Wisconsin Department of Natural Resources
SWIMS Project Summary

General Project Information

Project ID: AIRR22518

Name: CEDAR LAKE PROTECTION & REHABILITATION DIST: Cedar Lake EWM Response with DASH

Type: Aquatic Invasives Grant

Subtype: Aquatic Invasives Early Detection and Response

Status: COMPLETE

Start Date: 7/8/2017

End Date: 12/31/2019

Purpose: The Cedar Lake Protection and Rehabilitation District (PRD) proposes to control Eurasian watermilfoil in Cedar Lake, St. Croix County.

Approved activities include: Herbicide treatment, hand-pulling, pre-and post-monitoring, consultant fees, buoy placement, and APM plan update.

Deliverables include: Pre and post monitoring data, APM permits, EWM monitoring maps, maps of hand-pulling locations, including volume of EWM removed.

Special conditions: All monitoring and management should follow approved recommendations within the Cedar Lake Aquatic Plant Management Plan, WDNR\2019s Aquatic Plant Management in Wisconsin guidance, and/or Citizen Lake Monitoring Network protocols, as specified by the Department.

Objective:

Comments: Grantee is CEDAR LAKE PROTECTION & REHABILITATION DIST

Outcome:

Study Design:

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
Cedar Lake Protection and Reha	GRANT_RECIPIENT	ACTIVE	1/3/2019		Cedar Lake Protection and Rehabilitation District	
DUFFY, CLAUDIA M	TEAM_MEMBER	COMPLETE	8/14/2019	8/29/2020	Wisconsin DNR	
Lepsch, Jodi A	TEAM_MEMBER	ACTIVE	1/3/2020		Wisconsin DNR	
Mosel, Kyle J	TEAM_MEMBER	INACTIVE	7/3/2019	2/23/2023	WISCONSIN DNR	
SELLE, ALEXANDER J	TEAM_MEMBER	ACTIVE	7/3/2019		Wisconsin DNR	
Smith, Alex R	LAKE_BIOLOGIST	ACTIVE	8/14/2019		Wisconsin DNR	

Project Statuses

Date	Reported By	Status	Comments

Actions

Action	Detailed Description	Start Date	End Date	Status
Grant Awarded	Grant AIRR22518 awarded	7/8/2017	12/31/2019	COMPLETE

Wisconsin Department of Natural Resources
SWIMS Project Summary

Monitoring Stations

Station ID	Name	Comments
10004778	Cedar Lake - T32 R18W S34	

Assessment Units

WBIC	Segment	Local Name	Official Name
2615100	1	Cedar Lake	Cedar Lake
2615200	1	Horse Creek	Horse Creek

Lab Account Codes

Account Code	Description	Start Date	End Date

Forms

Form Code	Form Name

Methods

Method Code	Method Description

Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name
6/29/2015 10:00	COMPLETE		10004778	Cedar Lake - T32 R18W S34

Documents

Title	Description	Author	Published	Comments
Evaluation of Myriophyllum spicatum (EWM) Management Using Diver Assisted Suction Harvest (DASH) - Cedar Lake, Polk/St. Croix Counties, Wisconsin	In July and August 2018, DASH (Diver Assisted Suction Harvest) was employed to reduce/control stands of Myriophyllum spicatum-Eurasian watermilfoil (EWM) in Cedar Lake. The areas that were harvested were based upon pre-harvest surveys conducted in areas that have historically been managed in the past using herbicide. Due to the lack of success with herbicide (2,4-D and Diquat/Endothallwere used on different occasions with limited reduction), herbicide use was ceased for 2018.	Ecological Integrity Service, LLC	9/1/2018	

Wisconsin Department of Natural Resources
SWIMS Project Summary

Herbicide Treatment Analysis Targeting Myriophyllum spicatum (Eurasian watermilfoil) - Cedar Lake, St. Croix County, WI	On June 6, 2019 the herbicide ProcellaCOR (Florpyrauxifen-benzyl) was utilized to reduce Myriophyllum spicatum (EWM) in two beds totaling 12.2 acres. The frequency of occurrence (FOO) had a significant reduction ($p<0.0001$ from chi square analysis) with an FOO of 59.5% within the treatment bed before treatment to 0% after treatment. There was one significant reduction in native species (Potamogeton pusillus) and three significant increases in native species (based upon chi square analysis before and after treatment).	Ecological Integrity Service	8/1/2019	

Wisconsin Department of Natural Resources
SWIMS Project Summary

Myriophyllum spicatum‐Eurasian watermilfoil Management Analysis (herbicide, DASH, hand pull) - Cedar Lake, St. Croix County Wisconsin	An herbicide application of Aquastrike® (mixture of diquat and endothall) was conducted in a 2.6‐acre bed of EWM (Myriophyllum spicatum) on May 9, 2017 on Cedar Lake, St. Croix County Wisconsin. A post treatment survey on July 11 resulted in a frequency of occurrence (FOO) of EWM of 46.2% and a density of 0.64 (scale of 0‐3). This was a slight decrease from a September 2016 survey where the FOO was 48.7% and a mean density of 0.72. There was no statistically significant reduction in EWM based upon a chi‐square analysis. There was a significant reduction of five native species based upon a chi‐square analysis between 2016 and 2017 post treatment surveys. Hand pulling efforts using diver assisted suction harvest (DASH) removed approximately 5000 lbs. (wet weight) of EWM. Follow‐up hand pulling with divers removed an additional 200 lbs. There was a frequency reduction (51.4% to 24.3%) in EWM within the DASH sites based upon a chisquare analysis. The mean density was also reduced. A survey before and after DASH using a sample grid around all historical EWM control areas (treatment and diver removed) also showed a frequency reduction from 30.8% to 18.8%, but was not quite significant (p=0.06). A baseline EWM evaluation on a larger, long‐term sample grid was completed in September 2017 with a EWM FOO of 7.03%.	Ecological Integrity Service, LLC	1/1/2017	

Budget

Combined Budgets:

Combined WSLH:

Combined Total: $0.00

Funding

Organization	Source	Type	Amount	Start Date	End Date