

Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID: DL2016_Graham
Name: Directed Lakes 2016 Graham
Type: Targeted Monitoring
Subtype:
Status: ACTIVE
Start Date: 02/15/2016
End Date: 12/31/2099
Purpose: To gather background water quality, aquatic plant and aquatic invasive species data and shoreline data for Ludden Lake (930700), Tarrant Lake (1269100), Hill Slough (12412000), Decatur Lake (879400), Mud Lake (778500) and Beckman Lake (894700). (listed by priority)
Objective: Develop or update general water quality, aquatic plant community and AIS community for these lakes. Ludden Lake and Mud Lake shorelines will also be assessed for current conditions. Ludden Lake is our priority lake because the DL project dovetails with the SW Grassland Birds Project in the upland. Mud Lake conditions assessments are of value due to proposed water level changes for Lake Koshkonong. Information for Tarrant Lake will supplement knowledge related active APM harvesting. Hill Slough is of interest due to concerns about impacts from Big Hollow Drainage Ditch. Hill's Slough (WBIC: 1241200) which is ERW water containing state endangered fish species, and is adjacent to the Lower Wisconsin River. For the same reason, a PI will be done for each basin. Water chemistry will be collected in both it's east and west basins to allow for comparison of possible impacts from ditch overflows. Decatur Lake area residents have concerns about being 303d listed and nearby proposed CAFO. Beckman Lake has little data. It was drawn down many years ago and data collected will be useful for looking at management results.
Comments: Hill Slough, Decatur, and Mud Lake will have to be done by canoe or kayak. Hill Slough will have a PI in June 2016 by Jeanne Scherer, Jean Unmuth and summer LTEs/Interns. Jean's crew will take the water samples. Mud Lake is significantly affected by summer water levels and it may be difficult to get water chemistry for all three visits if levels are low in 2016. A recon trip will be made in June and the PI may need to be done then. Water clarity was very good during a late season visit to Beckman in 2013. It is the only lake likely to be able to be assessed for AIS by snorkeling. The others are too shallow, eutrophic or turbid. Beckman had many stumps (mostly sticklike) and may be best assessed by canoe for all monitoring. Tarrant and Hill Slough were both assessed for AIS during the 5 year project, so the AIS visits will provide supplemental data using the new protocol. Decatur Lake has volunteers, in particular Dick Tripp who does CBSM monitoring for the Lower Sugar River Watershed Association Phosphorus Analysis since May 2013. He takes samples about 20' out from his shoreline property. Dick has offered to go out with use and the use of his canoe.
Outcome: 3 sets of TSI data for Mud, Tarrant, Decatur, and Beckman Lakes. Six sets of TSI data for Hill Slough. Ludden was brought up to date for TSI in 2015 and doesn't need water chemistry data; P/I survey for each lake and AIS Directed Lakes protocol survey for each lake. Shoreline assessment for Ludden Lake, Tarrant Lake, and Mud Lake.
Study Design: Per lake: 3 water chemistry sampling events from July 15 – Sept. 15 (typical WisCALM) except for Ludden; 1 plant point intercept survey; 1 AIS survey – this entails a 10 minute search with a Dnet at the boat landing and at 5 targeted sites and 1 Ekman dredge at the deep hole
QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
Cicero, Patricia	PARTICIPANT	ACTIVE	02/15/2016		Jefferson County Land and Water Conservation Dept.	Patricia, Jefferson County Land and Water Conservation Dept., will assist with Mud Lake if she has an opportunity.
Graham, Susan	COORDINATOR	ACTIVE	02/15/2016		Wisconsin DNR	
KUHNE, ALISON M	TEAM_MEMBER	ACTIVE	05/23/2016		Wisconsin DNR	
SEARLE, GREGORY S	SUPERVISOR	ACTIVE	02/15/2016		Wisconsin DNR	
Scherer, Jeanne S	COORDINATOR	COMPLETE	02/15/2016	09/19/2017	UW Extension	
Scherer, Jeanne S	PROJECT_LEAD	COMPLETE	03/04/2016	03/04/2016	UW Extension	entered in error
UNMUTH, JEAN M	COORDINATOR	COMPLETE	02/15/2016	01/15/2020	Wisconsin DNR	
WILLIAMS, REBECCA E	TEAM_MEMBER	COMPLETE	06/06/2016	08/15/2019	Wisconsin DNR	

Project Statuses

Date	Reported By	Status	Comments
------	-------------	--------	----------

Wisconsin Department of Natural Resources SWIMS Project Summary

Actions

Action	Detailed Description	Start	End Date	Status
Monitor Invasive Species	AIS survey – this entails a 10 minute search with a Dnet at the boat landing and at 5 targeted sites and 1 Ekman dredge at the deep hole	02/15/2016	12/31/2099	PROPOSED
Monitor Water Quality or Sediment	3 water chemistry sampling events from July 15 – Sept. 15 (typical WisCALM)	02/15/2016	12/31/2099	PROPOSED
Aquatic Plant Monitoring or Survey	point intercept survey	02/15/2016	12/31/2099	PROPOSED

