

Appendix E. Mud Hen Lake User Survey

Mud Hen Lake User Survey

Section 1 – Residency

These first few questions will help us to determine who is responding to this survey and how those people would like to use Mud Hen Lake. If you have more than one property on the lake, please comment on the one property you have had the longest.

1. How is your property on Mud Hen Lake utilized? If you have more than one type of property, please report on only the property you have had the longest. *(Please select one)*

<u>19</u> Permanent residence	<u>1</u> Business
<u>35</u> Seasonal residence	<u>1</u> Underdeveloped land
<u>7</u> Weekend visits throughout the year	

Section 2 – Lake Use

The purpose of this section is to gather information on how Mud Hen Lake is used by its residents.

1. From the list below, check all activities on Mud Hen Lake that you, your family, or guests participate in.

<u>40</u> A. Fishing from shore	<u>27</u> F. Ice fishing	<u>44</u> K. Wildlife viewing
<u>59</u> B. Fishing from a boat	<u>19</u> G. Speed boating	<u>51</u> L. Canoe/Kayak/Paddle.
<u>58</u> C. Pontoon boating	<u>15</u> H. Jet Skiing	<u>40</u> M. Water skiing/Tubing
<u>60</u> D. Rest/Relaxation	<u>3</u> I. Wild rice harvest	<u>2</u> N. Other (please list)
<u>56</u> E. Swimming/Wading	<u>3</u> J. Sailing	<u>Snowmobiling, skiing</u>

2. Which 3 activities from the above list do you or members of your family or guests participate in most often? ***(Write the letters of the corresponding activities in the spaces below)***

I (We) participate in C most often, E second most often, and D third most often.

During the open-water (no ice) season, how frequently do you use the lake for any of the activities listed in Question 1, this section?

<u>14</u> Daily	<u>6</u> Once or twice per month
<u>37</u> Several times per week	<u>1</u> Once or twice per open-water season
<u>10</u> 3 or 4 times per month	

4. What type(s) of watercraft do you own, rent, or use on Mud Hen Lake? **(Check all that apply. If you do not use any watercraft on Mud Hen Lake, please check the last box.)**

<u>27</u> Motorized boat (0-50 hp)	<u>54</u> Canoe or Kayak
<u>32</u> Motorized boat (greater than 50 hp)	<u>3</u> Sailboat
<u>20</u> Paddle boat	<u>1</u> Other - Row Boat, floating waterslide
<u>53</u> Pontoon boat	<u>0</u> I do not own, rent, or use a boat or other
<u>16</u> Personal watercraft – PWC (jet ski)	watercraft on Mud Hen Lake

Section 3 – Lake Stewardship

This section of the survey will provide information about the lake stewardship practices of lake property owners.

1. Which of the following do you consider the most desirable shoreline for your property? **(Please check one)**

<u>8</u> Mowed lawn at shoreline (no plantings)	<u>22</u> Managed natural vegetation at shoreline
<u>18</u> Landscaped shoreline (ex., planted flowers, shrubs, trees)	<u>7</u> Unmanaged natural vegetation at shoreline
<u>10</u> Mowed lawn to sand beach	

2. Which, if any, of the following water quality/landscaping practices do you have some knowledge of? **(Check all that apply)**

<u>19</u> Rain garden	<u>26</u> Natural shoreline restoration
<u>34</u> Shoreline buffers	<u>22</u> Septic system upgrade
<u>19</u> Native prairie restoration	<u>28</u> Native flower/tree planting
<u>50</u> Benefits of not fertilizing	<u>0</u> Other (please describe) _____
<u>37</u> Using zero phosphorus fertilizers	_____
<u>16</u> Diversion of surface water runoff away from the lake	<u>3</u> Not familiar with any of these (skip to Question 4)

3. Which, if any, of the following water quality/landscaping practices have been installed or do you practice on your property on Mud Hen Lake? **(Check all that apply)**

