

TOWN OF NEWBOLD
TWO SISTERS LAKE PROPERTY OWNERS ASSOCIATION
Oneida County, Wisconsin

LAKE MANAGEMENT GRANT
Two Sisters Lake

Aquatic Species Control Grant

Grant No. AEPP – 224 – 10

2010 Final Report
for
May 1 thru October 31, 2010

February, 2011

1. Project Scope and Deliverables

The Town of Newbold, in partnership with the Two Sisters Lake Property Owners Association (TSLPOA), sponsored this project to implement a Clean Boats/Clean Waters program on Two Sisters Lake (TSL).

Wisconsin DNR Aquatic Invasive Species (AIS) literature was handed out routinely to boaters at Young's landing and TSLPOA members at various meetings. Two TSLPOA newsletters (Spring and Fall) were mailed to our lake property owners describing this AIS program, its prevention and benefits of a total effort on TSL via lake volunteers. About 31 lake families responded in all phases of the AIS effort in 2010...most served in double - program duty.....boat and shoreline inspection.

Further, in a new educational outreach community outreach 2010 effort, the above newsletters were also sent to near-by neighbors to TSL.....an additional 175 recipients (350 total circulation). This effort is described in more detail later in this Report (pages 5 & 6).

The TSLPOA retained one volunteer coordinator (VC) and three additional paid boat inspectors as independent contractors for the AIS program. These inspectors filled-in between volunteers by handling the watercraft inspections weekdays and some weekends. The VC developed a lake volunteer schedule; plus, recorded the inspection results on DNR Form 3200-120 on the DNR website. The lake volunteers handled some of the weekends and/holidays; plus all of the shoreline inspections and are trained to handle any rapid response work.

Training: Two TSLPOA members attended DNR and TSLPOA sponsored training workshops for watercraft inspection training; plus, the Adopt-A-Shoreline/Rapid Response Program.

Donated Labor Categories

About 542 man-hours were donated by these 31 families or about 18 man hours per family in all phases of this 2010 project. The original 2010 AIS grant application was based on 566 man hours. DNR donated volunteer labor worksheet and summary sheet showing the man hours of each individual volunteer family are shown in Exhibit A. The donated labor breakdown is as follows: (man hours)

	Actual	Budgeted
• Watercraft Inspection:	173	200
• Adopt-A-Shoreline:		
- Planning/Administration	10	5
- Zebra Mussel and Crayfish Monitoring Stations	25	25
- Shoreline Inspections (two) (2)	250	250

• DNR Workshops	(1)	6	6
• Grant Administration		45	60
• Planning and Training		8	---
• Community/Education outreach		25	20
Total Donated labor - Man-hours		542	566

(1) Two volunteers for CB/CW boat inspections and one for Citizens Lake Monitoring Network.

(2) Two inspections in 2010 using 2 persons per shoreline segment @ 3 man hours each for 21 segments.....2x2x3x21 equals 250 man hours.

Paid Boat Inspection Services

These services were contracted by TSLPOA from May 1 at Young’s Landing through September 12th with scheduled lake volunteers generally on week-ends and holidays. TSLPOA AIS Chairman handled the overall planning/coordination of both boat and shoreline inspection efforts with the assistance of a shoreline inspection coordinator (lake resident) and a paid volunteer coordinator. Additional weekend boat inspections for musky fishermen were extended to October 31st using paid inspectors.

The actual paid man-hours for these services was 520 hrs versus 710 hrs as initially budgeted through October 31st.

A detailed TSLPOA tabulation of all paid and volunteer boat inspection man hours including dates worked is shown in Exhibit A.

Watercraft Inspections

The inspectors handled over 520 watercraft ending October 31st. About 235 boats (45%) were identified with TSL residents (and their guests) with the balance from outside locations. These outside locations are listed in Exhibit B.

Please note, there is a steady decrease in watercraft entering TSL from large local water bodies since 2007..... i.e. Lake Tomahawk, Rainbow Flowage and the Rhinelander Boom Lake area.

As a comparison, the total inspected watercraft entering TSL annually is as follows:

2006.....00
2007.....540
2008.....450

2009..... 480
2010.....520

There was no evidence in 2010 of any AIS species adhering to the entering watercraft including zebra mussels (or villegers).

Boat Washing Station

The landing on TSL is conducive to a boat washing station with pressure water available and a back landing area without any backflow to the lake. In 2009, it was determined that a need existed for this station based on the finding on certain boats from outside water bodies. This station was installed in 2010 under this DNR grant complete with a gas powered high pressure pump (1600 psi), pressure water source, signage, dilute bleach spray apparatus, storage cabinet and DNR NPDES permit.

