

# **LAKE TOMAH DISTRICT**

## **AQUATIC INVASIVE SPECIES (AIS) GRANT APPLICATION**



**Prepared for Lake Tomah**

**City of Tomah**

**Monroe, County**

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## **Introduction**

### **Lake Tomah: a valued community resource**

Lake Tomah has been a valued recreational resource for the community of Tomah since the lake was created in 1939. Lake Tomah is a 251 acre lake that lies within the city limits. The lake and surrounding shoreline is used by the community residents for fishing, boating, hunting, picnicking, and many other outdoor recreational activities. Over 80 percent of the city residents completing a lake assessment survey in October 2007 indicated they visit or use the lake one or more times per year. The majority of the residents value the lake as a recreational resource.

The most recent effort to improve Lake Tomah was in 1992 and 1993 when the lake was dredged and a new dam was built. Carp an exotic, invasive species, became abundant in the lake after the dredging and are a major contributor to the poor lake conditions which exist today. The carp degrade lake habitat by preventing the growth of aquatic plants, degrade water quality and dominate the sport fishery. Excessive runoffs of nutrients from agricultural lands and urban areas which drain into Lake Tomah also have contributed to poor water quality. The degraded environmental conditions in the lake limit recreational use and the fishery. Most residents of Tomah feel the lake will worsen or remain the same if corrective actions are not taken.

## **Goal: Prevent the introduction and limit the expansion of Aquatic Invasive Species. (AIS)**

Many families and lake users enjoy the natural beauty of Lake Tomah and all the recreational opportunities it has to offer. The lake will be highly susceptible to the colonization of AIS as populations of fish, aquatic plants, and aquatic life recolonizes the lake immediately after the restoration project. It is critical to prevent AIS from colonizing the lake. An establishment of AIS would likely out compete native species and could prevent the lake restoration project from being successful.

### **Objectives**

- 1) Raise public and community awareness about AIS and Viral Hemorrhagic Septicemia (VHS) in the Lake Tomah area. The Lake Tomah Committee and the City of Tomah will place educational signs and information that clearly identify the threats of AIS and VHS and associated regulations at all three boat launches. The signage will be placed in early 2010. The Lake Committee working with Wisconsin Department of Natural Resources (WDNR) and University of Wisconsin Extension (UWEX) will develop educational materials and newspaper articles explaining the importance of preventing aquatic invasive species from colonizing the lake. The City of Tomah will use volunteer labor to achieve this objective.
- 2) Begin an AIS long-term monitoring program for Lake Tomah. The Lake Tomah Committee members and others will volunteer as citizen- lake- monitors and begin to monitor the lake for aquatic invasive species especially zebra mussels, Eurasian water milfoil and purple loosestrife. Monitoring will begin in 2010. This will be done working in partnership with DNR Lake Coordinator Buzz Sorge and UW-Extension Lake Citizen Lake Monitoring Network (CLMN) coordinator Laura Herman to receive training and necessary equipment.
- 3) Educating boaters and lake users about AIS. The Lake Tomah Committee will initiate a Clean Boat Clean Waters Program for Lake Tomah in 2010. Boats and boat trailers are the most likely way that AIS will be introduced into the lake. We will partner with UW-Extension Lakes Clean Boats Clean Water coordinator Erin Henegar and WDNR staff to schedule training workshops, acquire necessary Clean Boats Clean Waters (CBCW) kits and other (CBCW) program orientation as needed.
- 4) Create a rapid response plan for Lake Tomah. If aquatic invasive species enter the lake, the Lake Tomah Committee would work in partnership with the WDNR and consultants to develop an AIS Management Plan to control the invasive species.

**Budget Explanation:**

**Volunteer Labor:**

Reason	Hours	Labor Cost	Volunteers	Total Cost
Clean Boats Clean Waters Training	4	\$12.00/hr	4	\$192.00
Aquatic Invasive Training	3	\$12.00/hr	4	\$144.00
Native Aquatic Training	3	\$12.00/hr	4	\$144.00
Clean Boats Clean Waters 2 Boat launches	400	\$12.00/hr		\$4,800.00
Aquatic Plant Monitoring	12	\$12.00/hr	4	\$576.00
Emergent Plant Monitoring	12	\$12.00/hr	4	\$576.00
Rusty Crayfish Monitoring	12	\$12.00/hr	1	\$144.00
Install AIS Signs	24	\$12.00/hr	3	\$288.00
Install VHS Signs	30	\$12.00/hr	3	\$360.00
End Of Year Report	120	\$12.00/hr	1	\$1,440.00
			<b>Total</b>	<b>\$8,664.00</b>

**Project Cost:**

	Quantity		Cost	Volunteers	Total Cost
Clean Boats Clean Waters Kit	4		\$25	4	\$100.00
Aquatic Invasive Kit	4		\$65	4	\$260.00
Native Plant Kit	4		\$45	4	\$180.00
<b>Signs/Post</b>		<b>Size</b>			
Aquatic Invasive Signs	4	4x8	\$150		\$600.00
VHS Signs	10	2x2	\$50		\$500.00
Posts	20	4x4	\$10		\$200.00
<b>Other Cost</b>					
GPS			\$250		\$250.00
Boat Gas			\$40		\$40.00
Boat Rental			\$60		\$60.00
Computer Ink	2		\$25		\$50.00
Computer Paper	2		\$10		\$20.00
				<b>Total</b>	<b>\$2,260.00</b>
			<b>Total Project Cost</b>		<b>\$10,924.00</b>

# Survey:

An aquatic plant survey was conducted in the summer of 2008 by the WDNR. The results are listed below.