<u>1</u> Rain garden	<u>11</u> Natural shoreline restoration
<u>17</u> Shoreline buffers	<u>14</u> Septic system upgrade
<u>2</u> Native prairie restoration	<u>15</u> Native flower/tree planting
<u>44</u> Benefits of not fertilizing	<u>1</u> Other (please describe) rip rap _____
<u>22</u> Using zero phosphorus fertilizers	_____
<u>7</u> Diversion of surface water runoff away from the lake	<u>0</u> None of the above water quality/landscaping practices

4. What type of septic system do you have on your property? **(Select all that apply)**

<u>7</u> Mound system	<u>46</u> Holding tank
<u>1</u> At-grade system	<u>1</u> Lift pump system
<u>8</u> Convention system	<u>3</u> None (<i>skip to Section 4</i>)
<u> </u> Other (<i>please list</i>)	

5. How many years ago was your septic system last inspected? (*Please provide your best recall*)

<u>52</u> 1-5 years	<u>5</u> 6-10 years	<u>0</u> 11+ years	<u>0</u> Never	<u>6</u> Not Sure
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6. When was your septic system last 'pumped' or 'sewered'? (*Please provide your best recall*)

<u>56</u> 1-5 years	<u>0</u> 6-10 years	<u>0</u> 11+ years	<u>0</u> Never	<u>6</u> Not Sure
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Section 4 – Lake Issues

The questions in this section pertain to various possible issues in Mud Hen Lake including water quality, lake level, and aquatic plant growth.

1. Below are numerous issues that may negatively affect your use of Mud Hen Lake. From the list below, please mark all of the issues that are of concern to you.

<u>16</u> A. Poor quality fishing	<u>6</u> J. Too much shoreline lighting
<u>7</u> B. Too much public use	<u>6</u> K. Too much wild rice
<u>0</u> C. Not enough weed growth	<u>6</u> L. Not enough wild rice
<u>15</u> D. Poorly maintained boat access	<u>45</u> M. Too much weed growth (not including algae)
<u>54</u> E. Low water level in the lake	<u>24</u> N. Introduction of undesirable aquatic plants and animals
<u>4</u> F. High water level in the lake	<u>7</u> O. Nuisance wildlife:
<u>5</u> G. Overdevelopment of the shoreline	<u>1</u> P. Other: no-wake
<u>14</u> H. Foul or offensive odor	<u>5</u> Q. Not concerned about any of these issues (<i>Skip to</i>
<u>11</u> I. "Icky" or "green" water	<i>Question 3</i>)

2. Which **three** issues from the above list are of the most concern to you? (*Write the letters of the corresponding issues in the spaces below*)

I am most concerned about issues E, M, and N.

3. In your opinion, the water quality in the summer (June – September) in Mud Hen Lake is:

<u>14</u> Excellent	<u>38</u> Good	<u>12</u> Fair	<u>1</u> Poor	<u>1</u> Very Poor	<u>1</u> I don't know
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4. Please check the answer that best completes the following sentence: "In my opinion, the overall level of the lake, given fluctuation with rainfall, seems to be"

<u>0</u> Too high	<u>10</u> Just Right	<u>55</u> Too low	<u>1</u> I don't know
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5. How often, if ever has low water prevented you from using Mud Hen Lake?

<u>46</u> Yes	<u>20</u> No	<u>0</u> I don't use the lake
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6. Aquatic plants (rooted and floating) are an important part of any healthy lake system. In the time that you have owned the property indicated in Section 1, Question 1, would you say the amount of visible aquatic plant growth in the lake, **excluding algae**, has:

<u>43</u> Increased	<u>14</u> Decreased	<u>1</u> Stayed the same	<u>9</u> Unsure
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7. Aquatic plant growth varies throughout the open water season. Which month(s) of the season do you consider aquatic plant growth, excluding algae, to be problematic in Mud Hen Lake? (**Check all that apply**)

<u>3</u> May	<u>15</u> June	<u>36</u> July	<u>10</u> It is never a problem
<u>41</u> August	<u>20</u> September	<u>10</u> October	<u>11</u> I don't know

8. Do you think you would recognize Wild Rice in the lake if you saw it?

<u>24</u> definitely yes	<u>20</u> probably yes	<u>12</u> unsure	<u>7</u> probably not	<u>4</u> definitely not
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9. Please check all answers that best complete the following sentence: "Wild rice..."

