General Project Information

Project ID: AIRR-029-08

Name: HORSESHOE LAKE IMPROVEMENT ASSOCIATION: Horseshoe Lake Improvement Assoc., Rapid Response Program

Type: Aquatic Invasives Grant

Subtype: Aquatic Invasives Early Detection and Response

Status: COMPLETE

Start Date: 7/16/2007 **End Date:** 12/31/2010

Purpose: Horseshoe Lake Improvement Association is sponsoring an Aquatic Invasive Species Rapid Response grant which will focus on physical removal of hybrid Eurasian Water Milfoil plants from Horseshoe Lake by scuba divers (professional and resident)

and may include some small-scale chemical treatment (subject to DNR approval and permits) in fall 2007, 2008, and early

season 2009. A full lake point-intercept plant survey will be completed in 2008.

Project activities include:

1) physical removal by scuba divers, 2007-2009

2) pre- and post- treatment surveying

- 3) small-scale chemical application (currently set at 3.5 acres or less in 2008, with the potential for a small-scale application in Fall of 2007)
- 4) full lake point-intercept aquatic plant survey
- 5) marker buoys and improved public access signage to education lake users about the hybrid EWM and to designate problem locations in the lake to minimize spread

Project deliverables include:

1) all current and future reports related to surveying completed, diving results, point-intercept plant survey, chemical application, and a final report describing overall findings, work completed, results, and guidance for continued control actions; all in digital format.

Special conditions for this project:

- all chemical application must be permitted and approved by DNR;
- final report needs department review and approval

Objective:

Comments: Grantee is HORSESHOE LAKE IMPROVEMENT ASSOCIATION

Outcome:

Study Design:

QA Measures:

People							
Name	Role	Status	Start Date	End Date	Organization	Comments	
Blumer, David L	LAKE_BIOLOGI ST	ACTIVE	7/16/2007		Lake Education and Planning Services (LEAPS)		
Horseshoe Lake Improvement Ass	GRANT_RECIPI ENT	COMPLETE	7/16/2007	12/31/2010	Horseshoe Lake Improvement Association		

Project Statuses

Date Reported By Status Comments	
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Actions

Action	Detailed Description	Start Date	End Date	Status
Grant Awarded	AIRR-029-08	7/16/2007	12/31/2010	COMPLETE
Monitor Pre and Post Treatment		7/16/2007	12/31/2010	PROPOSED
APM Chemical Permit Request		7/16/2007	12/31/2010	PROPOSED

Permit Request			7/16/2007	12/31/2010	PROPOSED
Parameter	Value/Amount	Units	Со	mments	
24D Granular, # Acres					
24D Granular, # Pounds					
24D Liquid, # Acres					
24D Liquid, # Pounds					
Aquashade, # Acres					
Aquashade, # Pounds					
Biological, # Pounds					
Biologicals, # Acres					
Copper Granular, # Acres					
Copper Granular, # Pounds					
Copper Liquid, # Acres					
Copper Liquid, # Gallons					
Cutrine +, # Acres					
Cutrine +, # Gallons					
Cutrine, # Acres					
Cutrine, # Gallons					
Diquat, # Acres					
Diquat, # Pounds					
Endothall Granular, # Acres					
Endothall Granular, # Poun	ds				
Endothall Liquid, # Acres					
Endothall Liquid, # Pounds					
Floridone Granular, # Acres					
Floridone Granular, # Poun	ds				
Floridone Liquid, # Acres					
Floridone Liquid, # Pounds					
Glyphosate, # Acres					
Glyphosate, # Pounds					
Herbicide Treatment and W Use Restriction Signs Poste in Accordance with NR 107	ed				
Nautique, # Acres					
Nautique, # Gallons					
Navigate, # Acres					
Navigate, # Pounds					
Onsite Supervision Present	?				
Reward, # Acres					

Documents

Wisconsin Department of Natural Resources SWIMS Project Summary

Details: Pa	rameter		Value/Amount	Units	Co	mments		
Re	eward, # 0	Gallons						
Ro	odeo, # A	cres						
Ro	odeo, # G	allons						
			AIRR-029-08Horseshoe Lake Improvement Assoc., Rapid Response Program			COMPLETE		
Control Invasive S	Species				7/16/2007	12/31/2010	PROPOSEI)
Educate and enga	age resid	ents	19294306		7/16/2007		PROPOSEI)
Monitoring Sta	tions							
Station ID	N	Name			omments			
10000830	Н	orseshoe Lake						
Assessment U	nits							
WBIC	Seg	ment	Local Name		Official Name)		
2630100	1		Horseshoe Lake		Horseshoe Lake			
Lab Account C	odes							
Account Code		Descripti	on				Start Date	End Date
Forms								
Form Code Form Name								
Methods								
Method Code Method Description								
ieldwork Ever	nts							
	rt Date Status Field ID Station ID							

Title	Description	Author	Published	Comments
Aquatic Macrophyte Survey for Horseshoe Lake - Polk/Barron County, Wisconsin	In 2008, the WDNR and the Horseshoe Lake Improvement Association commissioned a cold-water exotic species survey, systematic point/intercept macrophyte survey, and fall Hybrid water milfoil bed mapping survey in preparation for developing an Aquatic Plant Management Plan for the lake. The full point intercept survey found macrophytes at 325 of the 515 total survey sites. We identified a total of 51 native plant species including five Wisconsin Special Concern Species (Spiny hornwort, Robbins spikerush, Farwells water milfoil, Filament-leaf pondweed, and Vaseys pondweed) in and directly adjacent to the lake.	Matthew S. Berg, Endangered Resource Services	1/1/2008	
Fall HWM Bed Mapping Survey for Horseshoe Lake - Polk/Barron County, Wisconsin		Matthew S. Berg, Endangered Resource Services	9/27/2009	

Hybrid Water Milfoil (Myriophyllum spicatum X Myriophyllum sibiricum) Rapid Assessment Survey and Diver Hand Removal Results for Horseshoe Lake	Horseshoe Lake (WBIC 2630100) is a 398 acre, mesotrophic, stratified, seepage lake located on the border of Polk and Barron Counties in northwest Wisconsin. In 2006, the Wisconsin Department of Natural Resources identified the presence of Hybrid water milfoil a cross between Northern and Eurasian water milfoils (Myriophyllum sibiricum X Myriophyllum spicatum) in the lake. Because of this finding, the Horseshoe Lake Improvement Association commissioned an exotic species point intercept survey to determine the extent of infestation in the lake in preparation for the possibility of applying for a rapid response grant.	Matthew S. Berg, Endangered Resource Services	7/30/2007	
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Budget

Combined Budgets: Combined WSLH:

Combined Total: \$0.00

Funding					
Organization	Source	Туре	Amount	Start Date	End Date