

## Wisconsin Department of Natural Resources SWIMS Project Summary

### General Project Information

**Project ID:** AEPP55118

**Name:** UPPER TURTLE LAKE ASSOCIATION: 2018-19 Upper Turtle Lake CLP Planning Project

**Type:** Aquatic Invasives Grant

**Subtype:** Aquatic Invasives Education

**Status:** COMPLETE

**Start Date:** 2/15/2018

**End Date:** 6/30/2019

**Purpose:** The Upper Turtle Lake Association is sponsoring a curly-leaf pondweed monitoring and planning project.

Specific project activities include: 1) CBCW watercraft inspection; 2) Volunteer AIS monitoring; 3) AIS outreach & education; 4) Spring and summer whole lake point intercept plant surveys; 5) Pre-post treatment monitoring; 6) CLP bed mapping; 7) CLP turion monitoring; 8) Dye study in north bay of the lake; 9) Lake water quality monitoring.

Project deliverables include GIS data & maps of areas monitored, CBCW, AIS, and water quality monitoring data in SWIMS, education materials developed, dye study report, and CLP and turion monitoring reports.

Special Conditions: 1) Sponsor shall contact DNR immediately if a new AIS is found; 2) Water quality, WAV, and AIS monitoring personnel shall be trained and follow DNR approved protocols; 3) Water quality, WAV, and AIS monitoring data shall be entered in SWIMS; 4) Education materials shall be consistent with the Department's statewide education strategy for preventing and controlling AIS; 5) WDNR's Aquatic Plant Management in Wisconsin guidance shall be followed for point-intercept surveys and pre-post aquatic plant monitoring.

This scope is intended to summarize the detailed project scope provided in the application and does not supersede those application tasks/deliverables. Data, records, reports, and education materials, including GIS-based maps and digital images, must be submitted to the Department in a format specified by the regional lake coordinator.

**Objective:**

**Comments:** Grantee is UPPER TURTLE LAKE ASSOCIATION

**Outcome:**

**Study Design:**

**QA Measures:**

### People

Name	Role	Status	Start Date	End Date	Organization	Comments
Upper Turtle Lake Association,	GRANT_RECIPIENT	ACTIVE	2/15/2018		Upper Turtle Lake Association	

### Project Statuses

Date	Reported By	Status	Comments
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### Actions

Action	Detailed Description	Start Date	End Date	Status
Grant Awarded	Grant AEPP55118 awarded	2/15/2018	6/30/2019	COMPLETE

### Monitoring Stations

## Wisconsin Department of Natural Resources SWIMS Project Summary

Station ID	Name	Comments
033175	Upper Turtle Lake - Deep Hole	

### Assessment Units

WBIC	Segment	Local Name	Official Name
2078300	2	Turtle Creek	Turtle Creek
2079800	1	Upper Turtle Lake	Upper Turtle 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

Start Date	Status	Field ID	Station ID	Station Name
9/16/2018	COMPLETE	UPPER TURTLE	033175	Upper Turtle Lake - Deep Hole
10/12/2018 16:45	COMPLETE	UPPER TURTLE	033175	Upper Turtle Lake - Deep Hole

### Documents

Title	Description	Author	Published	Comments
2017 Curly-leaf pondweed (Potamogeton crispus) Point-intercept and Bed Mapping Surveys, and Warm-water Macrophyte Point-intercept Survey - Upper Turtle Lake	As a prerequisite to updating their plan in 2018 and to compare how the lakes vegetation had changed since the last point-intercept surveys, the UTLA and the Wisconsin Department of Natural Resources authorized CLP density and bed mapping surveys on June 20-21, and a full point-intercept survey for all aquatic macrophytes on July 17, 2017. During the initial 2010 early-season survey, we found CLP at 52 sites (8.7% coverage with a mean rake fullness of 1.87) of which 35 had a rake fullness of 2 or 3 suggesting 5.9% of the lake had a significant infestation. In 2017, we found CLP at 216 points (36.3% coverage with a mean rake fullness of 1.97) with 140 of these having a rake fullness of 2 or 3 (23.5% of the lake had a significant infestation). This represented a 315% increase in total CLP coverage as well as a 300% increase in areas with significant CLP.	Matthew S. Berg, Endangered Resource Services, LLC	7/17/2017	

