General Project Information

Project ID: AEPP48216

Name: CROOKED LAKES AREA LAKES PRTCTN & REHAB DIST: Crooked Lake Management Plan

Type: Aquatic Invasives Grant

Subtype: Aquatic Invasives Education

Status: COMPLETE

Start Date: 2/15/2016 **End Date:** 6/30/2019

Purpose: The Crooked Lake Area Lakes P & R District is sponsoring a project to develop a Comprehensive Lake Management Plan

consistent with NR 198.43 for Crooked Lakes in Oconto County.

Project final deliverables include: 1)Water Quality and Watershed Analysis, 2)Fishery Data Compilation and Integration, 3)Shoreline Course Woody Habitat Assessment, 4)Aquatic/ Current Aquatic Plant Community Assessment, 5)Aquatic Invasive Aquatic Plant Surveys, 6) Completion of a WDNR \2013Approved Stakeholder Survey, 7)Public Participation in the Planning Process, 8)Clean Boats Clean Waters

Specific project activities include:

1) Water quality using WisCALM comparisons http://dnr.wi.gov/topic/surfacewater/assessments.html

2) Watershed analysis completed primarily with WiLMS and predictive equations.

3) Fishery compilation and integration within management plan

4) Conduct Point Intercept survey consistent with DNR Protocol http://www.uwsp.edu/cnr-ap/UWEXLakes/Documents/ecology/Aquatic%20Plants/PI-Protocol-2010.pdf 30

5) Professional Zebra Mussel monitoring

6) Completion of WDNR-approved social survey using DNR protocol

http://intranet.dnr.state.wi.us/int/es/science/socialmanual.htm

- 7) Clean Boat Clean Water Inspections with a minimum of 200 hours per boat landing
- 8) Shoreline and course Woody Habitat Assessment per DNR protocol.

Special Conditions:

- 1) CLMN efforts should not be duplicated and these data shall be included in the trends analysis and final reporting;
- 2) All data CBCW and CLMN shall be entered into the SWIMS database

Objective:

Comments: Grantee is CROOKED LAKES AREA LAKES PRTCTN & REHAB DIST

Outcome:

Study Design:

QA Measures:

People							
Name	Role	Status	Start Date	End Date	Organization	Comments	
Crooked Lake Area Lakes P & R	GRANT_RECIPI ENT	ACTIVE	6/1/2016		Crooked Lake Area Lakes P & R District		
Hoyman, Tim	LEAD_EQUIPM ENT	ACTIVE	6/2/2016		Onterra, LLC		
State Lab of Hygiene,	LABORATORY	ACTIVE	6/2/2016		State Lab of Hygiene		
Van Campenhout, Jayne	APPLICANT	ACTIVE	6/2/2016				

Project Statuses

Date	Reported By	Status	Comments	Comments				
Actions								
Action		Detailed Description	Start Date	End Date	Status			
Grant Awarded	d	Crooked Lake	2/15/2016	6/30/2018	APPROVED			
Grant Awarded	d	Bass Lake	2/15/2016	6/30/2018	COMPLETE			
Grant Awarded		Gilkey Lake	2/15/2016	6/30/2018	PROPOSED			

Monitoring Stations					
Station ID	Name	Comments			
453282	Bass Lake - Deep Hole				
433072	Crooked Lake - South Bay-Deep Hole				
433082	Gilkey Lake - Deep Spot				

Assessment Units						
WBIC	Segment	Local Name	Official Name			
462000	1	Crooked Lake	Crooked Lake			
462300	1	Gilkey Lake	Gilkey Lake			
462400	1	Bass Lake	Bass Lake			