<u>34</u> is a valuable resource in the lake	<u>4</u> has no resource value
<u>34</u> is a state protected plant species	<u>2</u> is not a state protected species
<u>7</u> can legally be removed from the lake	<u>15</u> cannot be legally removed from the lake
<u>3</u> is a nuisance weed	<u>0</u> fill in blank:

SECTION 5 – Aquatic Invasive Species

This section of the survey seeks to determine how much lake residents know about aquatic invasive species. Aquatic invasive species are plants and animals that are foreign to Mud Hen Lake and do not belong there.

Curly-leaf pondweed (CLP)

Curly-leaf pondweed has not been documented in Mud Hen Lake but could be a threat in the future. CLP can create nuisance levels of plant growth and negatively impact water quality in a lake.

1. How much do you know about CLP and the problems it can cause in a lake?

<u>1</u> a lot	<u>22</u> some	<u>27</u> very little	<u>16</u> just what I read here
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2. Do you think you would recognize CLP in the lake if you saw it?

<u>5</u> Definitely yes	<u>15</u> Probably yes	<u>15</u> Unsure	<u>20</u> Probably not	<u>10</u> Definitely not
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Eurasian Watermilfoil (EWM)

Eurasian watermilfoil has not been documented in Mud Hen Lake but could be a threat in the future. EWM can form dense beds of vegetation that interfere with many lake uses.

3. Prior to reading the above statement, were you aware of the potential problems EWM can cause?

<u>8</u> a lot	<u>29</u> some	<u>22</u> very little	<u>7</u> just what I read here
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4. Do you think you would recognize EWM in the lake if you saw it?

<u>6</u> Definitely yes	<u>17</u> Probably yes	<u>23</u> Unsure	<u>16</u> Probably not	<u>4</u> Definitely not
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Purple Loosestrife

Purple loosestrife, an invasive shoreline/wetland plant species, has been documented in Mud Hen Lake. Purple loosestrife can take over shorelines and wetlands displacing more beneficial native plants.

5. Prior to reading the above statement, were you aware of the potential problems purple loosestrife can cause?

<u>13</u> a lot	<u>30</u> some	<u>16</u> very little	<u>7</u> just what I read here
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6. Do you think you would recognize purple loosestrife in the lake if you saw it?

<u>22</u> Definitely yes	<u>24</u> Probably yes	<u>7</u> Unsure	<u>9</u> Probably not	<u>4</u> Definitely not
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Other Aquatic Invasive Species

7. Below is a list of additional aquatic invasive species. Please check all of those that you have heard of before.

<u>12</u> Rusty crayfish	<u>7</u> Spiny waterflea	<u>7</u> Hydrilla
<u>60</u> Zebra mussels	<u>1</u> Banded mystery snail	<u>8</u> Phragmites (giant reed grass)
<u>14</u> Chinese mystery snail	<u>5</u> Freshwater jellyfish	<u>6</u> Japanese knotweed
<u>0</u> New Zealand mudsnail	<u>57</u> Carp	<u>0</u> I have not heard of these AIS

8. In order to gauge *potential* interest, would you be willing to take part in a training session to help you identify aquatic invasive species in the lake?

