Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID: AEPP-374-13

Name: NORTH LAKELAND DISCOVERY CENTER: Manitowish Chain of Lakes Management Planning Project, Phase 2a

Type: Aquatic Invasives Grant

Subtype: Aquatic Invasives Education

Status: COMPLETE

Start Date: 10/1/2012 **End Date:** 12/31/2016

Purpose: North Lakeland Discovery Center is sponsoring a study of Clear Lake and Fawn Lake, in Vilas County focusing on developing a Lake Management Plan (LMP) for Clear Lake and Fawn Lake, conducting AIS education and monitoring, and performing

early-season AIS monitoring on Stone Lake and Manitowish Lake.

Project activities include: 1) Stakeholder participation \2013 stakeholder survey, planning meetings (up to 2), kick-off meeting, wrap-up meeting, news release(s), and newsletter article; 2) Water quality sampling and analysis; 3) Watershed assessment and P load modeling; 4) Fisheries assessment and shoreline assessment; 5) Professional Dreissena monitoring; 6) Aquatic plant surveys (PI survey, CLP assessment, community mapping, substrate mapping); 7) Data analysis; 8) Hire AIS Coordinator and Water Education Intern; 9) Volunteer watercraft inspections and AIS monitoring; 10) CLP hand-pulling and PL bio-control program; 11) AIS educational activities; 12) Develop LMP.

Project deliverables include: 1) Stakeholder survey, news release(s), and newsletter article; 2) Water chemistry data, watershed maps, and modeling data; 3) PI and shoreland data; 4) Aquatic plant community and substrate maps and aquatic plant vouchers; 5) Entered inspection and AIS monitoring data into SWIMS; 6) Hired staff; 7) AIS educational products and events; 8) LMP.

Specific conditions for this project: 1) Draft of stakeholder survey needs to be submitted to Lakes Management Coordinator for review and approval before sending to public; 2) Draft of LMP needs Dept review and approval.

WDNR Lakes Management Coordinator will be provided with an electronic (pdf or word) copy of LMP, news release(s), newsletter article, any AIS educational products, stakeholder survey, data from PI, shoreland assessment, watershed assessment and water quality sampling, all maps from project, all GIS data, and aquatic plant vouchers.

Objective:

Outcome:

Comments: Grantee is NORTH LAKELAND DISCOVERY CENTER

Study Design:

QA Measures:

| People | | | | | | |
|--------------------------------|---------------------|----------|------------|-----------|------------------------------------|----------|
| Name | Role | Status | Start Date | End Date | Organization | Comments |
| Cibulka, Dan | TEAM_MEMBER | ACTIVE | 12/19/2013 | | Onterra, LLC | |
| Hanke, Todd | TEAM_MEMBER | ACTIVE | 12/19/2013 | | Onterra, LLC | |
| Heald, Emily | COORDINATOR | COMPLETE | 3/22/2017 | 4/11/2022 | UW Madison Division of Extension | |
| Hoyman, Tim | TEAM_MEMBER | ACTIVE | 12/19/2013 | | Onterra, LLC | |
| North Lakeland Discovery Cente | GRANT_RECIPI ENT | ACTIVE | 10/1/2012 | | North Lakeland Discovery Center | |
| Oberleitner, Brandon | TEAM_MEMBER | ACTIVE | 5/3/2017 | | North Lakeland Discovery Center | |

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| Platt, Heather | TEAM_MEMBER | ACTIVE | 1 - 1 - 1 | North Lakeland Discovery Center |
|----------------|-------------|--------|-----------|------------------------------------|
| Tesensky, John | TEAM_MEMBER | ACTIVE | 5/3/2017 | North Lakeland Discovery Center |

| Tesensky, John TEAM_MEME | | BER ACTIVE 5/3/2017 | | Discovery Co | | | | |
|-------------------------------|------------------------------|---------------------|---|--------------|-----------|------------|-----------|----------|
| Project Sta | tuses | | | | | | | |
| Date | Reported B | у | Status Comments | | | | | |
| Actions | | | | | | | | |
| Action | | | Detailed Descrip | otion | | Start Date | End Date | Status |
| Monitor Invas | sive Species | | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Social Surve | y of Residents of | or Users | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Grant Award | ed | | 2328900 Fawn Lake | | | 10/1/2012 | 6/30/2015 | COMPLETE |
| Informational | Meetings | | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Grant Award | ed | | 2329000 Clear Lake | | | 10/1/2012 | 6/30/2015 | COMPLETE |
| Map Invasive | Species | | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Develop/Dist | ribute Brochure | s/Literature | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Issue News/I | Media Release | | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Biomonitoring | Biomonitoring Toxicity Tests | | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Aquatic Plan | t Monitoring or S | Survey | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Shoreland M Inventory | onitoring, Asses | | Shoreland Monitoring, Assessment or Inventory | | 10/1/2012 | 6/30/2016 | PROPOSED | |
| Watercraft In Clean Waters | spections Clear s | n Boats, | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Watershed M | lapping or Asse | ssment | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Monitor Fish | Community | | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Monitor Wate | er Quality or Sec | diment | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Lake Manage | ement Plan Dev | elopment | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Information and Education | | | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| APM Mechanical Permit Request | | quest | | | | 10/1/2012 | 6/30/2015 | PROPOSED |
| Details: Parameter | | | Value/Amou | ınt | Units | Coi | mments | |
| | Total Acres h | | | | | | | |
| | Total pounds harvested | of plants | | | | | | |
| Develop/Dist | ribute Newslette | er | | | | 10/1/2012 | 6/30/2015 | PROPOSED |

| Total Acres harvested | | | |
|----------------------------------|-----------|-----------|----------|
| Total pounds of plants harvested | | | |
| Develop/Distribute Newsletter | 10/1/2012 | 6/30/2015 | PROPOSED |

| Monitoring Stations | | | | | |
|---------------------|------------------------------------|----------|--|--|--|
| Station ID | Name | Comments | | | |
| 10005964 | Clear Lake (Vilas Co) | | | | |
| 643415 | Clear Lake - Deep Hole (42 05e 12) | | | | |

