Wisconsin Department of Natural Resources
SWIMS Project Summary

General Project Information

Project ID: GLRI_00E00541-0

Name: Winegar Pond Invasive Species Control in a Green Bay Wetland

Type: Great Lakes Restoration Initiative

Subtype: Habitat

Status: ACTIVE

Start Date: 10/1/2010

End Date: 12/31/2099

Purpose: Winegar Pond is a 120-acre Lake Michigan coastal wetland located near the mouth of the Peshtigo River in the Green Bay of Wisconsin. The wetland is owned and managed by the Wisconsin Department of Natural Resources as part of the Green Bay West Shores Wildlife Area - Peshtigo Harbor Unit. The wetland has a natural hydrologic connection to the Peshtigo River through a narrow tributary channel and to Green Bay through an approximately 100 foot shallow swale. We intend to install two fish passage structures that will prevent seasonal migration by carp but allow adult native gamefish to reproduce and annually recruit juvenile gamefish with access to the Peshtigo River and Green Bay. Each spring, adult non-native common carp (Cyprinus carpio) invade Winegar Pond to spawn. Shallow depths and warm spring run-off events that flow through Winegar Pond make it an attractive area for increased carp spawning activity. As a result, carp uproot vegetation and reduce water quality via increased turbidity, destroying native emergent and submerged aquatic plant communities. This has also promoted the invasion of non-native phragmites (Phragmites australis) resulting in a negative impact on native fish recruitment and reduced migratory bird nesting success. In addition to the fish passage structures, we will chemically treat and manage 100 acres of existing stands of phragmites directly adjacent to Winegar Pond.

Objective: This invasive species project aims to reduce the annual migration of spawning common carp into Winegar Pond by designing and installing 2 ecologically sensitive carp exclusion structures at the primary inlet and outlet waterways that connect the coastal wetland to Green Bay and the Peshtigo River. Similar carp exclusion structures have proven effective in the restoration of communities of native aquatic vegetation in several Wisconsin lakes (i.e. Rush Lake and Lake Winnebago) as well as other coastal wetlands throughout the Great Lakes. Carp exclusion structures are a proven technology that is cost effective, efficient and environmentally sound that does not require the use of chemicals or manual removal methods. In order to maximize the overall habitat restoration benefits of this project and complement carp control measures on the 120-acre Winegar Pond, approximately 100 additional acres of established invasive phragmites will be chemically treated (via herbicide application) directly adjacent to Winegar Pond. These actions will dramatically improve water quality, restore a diverse native coastal wetland vegetation community, enhance fishery abundance and diversity, promote a healthy macrophyte and macroinvertebrate population, and increase waterfowl and shorebird use during breeding and migration.

Comments: $658,009

Outcome: Continued partnership and collaboration with local stakeholders leading to further implementation of the Great Lakes restoration strategies and plans
Use of the carp exclusion design and technologies as a demonstration project is expected to engage local, state and federal units of government resulting in additional invasive species practices being installed and utilized, further reducing impacts of invasive species while improving the health of Great Lakes communities
A replicable project design that results in the most cost effective use of resources
Anticipated increases in similar invasive species control efforts and coastal wetland restoration success rates
Progress toward sustainable Lake Michigan migratory and stream-resident fish populations
Better understanding of areas utilized by native spawning fish, including northern pike and muskellunge
Restoration of 120 acres of native spawning and wetland-dependent wildlife habitat
Implementation of the education and outreach component as discussed above
A science-based approach to common carp and invasive phragmites control

Study Design:

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
Hill, Jason	COORDINATOR	ACTIVE	10/12/2010		Ducks Unlimited, Inc.	

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SWIMS Project Summary

Project Statuses

Date	Reported By	Status	Comments

Project Status Detail

Actions

Action	Detailed Description	Start Date	End Date	Status
Control Invasive Species	Winegar Pond is a 120-acre Lake Michigan coastal wetland located near the mouth of the Peshtigo River in the Green Bay of Wisconsin. We intend to install two fish passage structures that will prevent seasonal migration by carp but allow adult native gamefish to reproduce and annually recruit juvenile gamefish with access to the Peshtigo River and Green Bay. In addition to the fish passage structures, we will chemically treat and manage 100 acres of existing stands of phragmites directly adjacent to Winegar Pond.	10/1/2010	12/31/2099	PROPOSED

Details: Parameter	Value/Amount	Units	Comments
% reduction in area infested by invasive species			
Area infested by invasive species			

Monitoring Stations

Station ID	Name	Comments

Assessment Units

WBIC	Segment	Local Name	Official Name
70	2	Green Bay (GI Shoreline)	Green Bay

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

Documents

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Title	Description	Author	Published	Comments
Winegar Pond Invasive Species Control in a Green Bay Wetland, GLRI proposal, Hill		Hill, Jason	2/3/2011	

Budget

Combined Budgets:

Combined WSLH:

Combined Total: $0.00

Funding

Organization	Source	Type	Amount	Start Date	End Date