The inspectors used this washing mechanism 5-6 times in 2010 to remove excessive debris and suspected microscopic zebra mussels. It is anticipated that , in 2011, the station will be used close to 20 times in the boating season. TSLPOPA will provide additional training for the paid as well as volunteer boat inspectors.....perhaps the DNR can assist in this matter!!!!

Adopt - A- Shoreline Inspection

Two Sisters Lake has about 719 acres with 8.75 miles of shoreline and is very clear and has great water quality. The Lake was divided into 21 shoreline lengths of about 2000'. A volunteer family living near each length was assigned said inspection. A shoreline instruction sheet were passed out for their use as shown in Exhibit C.

The TSL shoreline was inspected twice..... once in late June with emphasis on curly-leaf pond weed and early August for Eurasian water milfoil. No evidence was found of these AIS species. However, inspectors brought in coontail, northern milfoil, pickerel weed, elodea lake weeds. These samples were taken to DNR's Sandy Wichman of the DNR by the TSLPOA AIS Chairman for proper identification.

Each inspecting family used DNR AIS weed identification laminates to identify the AIS features compared to their native look-a-likes. These were an excellent inspecting and training tools.....many thanks to the DNR for funding them. About 250 volunteer hours were donated by lake residents to perform said shoreline inspections.

Zebra Mussels: TSLPOA assembled and installed two DNR zebra mussel monitoring stations in 2006 and every season thereafter. One was near the landing in Birch Bay, the other in Eagle Bay far from the landing.

After periodic checking, no evidence was found of Zebra mussels in 2010.

Rusty Crayfish: TSLOA assembled and installed two DNR rusty crayfish monitoring stations in 2010. One was in the west TSL near the stream outlet, the other in the east lake on the north shore. The former contain a sample of rusty crayfish and the later only had native crayfish. Sandy Wichman of the DNR assisted in the identification procedure. To date, is there is no explanation as to why one finding of rusty crayfish in one location and not the other.

Chinese Banded Snails: According to the DNR, this species is technically non-native. These snails were found in TSL several years ago by our shoreline inspectors in the east lake along the south shoreline of the west bay (Tamarack Bay) probably deposited by ducks carried in from outside locations. Recently, these species have spread somewhat along the south shore toward the channel. The DNR has no further explanations nor any remedies except physical removal from the shallow water of the south shoreline.

Rapid Response Team: Our Rapid Response Team consists of the AIS Chairman using equipment listed in Exhibit C delivering the refrigerated samples to Sandy Wickman of the Rhinelander DNR..... the system works. At the end of the summer, DNR Form 3200 -114 and 115 were sent to Sandy Wickman indicating that no AIS species were found in TSL, except for the above snails.

Scuba Diving Inspections: In 2010, we planned to use resident volunteer scuba divers to examine the lake bottom adjacent to the boat landing. However, due to difficulties in scheduling, we only secured a few snorkelers for this brief exploration....no AIS was found. In 2011, we again plan to continue this scuba diving pilot effort.....perhaps the DNR can assist in this matter!!!!

2. Community Educational Outreach

In the past, our educational efforts for AIS have centered at the TSL boat landing with individual boat launchers. This activity involved give-a-ways (i.e. fishing lures with logos), DNR literature distribution and some AIS signage. Further, we used a DNR AIS table exhibit and provide a discussion at several TSLPOA annual meetings. Therefore, based on this limited educational effort, we included in our 2010 AIS effort an educational outreach program in the Towns of Newbold and Lake Tomahawk, Oneida County as described below:

Near-by TSL Neighbors: Our outreach committee established a 175 mailing list of the adjacent TSL neighbors via South Shore, Black Lake and River Roads. This created a total list of about 350 including our lake residents. Both our Spring and Fall 2010 newsletters were mailed out to all the above. These newsletters are shown in Exhibit E.

Business/Government Community: While the above Towns are essentially rural and mostly waterbody occupied, there is still some educational activities available beyond just a TSL landing activities. Therefore, we supplied various business/government entities with DNR AIS literature in suitable counter-top racks. These entities are as follows:

Mc Naughton Pub	Lakeland Hardware	Smiley Pub
Brick Restaurant	Shamrock Bar/Restaurant	BP Service Station
LT Visitors Bureau	J & Sports Shop	Captain's Nook Sport
LT Mat Mart	LT Liquor Restaurant	LT Art Gallery
Newbold Town Hall	LT Town Hall	

None of the above hesitated and were happy to display the AIS literature.