Lab Account Codes			
Account Code	Description	Start Date	End Date
Forms			

Form Code	Form Name

Methods	
Method Code	Method Description

Fieldwork Ever	Fieldwork Events						
Start Date	Status	Field ID	Station ID	Station Name			
4/26/2016 11:32	COMPLETE	GCLS	433082	Gilkey Lake - Deep Spot			
4/26/2016 11:51	COMPLETE	CCLB	433072	Crooked Lake - South Bay-Deep Hole			
4/26/2016 11:51	COMPLETE	CCLS	433072	Crooked Lake - South Bay-Deep Hole			
4/26/2016 12:17	COMPLETE	BCLS	453282	Bass Lake - Deep Hole			
6/30/2016 9:50	COMPLETE	GCLS	433082	Gilkey Lake - Deep Spot			
6/30/2016 10:20	COMPLETE	CLS	433072	Crooked Lake - South Bay-Deep Hole			
6/30/2016 11:15	COMPLETE	BCLS	453282	Bass Lake - Deep Hole			
7/25/2016	COMPLETE		453282	Bass Lake - Deep Hole			
7/25/2016 13:00	COMPLETE	GCLS	433082	Gilkey Lake - Deep Spot			

7/25/2016 13:30	COMPLETE	CCLB	433072	Crooked Lake - South Bay-Deep Hole
7/25/2016 13:30	COMPLETE	CCLS	433072	Crooked Lake - South Bay-Deep Hole
7/25/2016 15:30	COMPLETE	BCLS	453282	Bass Lake - Deep Hole
8/21/2016 10:00	COMPLETE	BCLS	453282	Bass Lake - Deep Hole
8/21/2016 10:05	COMPLETE	CCLS	433072	Crooked Lake - South Bay-Deep Hole
8/21/2016 10:10	COMPLETE	GCLS	433082	Gilkey Lake - Deep Spot
8/25/2016 11:00	COMPLETE	GCLS	433082	Gilkey Lake - Deep Spot
8/25/2016 11:40	COMPLETE	BCLS	453282	Bass Lake - Deep Hole
11/7/2016 10:15	COMPLETE	GCLS	433082	Gilkey Lake - Deep Spot
11/7/2016 11:20	COMPLETE	CCLB	433072	Crooked Lake - South Bay-Deep Hole
11/7/2016 11:20	COMPLETE	CCLS	433072	Crooked Lake - South Bay-Deep Hole
11/7/2016 12:15	COMPLETE	BCLS	453282	Bass Lake - Deep Hole
2/13/2017 12:15	COMPLETE	GCLS	433082	Gilkey Lake - Deep Spot
2/13/2017 12:45	COMPLETE	BCLS	453282	Bass Lake - Deep Hole
2/13/2017 13:00	COMPLETE	CCLB	433072	Crooked Lake - South Bay-Deep Hole
2/13/2017 13:00	COMPLETE	CCLS	433072	Crooked Lake - South Bay-Deep Hole

Documents

Title	Description	Author	Published	Comments
Crooked Lake Area Lakes, Oconto County, Comprehensive Management Plan	Crooked Lake, Oconto County, is a 166-acre drainage lake with a max depth of 37 feet and a mean depth of 10 feet. Gilkey and Bass Lakes, 23 and 14 acres, are smaller lakes directly connected to Crooked Lake. At the time of this report, the most current orthophoto (aerial photograph) was from the National Agriculture Imagery Program (NAIP) collected in June 2015. Based upon heads-up digitizing the water level from that photo, the lake was determined to be the listed acres. Gilkey Lake has a max depth of 6 feet and a mean depth of 3 feet. Bass Lake has a max depth of 11 feet and a mean depth of 4 feet. All three lakes have a relatively small watershed when compared to the size of the lakes. Both Gilkey and Bass Lakes contain 24 native plant species, of which water bulrush and fern-leaf pondweed is the most common plant, respectively. Crooked Lake contains 37 native plant species, of which common waterweed is the most common plant. Two exotic plant species are known to exist in the system.		12/1/2018	
Surface Water Grant Project Lab Costs	Lab costs for the grant received by Crooked Lake Area Lakes P & R District.			

Budget

Combined Budgets: Combined WSLH:

Combined Total: \$0.00

Funding					
Organization	Source	Туре	Amount	Start Date	End Date