains Herbicide totals	Y		
Coontail (Ceratophyllum demersum)	SP		
Copper Acres	0		
Copper Liquid, # Acres	0		
Copper Liquid, # Gallons	0		
Copper Pounds	0		
Curly-leaf pondweed (Potamogeton crispus)	SP		
Citrine Acres	0		
Citrine Liquid Acres	0		
Citrine Liquid Gallons	0		
Citrine Plus Acres	0		
Citrine Plus Liquid Acres	0		
Citrine Plus Liquid Gallons	0		
Citrine Plus Pounds	0		
Citrine Pounds	0		
Citrine Ultra Acres	0		
Citrine Ultra Gallons	0		
DMA 4 IVM Acres	0		
DMA 4 IVM Gallons	0		
Diquat Acres	0		
Diquat Gallons	0		
Diquat Liquid Acres	0		
Diquat Pounds	0		
Endotholl Acres	0		
Endotholl Liquid Acres	0		
Endotholl Liquid Gallons	0		
Endotholl Pounds	0		
Floridone Acres	0		
Floridone Gallons	0		
Glyphosate Acres	0		

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Details: Parameter	Value/Amount	Units	Comments
Glyphosate Gallons	0		
Glyphosate Liquid Acres	0		
Glyphosate Pounds	0		
Green Clean Acres	0		
Green Clean Gallons	0		
H2O2 Acres	0		
H2O2 Pounds	0		
Habitat Acres	0		
Habitat Gallons	0		
Harvester Acres	0		
Harvester Gallons	0		
Herbicide Treatment and Water Use Restriction Signs Posted in Accordance with NR 107?	Y		
Hydrothol Acres	0		
Hydrothol Gallons	0		
Illinois pondweed (Potamogeton illinoensis)	SP		
Imazapyr Acres	0		
Imazapyr Gallons	0		
Large Duckweed (Spirodela polyrhiza)	SP		
Muskgrasses (Chara)	SP		
Name_supervisor	S. Van Egeren & J. Skogerboe		
Nautique Acres	0		
Nautique Gallons	0		
Navigate Acres	0		
Navigate, # Pounds	0		
OTHER_Aquatics	TS		
OTHER_Aquatics_Desc	Starry stonewort		
Onsite Supervision	Yes		
Permit County	Racine		
Permit Year	2016		
Person Completing Form	Jeff Stelzer		
Phycomycin Acres	0		
Phycomycin Pounds	0		
Polaris Acres	0		
Polaris Gallons	0		
Refuge Acres	0		
Refuge Gallons	0		
Reward Acres	0		
Reward Gallons	0		

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Details: Parameter	Value/Amount	Units	Comments		
Reward Liquid Acres	0				
Reward Pounds	0				
Rodeo Acres	0				
Rodeo Gallons	0				
SCI-62 Acres	0				
SCI-62 Gallons	0				
Sculpin G Acres	0				
Sculpin G Pounds	0				
SeClear Acres	0				
SeClear Gallons	0				
ShoreKlear Acres	0				
ShoreKlear Gallons	0				
Sonar AS Gallons	0				
Sonar AS Acres	0				
Touchdown Pro Acres	0				
Touchdown Pro Gallons	0				
Treatment Date	6/16/2016				
Treatment End Time	9:36				
Treatment Start Time	9:08				
Tribune Acres	0				
Tribune Gallons	0				
Vectobac Acres	0				
Vectobac Gallons	0				
Water Temperature	72.4				
Water Temperature Units	F				
Water Use Restriction - Animal Water	N				
Water Use Restriction - Crop Irrigation	N				
Water Use Restriction - Drinking Water	N				
Water Use Restriction - Fish Consumption	N				
Water Use Restriction - None	N				
Water Use Restriction - Other Irrigation	N				
Water Use Restriction - Swimming	N				
White water lily (Nymphaea odorata)	SP				
Wind Direction	W/NW				
Wind Speed	7-14				
APM Chemical Treatment Record	Chemical treatment details		6/29/2016	6/29/2016	COMPLETE

**Wisconsin Department of Natural Resources
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Details: Parameter	Value/Amount	Units	Comments
Air Temperature	78		
Air Temperature Units	F		
Aqua-Pro Acres	0		
Aqua-Pro Gallons	0		
Aquaneat Acres	0		
Aquaneat Gallons	0		
Aquashade Acres	0		
Aquashade Pounds	0		
Aquastar Acres	0		
Aquastar Gallons	0		
Aquathol Acres	0		
Aquathol Gallons	0		
Aquathol K Acres	0		
Aquathol K Gallons	0		
Aquathol Super K, # Acres	0		
Aquathol Super K, # Pounds	0		
Aquathol, # Acres Gallons	0		
Aquathol, # Pounds	0		
Avast Acres	0		
Avast Gallons	0		
Broad-leaved cattail (Typha latifolia)	SP		
Captain XTR, # Acres	0		
Captain XTR, # Gallons	0		
Clearcast Acres	0		
Clearcast Gallons	0		
Clearigate Acres	0		
Clearigate Gallons	0		
Contains Herbicide totals	Y		
Coontail (Ceratophyllum demersum)	SP		
Copper Acres	4.71		
Copper Liquid, # Acres	4.71		
Copper Liquid, # Gallons	42.75		
Copper Pounds	34.5		
Curly-leaf pondweed (Potamogeton crispus)	SP		
Citrine Acres	0		
Citrine Liquid Acres	0		
Citrine Liquid Gallons	0		
Citrine Plus Acres	0		
Citrine Plus Liquid Acres	0		