Workshops: Members of TSLPOA sponsored AIS and CB/CW workshops at the TSLPOA annual meeting in July, 2010, the Tom Doyle Lake Association annual meeting. The Newbold and Lake Tomahawk Fire Department were postponed until 2011.

Press Releases/Promotional Ad: This advertisement was to stress AIS Infestation Alert, protect a great resource.....OUR LAKES..... a need for ACTION.....do your part!!!! However, the TSLPOA membership decided to defer this communication outreach until 2011.

Signage: TSLPOA placed two additional DNR AIS signs at the exit and entrance to the boat landing. We also approached the Town to install a trash barrel at our landing, but the Town thought a barrel was an attractive nuisance, even at TSLPOA expense.

3. Financials

The Town of Newbold, in partnership with the TSLPOA, was awarded a \$5550 DNR AIS Control Grant on April 1, 2010. TSLPOA, as the AIS project manager, paid the wages of the volunteer coordinator and three other paid boat inspectors, purchased various supplies, workshop fees and purchased equipment and accessories for the boat washing station. We did not retain any outside consultants. These transactions are recorded on DNR Grant Payment Worksheet (Form 8700-002) is shown in Exhibit D along with copies of paid invoices and cancelled checks.

A DNR Grant Payment Request (Form 8700-001) has been prepared and signed by the Newbold Town Chairman. This Form shows a final reimbursement request of about \$4600. This request form is shown in Exhibit B.

4. Lake Management Planning

Based on our success with DNR AIS Education and Prevention Program from 2006 through 2010, TSLPOA membership authorized its Board to investigate the use of Lake Management Planning (LMP) to further enhance our ongoing AIS efforts. LMP will involve gathering data in 2011 and in 2012, its analysis and reporting.

The WDNR-Rhinelanders strongly recommended a LMP for TSL before any AIS infestation takes place. The WDNR indicated lake residents will learn many new things about TSL as the LMP unfolds through an enhanced understanding of how TSL functions

ecologically, even though TSL is currently free of AIS. As a minimum, the LMP effort will increase our lake stewardship ethic. This effort also involves retaining a lake consultant.

Based on this encouragement, The TSLPOA Board retained Onterra, LLC of DePere, WI as the lake consultant for the LMP. Onterra prepared a formal DNR grant request for this LMP effort including a continuation of our previous AIS education/prevention work.

This above DNR application was submitted via the Town of Newbold on February 1, 2011.

5. Additional Discussion

- We anticipated about 40 volunteers in 2010, but secured 31 for a 78% success rate.
- Based on the use of scuba divers at several landings on Lake Minocqua, we again plan to use our lake volunteer divers in 2011 especially around the landing...looking for Eurasian water milfoil and curly-leaf pond weed...further training is required.....*perhaps DNR assistance can assist in this matter!!!!*
- While the AIS Chairman over saw the whole AIS program on TSL from year to year, selection of a watercraft inspection volunteer coordinator (manager) proved to be quite useful for this program. Also, the new shoreline inspection manager was also a valuable asset.
- The landing has a good launch area; plus, the adjacent beach which is used frequently by outside folks. We plan to routinely post some AIS educational material on cars of the beach users in 2011.
- The use of the DNR AIS weed identification card laminates worked out quite well.
- A DNR rusty crayfish trap and zebra mussel monitoring stations will again be installed in TSL in 2011 (both lakes).
- TSLPOA believes the TSL AIS Watercraft Inspection, Education and Rapid Response Project for 2006 through 2010 has been very successful helping to keep our 719 acre lake free from AIS species.
- Job Description: The DNR requested a Job Description for the Volunteer Coordinator. This is shown in Exhibit C.
- Boat washing station will again be used in 2011, but much more frequently in the order of 20 plus times throughout the season. Further inspector training is definitely required.....*perhaps DNR assistance can assist in this matter!!!!*

6. Acknowledgements

- TSLPOA wishes to thank the Town of Newbold for their complete cooperation with special thanks to Dave Kroll, Town Chairman, who acted officially on behalf of the Town and TSLPOA with the WDNR.
- Thanks to the local DNR Offices: Kevin Gauthier and Sandy Wickman in Rhinelander and Jane Malischke of the Spooner Office.
- Thanks to Gene and Linda Oestreich, full time TSL residents, for accepting the management of the shoreline inspection program. Their performance was outstanding along with the 21 individual shoreline inspectors.
- Many thanks to Kent Bradshaw, TSL resident, for his excellent effort as our Volunteer Coordinator of boat landing inspectional services. He scheduled all volunteers and purchased and installed the entire TSL Boat washing station including inspector training. Further, as a lake volunteer, he helped us with our water quality work from May through October, 2010.

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