Lab Account Codes

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| 10006408 | Fawn Lake | |
|----------|------------------------------|--|
| 643285 | Fawn Lake - Deep Hole | |
| 10006424 | Little Star Lake | |
| 643078 | Little Star Lake - Deep Hole | |

| Assessment Units | | | | | |
|------------------|---------|--------------------------------|------------------|--|--|
| WBIC | Segment | Local Name | Official Name | | |
| 2328900 | 1 | Fawn Lake T42n R05e S11 (Mud) | Fawn Lake | | |
| 2329000 | 1 | Clear Lake | Clear Lake | | |
| 2334300 | 1 | Little Star Lake T42n R05e S15 | Little Star Lake | | |

| Account Code | nt Code Description | | | | |
|-------------------|---|--|--|--|--|
| Forms | | | | | |
| Form Code | Form Name | | | | |
| AIS_PRES_ABS_0903 | _0903 Aquatic Invasives Presence/Absence Report (R 03/09) | | | | |
| SECCHI_TEMPDO | Lake Monitoring - Secchi, Temperature and D.O. | | | | |
| WATERCRAFT_2014 | Watercraft Inspection Report (Revised 4/2014) | | | | |

| Methods | |
|-------------|--------------------|
| Method Code | Method Description |

| Fieldwork Ever | Fieldwork Events | | | | | | |
|-----------------|------------------|----------|------------|------------------------------------|--|--|--|
| Start Date | Status | Field ID | Station ID | Station Name | | | |
| 6/18/2013 10:15 | COMPLETE | FLB | 643285 | Fawn Lake - Deep Hole | | | |
| 6/18/2013 10:15 | COMPLETE | FLS | 643285 | Fawn Lake - Deep Hole | | | |
| 6/18/2013 10:50 | COMPLETE | CLB | 643415 | Clear Lake - Deep Hole (42 05e 12) | | | |
| 6/18/2013 10:50 | COMPLETE | CLS | 643415 | Clear Lake - Deep Hole (42 05e 12) | | | |
| 7/24/2013 8:45 | COMPLETE | FLB | 643285 | Fawn Lake - Deep Hole | | | |
| 7/24/2013 8:45 | COMPLETE | FLS | 643285 | Fawn Lake - Deep Hole | | | |
| 7/24/2013 9:15 | COMPLETE | CLB | 643415 | Clear Lake - Deep Hole (42 05e 12) | | | |
| 7/24/2013 9:15 | COMPLETE | CLS | 643415 | Clear Lake - Deep Hole (42 05e 12) | | | |
| 8/26/2013 10:00 | COMPLETE | CLS | 643415 | Clear Lake - Deep Hole (42 05e 12) | | | |
| 8/26/2013 11:00 | COMPLETE | CLB | 643415 | Clear Lake - Deep Hole (42 05e 12) | | | |
| 8/26/2013 11:00 | COMPLETE | FLB | 643285 | Fawn Lake - Deep Hole | | | |
| 8/26/2013 11:00 | COMPLETE | FLS | 643285 | Fawn Lake - Deep Hole | | | |
| 10/10/2013 9:15 | COMPLETE | FLB | 643285 | Fawn Lake - Deep Hole | | | |
| 10/10/2013 9:15 | COMPLETE | FLS | 643285 | Fawn Lake - Deep Hole | | | |

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| 10/10/2013 9:35 | COMPLETE | CLB | 643415 | Clear Lake - Deep Hole (42 05e 12) |
|-----------------|----------|-----|--------|------------------------------------|
| 10/10/2013 9:35 | COMPLETE | CLS | 643415 | Clear Lake - Deep Hole (42 05e 12) |
| 2/19/2014 12:20 | COMPLETE | CLB | 643415 | Clear Lake - Deep Hole (42 05e 12) |
| 2/19/2014 12:20 | COMPLETE | CLS | 643415 | Clear Lake - Deep Hole (42 05e 12) |
| 2/19/2014 12:57 | COMPLETE | FLB | 643285 | Fawn Lake - Deep Hole |
| 2/19/2014 12:57 | COMPLETE | FLS | 643285 | Fawn Lake - Deep Hole |
| 5/7/2017 | COMPLETE | | 643078 | Little Star Lake - Deep Hole |

| Documents | | | | | | | |
|--|--|---|-----------|----------|--|--|--|
| Title | Description | Author | Published | Comments | | | |
| Manitowish Waters Chain of Lakes Comprehensive Management Plan - Vilas County [Draft] | Beginning in 2011, a phased approach was developed to address each lake within the chain over the course of 2011 -2016. Developing management plans for small clusters of lakes within the chain creates a manageable process that allows for sufficient attention to be applied to each lake's needs. | Brenton Butterfield, Tim Hoyman, Todd Hanke, and Eddie Heath, Onterra, LLC | 3/1/2017 | | | | |

Budget

Combined Budgets: Combined WSLH:

Combined Total: \$0.00

| Funding | | | | | |
|--------------|--------|------|--------|------------|----------|
| Organization | Source | Туре | Amount | Start Date | End Date |