Monitoring Stations

Station ID	Name	Comments
233117	Beckman Lake - Deep Hole	
10046874	Decatur Lake - Deep Hole	This is a corrected station for the deep hole. The original
10030015	Hill Slough - East	Deep Hole
10029030	Hill Slough - West	Deep Hole
253168	Ludden Lake - Deep Hole	
10043980	Mud Lake - Center of Lake	
114002	Tarrant Lake - Deepest Spot/Center	

Assessment Units

WBIC	Segment	Local Name	Official Name
778500	1	Mud Lake	Mud Lake
879400	1	Decatur Lake	Decatur Lake
894700	1	Beckman Lake	Beckman Lake
930700	1	Ludden Lake	Ludden Lake
1241200	1	Hill Slough East	Hill Slough
1241200	2	Hill Slough West	Hill Slough
1269100	1	Tarrant Lake	Tarrant Lake

Lab Account Codes

Account Code	Description	Start Date	End Date
WQ014	DIRECTED LAKES MONITORING	04/22/2015	12/31/2099

Forms

Form Code	Form Name
SECCHI_TEMPDO_PLI	Lake Monitoring - Secchi, Temp., D.O., pH, Conductivity

Methods

Method Code	Description
AQ_PLANT_2010	Baseline Aquatic Plants Monitoring 2010
BASELINE LAKE MONITORING METHODS - INTEGRATED SAMPLER - CHEM SAMPLES	Baseline Lake Integrated Sampler 2003
BASELINE LAKE MONITORING METHODS - LAKE PROFILES	Baseline Lake Monitoring Temperature/D.O./Conductance Profile 2003

Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name
07/12/2016	COMPLETE	HE1	10030015	Hill Slough - East
07/12/2016	COMPLETE	HW1	10029030	Hill Slough - West

Wisconsin Department of Natural Resources SWIMS Project Summary

Start Date	Status	Field ID	Station ID	Station Name
07/26/2016 14:00	COMPLETE		10046874	Decatur Lake - Deep Hole
07/26/2016 14:15	COMPLETE	DECATUR_1_2	10046874	Decatur Lake - Deep Hole
07/28/2016 09:30	COMPLETE	TARRANT_1_2	114002	Tarrant Lake - Deepest Spot/Center
07/28/2016 09:45	COMPLETE		114002	Tarrant Lake - Deepest Spot/Center
08/04/2016	COMPLETE		233117	Beckman Lake - Deep Hole
08/04/2016 10:00	COMPLETE	BECKMAN_1_2	233117	Beckman Lake - Deep Hole
08/04/2016 10:00	COMPLETE		233117	Beckman Lake - Deep Hole
08/08/2016 09:50	COMPLETE	DECATUR 2	10046874	Decatur Lake - Deep Hole
08/08/2016 09:50	COMPLETE		10046874	Decatur Lake - Deep Hole
08/11/2016 08:50	COMPLETE		114002	Tarrant Lake - Deepest Spot/Center
08/11/2016 09:10	COMPLETE	TARRANT_2_2	114002	Tarrant Lake - Deepest Spot/Center
08/15/2016	COMPLETE	HE1	10030015	Hill Slough - East
08/15/2016	COMPLETE	HW1	10029030	Hill Slough - West
08/15/2016	COMPLETE		10029030	Hill Slough - West
08/18/2016 09:00	COMPLETE	BECKMAN_2_2	233117	Beckman Lake - Deep Hole
08/18/2016 09:00	COMPLETE		233117	Beckman Lake - Deep Hole
08/22/2016 02:35	COMPLETE	DECATUR 3	10046874	Decatur Lake - Deep Hole
08/22/2016 14:35	COMPLETE		10046874	Decatur Lake - Deep Hole
08/26/2016 10:00	COMPLETE	TARRANT_3_2	114002	Tarrant Lake - Deepest Spot/Center
08/26/2016 10:00	COMPLETE		114002	Tarrant Lake - Deepest Spot/Center
08/30/2016 13:12	COMPLETE	BECKMAN_3_2	233117	Beckman Lake - Deep Hole
08/30/2016 13:12	COMPLETE		233117	Beckman Lake - Deep Hole
09/15/2016	COMPLETE	HW1	10029030	Hill Slough - West
09/15/2016 10:30	COMPLETE	HW1	10029030	Hill Slough - West
09/15/2016 13:00	COMPLETE	HE1	10030015	Hill Slough - East