## Wisconsin Department of Natural Resources SWIMS Project Summary

2017 Upper Turtle Lake CLP Survey [Excel File]	CLP survey data from Upper Turtle Lake	Matthew S. Berg and Noah M. Berg	6/21/2017	
2017 Upper Turtle Lake PI Survey [Excel File]	Data from a PI survey done on Upper Turtle Lake.	Matthew S. Berg and Hallie M. Jensen	7/17/2017	
2018 Curly-leaf Pondweed (Potamogeton crispus) Pre/Post Herbicide and Bed Mapping Surveys - Upper Turtle Lake	Following several years of high CLP density on the lake that resulted in severe navigation impairment for many residents, mats of rotting vegetation, and poor summer water quality (UTLA board, pers. comm.), the UTLA decided to authorized follow-up plant surveys in 2017 so they could update their APMP in 2018 and revisit active management.	Matthew S. Berg, Endangered Resource Services, LLC	6/18/2018	
2018 Curly-leaf pondweed (Potamogeton crispus) Fall Turion Survey Upper Turtle Lake	Following several years of high CLP density on the lake that resulted in severe navigation impairment for many residents, mats of rotting vegetation, and poor summer water quality (UTLA board, pers. comm), the UTLA decided to authorized follow-up plant surveys in 2017 so they could update their APMP in 2018 and revisit active management.	Matthew S. Berg, Endangered Resource Services, LLC	10/28/2018	
2018 Upper Turtle Lake CLP Turion Survey Data [Excel File]	CLP Turion Survey data from Upper Turtle Lake	Matthew S. Berg	10/28/2018	
2018 Upper Turtle Lake Posttreatment Survey [Excel File]	Pretreatment and Posttreatment data for Upper Turtle Lake.	Matthew S. Berg and Hallie M. Jensen	6/18/2018	
2018 Upper Turtle Lake PrePosttreatment Comparison Data [Excel File]	Data and graphs showing comparison of pretreatment and posttreatment data.	Matthew S. Berg	6/18/2018	
2018 Upper Turtle Lake Pretreatment Survey [Excel File]	Pretreatment survey for Upper Turtle Lake in May 2018.	Matthew S. Berg and Joshua D. Curtin	5/12/2018	
AEPP 551 18_Final Report_CLP Turion Survey_10172021	Curly-leaf pondweed (Potamogeton crispus)\r\nFall Turion Survey		10/17/2021	
AEPP 551 18_Final Report_Survey Report_07142022	Curly-leaf pondweed (Potamogeton crispus)\r\nPoint-intercept and Bed Mapping Surveys, and\r\nWarm-water Point-intercept Macrophyte Survey		7/14/2022	
Upper Turtle Approval Letter	Approval Letter for Upper Turtle APM Plan.	Alex Smith	1/23/2018	

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<p>Upper Turtle Lake, Barron County, 2018-2022 APMP</p>	<p>Upper Turtle Lake is a hard water drainage lake located in west-central Barron County, Wisconsin. The health and quality of the native plant community is above average, with a floristic quality that ranks in the upper quartile on a statewide and regional basis. Curly-leaf pondweed (CLP), an aquatic invasive species, is known to be in the lake and reed canary grass and purple loosestrife, both established exotic species, are also present around the lake. Until recently, CLP seldom occurred as monotypic beds and appeared to enhance early season habitat in the lake by providing fish forage and cover areas. In 2017, the CLP population was significantly larger than the fairly benign population that was seen in 2010. While it is possible that CLP has been spreading at a fast but steady pace since the most recent plant survey, in 2010, the ideal winter and spring conditions in 2017 likely exacerbated the issue and potentially caused a massive population increase.</p>	<p>Heather Wood</p>	<p>1/1/2018</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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