<h2>STATS</h2>	Total vegetation
<b>INDIVIDUAL SPECIES STATS:</b>	
Frequency of occurrence within vegetated areas (%)	
Frequency of occurrence at sites shallower than maximum depth of plants	
Relative Frequency (%)	
Relative Frequency (squared)	1.00
Number of sites where species found	
Average Rake Fullness (EWM, CLP only)	
#visual sightings	
present (visual or collected)	
<b>SUMMARY STATS:</b>	
Total number of points sampled	652
Total number of sites with vegetation	1
Total number of sites shallower than maximum depth of plants	71
Frequency of occurrence at sites shallower than maximum depth of plants	1.41
Simpson Diversity Index	0.00
Maximum depth of plants (ft)	2.00
Number of sites sampled using rake on Rope (R)	0
Number of sites sampled using rake on Pole (P)	651
Average number of all species per site (shallower than max depth)	0.01
Average number of all species per site (veg. sites only)	1.00
Average number of native species per site (shallower than max depth)	
Average number of native species per site (veg. sites only)	
Species Richness	1
Species Richness (including visuals)	5

## **Milestone:**

There are not many lakes in Monroe County. Lake Tomah is very important for the overall community and the local economy. It is important to educate the general public about AIS and VHS to preserve the beauty and fisheries of Lake Tomah for future generations. Prevention is the key to maintaining a healthy, stable lake. This can be accomplished through lake monitoring, education and public signage, watercraft inspection and other activities outlined in this grant proposal. The community of Tomah can work together to improve the water quality and lake environment for future generations for multiple uses important to area residents and visitors. These steps must be completed to assure the success of the Lake Tomah Management Plan.

## **Other Projects:**

In the summer of 2007, the Tomah Lake Committee, City of Tomah and interested community members initiated a partnership with the WDNR and the Monroe County Land Conservation Department to explore the opportunity to improve Lake Tomah. Through this process, the partnership developed a Lake Management Plan to accomplish this task. This was done by setting up lake management goals and objectives which are listed below.

**Goal I: Restore and improve the fishery of Lake Tomah by establishing a self-sustaining sport fishery.**

### **Objectives**

- 1) New Lake Map
- 2) Lake Drawdown
- 3) Liberalize Fishing Regulations
- 4) Carp Eradication
- 5) Sport Fishery Restoration

**Goal II: Improve water clarity and reduce algae levels by reducing nutrient concentrations in Lake Tomah.**

### **Objective**

- 1) Carp Eradication
- 2) Urban Storm Water Management
- 3) Agricultural Runoff Management

**Goal III: Protect and restore healthy stable lake and shore land habitats.**

### **Objectives**

- 1) Drawdown
- 2) Island and Shore land Buffer Restoration

**Goal IV: Provide safe and enjoyable multifaceted recreational opportunities for all lake users**

**Objective**

- 1) Boating Ordinance
- 2) Boat Launch Improvements
- 3) Handicap Pier Improvements
- 4) Supplemental Dam Inspection

For more detailed information please refer to the Lake Tomah Management Plan.



## MONROE COUNTY LAND CONSERVATION DEPARTMENT

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6/24/09

The Monroe County Land Conservation Department supports the efforts of the City of Tomah Lake Committee in preventing Aquatic Invasive Species from becoming established in a newly restored Lake Tomah. The approval of this grant application will greatly enhance the efforts by the Lake Committee and volunteers in the fight against AIS.

Sincerely,

Bryce Richardson  
Soil and Water Conservationist  
Monroe County Land Conservation Department

**Aquatic Invasive Species Grant Application  
Education, Prevention & Planning Projects  
Lake Tomah Resolution**

Resolution # \_\_\_\_\_

Resolution of City of Tomah

County of Monroe

WHEREAS Tomah Lake is an important resource used by the public for recreation and enjoyment of natural beauty; and

WHEREAS the protection of critical aquatic plant areas and reasonable lake use activities are paramount in the protection of water quality and the natural ecosystem of the lake; and

WHEREAS we are qualified to carry out the responsibilities of this protection project

IT IS, THEREFORE, RESOLVED THAT:

The City of Tomah requests the funds and assistance available from the Wisconsin Department of Natural Resources under the “Aquatic Invasive Species Grant”: and

HEREBY AUTHORIZES Allan Thompson to act on behalf of The City of Tomah to: submit an application to the State of Wisconsin for financial aid for lake protection purposes; sign documents; and take necessary action to undertake, direct and complete an approved protection project.

BE IT FURTHER RESOLVED THAT The City of Tomah will comply with state rules for the program, may perform force account work, and will meet the financial obligations under the grant.

Adopted this day \_\_\_\_\_ of \_\_\_\_\_, 2009

By a vote of: \_\_\_\_\_ in favor \_\_\_\_\_ against \_\_\_\_\_ abstain

BY: Allan Thompson Mayor  
of  
City of Tomah