Documents

Title	Description	Author	Published	Comments
Beckman Plant Survey Points Map		Jeanne Scherer	10/07/2016	Beckman Plant Survey Points Map
Decatur Lake Dam	Photo of Decatur Lake dam provided by Meredith Tripp	Jeanne Scherer	10/07/2016	
Decatur Lake Plant Survey Map 1	Decatur Lake Plant Survey Map	Jeanne Scherer	10/07/2016	
Decatur Lake Plant Survey Map 2	Decatur Lake Plant Survey Map 2	Jeanne Scherer	10/07/2016	
Decatur Lake Wetlands_new island in NW area_20160911	Wetlands_new island in NW area_20160911			Photo provided by Jaine Winter. Location is approximately 42.651453, -89.416628. Navigation is impossible near this island due to shallows. Once stuck, it is extremely difficult to push the boat out due to mucky, very soft bottom.
Decature Lake--Shallows mid-lake 9/11/2016	Decature Lake--Shallows mid-lake 9/11/2016			Photo provided by Jaine Winter who took this photo of her husband in one of the mid-lake shallows that made it impossible to fully sample the plant survey points in this part of the lake's main body.
Fall on Decatur Lake, Green County	Fall on Decatur Lake, Green County	Jeanne Scherer	10/07/2016	Photo provided by Meredith Tripp

Wisconsin Department of Natural Resources SWIMS Project Summary

Title	Description	Author	Published	Comments
Headgates for Decatur Lake Mill Race and Headsgate Park Boat Launch	Headgates for Decatur Lake Mill Race and Headsgate Park Boat Launch	Jeanne Scherer	10/07/2016	Photo provided by Jaine Winter, 9/11/2016
Hill Slough Plant Sampling Map	Hill Slough Plant Sampling Map	Jeanne Scherer	10/07/2016	
Ludden Plant Sampling Map	Ludden Plant Sampling Map	Jeanne Scherer	10/07/2016	
Mud Lake (north of Koskonong), Jefferson County Plant Survey Map	Mud Lake (north of Koskonong), Jefferson County Plant Survey Map	Jeanne	10/07/2016	
Pelicans on Decatur Lake, Green County Tarrant Plant Sampling Map	Pelicans on Decatur Lake, Green County Tarrant Plant Sampling Map	Jeanne Scherer	10/07/2016	Photo provided by Meredith Tripp
Water chemistry for directed lakes [Decatur correction to sample depths 2016]	Corrections were made to sample depths associated with some 2016 Decatur Lake samples (volunteer confused depth of sample with depth of sample point).	Jeanne Scherer, Jennifer Filbert	09/08/2016	
Wetlands_new island in NW area_20160911	Wetlands_new island in NW area_20160911	Jeanne Scherer	10/07/2016	Photo provided by Jane Winter of painted and spiny softshell turtles

Budget

Budget Description:Directed Lakes 2016 Graham

Start Date: 03/04/2016

End Date:

Code	Description	Quantity	Units	Unit Cost	Total Cost	Comments
FTE	FTE Hours		Hours	\$0.00	\$0.00	
LTE SAL	LTE Salary	284	Hours	\$14.00	\$3,976.00	adjusted unit cost to current; Two days at Hill Slough with four LTEs are likely to be needed in June for PI. By the time we go for chemistry visits, the lake may be too full of plants for PI.
LTE FR	LTE Fringe				\$982.07	
LTE IND	LTE Indirect				\$801.72	
LTE TOT	LTE Total Cost				\$5,759.79	
SUPPLY	Supplies	1		\$735.00	\$735.00	Includes Eckman Dredge (\$621) and small items-AA batteries, tinfoil, wax paper, ziplock bags, rite in the rain field books, gas for boat (\$40)
EQUIP	Equipment				\$0.00	
MILEAGE	Mileage	1650	Miles	\$0.72	\$1,188.00	3 visits/lake except Ludden (2 visits) due to now water chemistry for Ludden
MEAL	Meals	55	Meals	\$4.00	\$220.00	17 lake visits by 2 LTES plus additional days and LTEs for Hill Slough PI; likely to be lower since up to 5 trips may only be for water chem trip; adjusted to current lunch allowance
LODGE	Lodging				\$0.00	
TRAVEL	Travel Total				\$1,408.00	
BUG	Bug Contracts				\$0.00	
OTHER	Other Contracts				\$0.00	
USGS	USGS Costs				\$0.00	

Wisconsin Department of Natural Resources SWIMS Project Summary

Code	Description	Quantity	Units	Unit Cost	Total Cost	Comments
TOTAL	Total Cost (excludes SLOH)				\$7,902.79	

Test Code	Description	Test Group	# Planned	Unit Cost	Total Cost
-----------	-------------	------------	-----------	-----------	------------

Total SLOH Lab Costs: \$0.00

Total Budget: \$7,902.79

Combined Budgets: \$7,902.79

Combined SLOH: \$0.00

Combined Total: \$7,902.79

Funding

Organization	Source	Type	Amount	Start Date	End Date
--------------	--------	------	--------	------------	----------