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Details: Parameter	Value/Amount	Units	Comments
Citrine Plus Liquid Gallons	0		
Citrine Plus Pounds	0		
Citrine Pounds	0		
Citrine Ultra Acres	0		
Citrine Ultra Gallons	0		
DMA 4 IVM Acres	0		
DMA 4 IVM Gallons	0		
Diquat Acres	0		
Diquat Gallons	0		
Diquat Liquid Acres	0		
Diquat Pounds	0		
Endotholl Acres	0		
Endotholl Liquid Acres	0		
Endotholl Liquid Gallons	0		
Endotholl Pounds	0		
Eurasian water-milfoil (Myriophyllum spicatum)	SP		
Filamentous Algae	SP		
Floridone Acres	0		
Floridone Gallons	0		
Glyphosate Acres	0		
Glyphosate Gallons	0		
Glyphosate Liquid Acres	0		
Glyphosate Pounds	0		
Green Clean Acres	0		
Green Clean Gallons	0		
H2O2 Acres	0		
H2O2 Pounds	0		
Habitat Acres	0		
Habitat Gallons	0		
Harvester Acres	0		
Harvester Gallons	0		
Herbicide Treatment and Water Use Restriction Signs Posted in Accordance with NR 107?	Y		
Hydrothol Acres	4.71		
Hydrothol Gallons	4.25		
Illinois pondweed (Potamogeton illinoensis)	SP		
Imazapyr Acres	0		
Imazapyr Gallons	0		

**Wisconsin Department of Natural Resources
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Details: Parameter	Value/Amount	Units	Comments
Large Duckweed (Spirodela polyrhiza)	SP		
Muskgrasses (Chara)	SP		
Nautique Acres	0		
Nautique Gallons	0		
Navigate Acres	0		
Navigate, # Pounds	0		
OTHER_Aquatics	TS		
OTHER_Aquatics_Desc	Starry stonewort		
Onsite Supervision	No		
Permit County	Racine		
Permit Year	2016		
Person Completing Form	Jeff Stelzer		
Phycomycin Acres	0		
Phycomycin Pounds	0		
Polaris Acres	0		
Polaris Gallons	0		
Refuge Acres	0		
Refuge Gallons	0		
Reward Acres	0		
Reward Gallons	1.41		
Reward Liquid Acres	4.71		
Reward Pounds	0		
Rodeo Acres	0		
Rodeo Gallons	0		
SCI-62 Acres	0		
SCI-62 Gallons	0		
Sculpin G Acres	0		
Sculpin G Pounds	0		
SeClear Acres	0		
SeClear Gallons	0		
ShoreKlear Acres	0		
ShoreKlear Gallons	0		
Sogo pondweed (Stuckenia pectinata)	SP		
Sonar AS Gallons	0		
Sonor AS Acres	0		
Touchdown Pro Acres	0		
Touchdown Pro Gallons	0		
Treatment Date	6/29/2016		
Treatment End Time	15:34		
Treatment Start Time	10:30		

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Details: Parameter	Value/Amount	Units	Comments
Tribune Acres	0		
Tribune Gallons	0		
Vectobac Acres	0		
Vectobac Gallons	0		
Water Temperature	75.6-83.6		
Water Temperature Units	F		
Water Use Restriction - Animal Water	N		
Water Use Restriction - Crop Irrigation	N		
Water Use Restriction - Drinking Water	N		
Water Use Restriction - Fish Consumption	N		
Water Use Restriction - None	N		
Water Use Restriction - Other Irrigation	N		
Water Use Restriction - Swimming	N		
White water lily (Nymphaea odorata)	SP		
Wind Direction	N/SW		
Wind Speed	3-7		

Monitoring Stations

Station ID	Name	Comments
10005277	Lake Kec-Nong-Ga-Mong	
10017726	Long Lake -- Kec-Nong-Ga-Mong Lake -- N End	

Assessment Units

WBIC	Segment	Local Name	Official Name
760700	1	Unnamed Stream	Unnamed
761100	1	Long Lake	Long Lake

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

Wisconsin Department of Natural Resources SWIMS Project Summary

Start Date	Status	Field ID	Station ID	Station Name
7/6/2015	COMPLETE		10017726	Long Lake -- Kec-Nong-Ga-Mong Lake -- N End

Documents

Title	Description	Author	Published	Comments
Long Lake Starry Stonewort Grant Summary	Long Lake is a 109-acre lake located within U.S. Public Land Survey Township 4 North, Range 20 East, Sections 5, 6, and 7, Town of Norway, in Racine County, Wisconsin. The Lake is a valuable natural resource offering a variety of recreational and related opportunities to the resident community and its visitors. In the summer of 2015, the recreational and aesthetic values of Long Lake were threatened by the discovery of Starry Stonewort (<i>Nitellopsis obtusa</i>) southeast of the boat launch by the WDNR. The Long Lake Protection District (LLPD) took immediate steps to assess its extent by applying for an Aquatic Invasive Species (AIS) Rapid Response Grant and contracting with Lake and Pond Solutions Co. This plan is prepared at the request of the LLPD and the WDNR to assist lake managers and regulatory agencies in directing future plant management activities.	Lake and Pond Solutions Co.	1/12/2017	

Budget

Combined Budgets:

Combined WSLH:

Combined Total: \$0.00

Funding

Organization	Source	Type	Amount	Start Date	End Date
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