<u>13</u> Definitely yes	<u>20</u> Probably yes	<u>20</u> Unsure	<u>9</u> Probably not	<u>3</u> Definitely not
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SECTION 6 – Aquatic Plant Management

Currently aquatic plant growth in Mud Hen Lake is not managed. Algae growth is also not managed. A benefit of aquatic plant management strategies is that they can also help reduce algae growth. Aquatic plants in a lake can be managed in many different ways. Sometimes no aquatic plant management may be the best option.

1. Do you think that management of aquatic plants in Mud Hen Lake is necessary?

<u>25</u> definitely yes	<u>23</u> probably yes	<u>14</u> unsure	<u>2</u> probably not	<u>1</u> definitely not
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2. Which type(s) of aquatic plants do you think should be managed on Mud Hen Lake? (***Check all that apply***)

<u>43</u> Grow below the water's surface	<u>34</u> Algae on the water's surface
<u>40</u> Stick out of the water	<u>23</u> Grow on the shoreline, out of the water
<u>2</u> Float on the water's surface (non-algae)	<u>2</u> Other:

Common Aquatic Plant Management Methods

If plant management is recommended for Mud Hen Lake, what methods might you support? Please assume that the following management methods are safe and legal, and would only be performed by professionals and only be used if approved by the State of Wisconsin. Total removal or eradication of aquatic plants is not possible.

3. Please mark whether you would support, oppose, or need more information about the use of these aquatic plant management methods on Mud Hen Lake.

Small-scale (less than 10 acres) mechanical harvesting:

<u>31</u> Support	<u>2</u> Oppose	<u>22</u> Need more information
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Large-scale (10 acres or greater) mechanical harvesting:

<u>28</u> Support	<u>3</u> Oppose	<u>25</u> Need more information
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Hand-pulling and raking in shallow waters:

<u>51</u> Support	<u>0</u> Oppose	<u>6</u> Need more information
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Small-scale (less than 10 acres) of chemical herbicide application:

<u>23</u> Support	<u>8</u> Oppose	<u>24</u> Need more information
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Large-scale (10 acres or greater) of chemical herbicide application:

<u>21</u> Support	<u>10</u> Oppose	<u>27</u> Need more information
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Biological control (using one live species to control another):

<u>28</u> Support	<u>8</u> Oppose	<u>28</u> Need more information
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No management:

<u>3</u> Support	<u>30</u> Oppose	<u>24</u> Need more information
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4. Have you made any attempts to remove or control aquatic plants in Mud Hen Lake by your shore property? **(Check one)**

<u>12</u> No (Skip to Section 7)	<u>48</u> Yes, I did it myself
<u>1</u> Yes, I hired someone	<u>0</u> Yes, I did some myself and I hired someone

5. What have you done to remove aquatic plants from the lake by your property? **(Check all that apply)**

<u>3</u> Hire someone to hand-pull or rake	<u>54</u> Self-hand pull or rake
<u>0</u> Hire someone to apply chemical herbicide	<u>4</u> Self-application of chemical herbicide
<u>1</u> Mechanical plant removal with boat and motor or other apparatus	<u>0</u> Other

SECTION 7 – Community Support

Local, county, state, and federal resources will be sought in addition to Lake Association funds to implement management recommendations for Mud Hen Lake. Donations of volunteer time, services, materials, and equipment can be used as match funding for many grant programs reducing the overall financial burden to the Lake Association. The following questions will help to determine your willingness to support future projects involving the implementation of aquatic plant and lake management recommendations.

1. The following are activities that lake residents could participate in. ***Please check all those activities you might be willing to volunteer your time if additional assistance is needed. This is not a commitment but rather a measure of possible assistance if needed.***

<u>11</u> Watercraft inspection at the boat landings such as Clean Boats Clean Waters
<u>23</u> On the water monitoring for aquatic invasive species
<u>18</u> Shore land monitoring for aquatic invasive species
<u>7</u> Raising beetles for purple loosestrife control
<u>14</u> Native aquatic plant monitoring and identification
<u>19</u> Water quality monitoring
<u>26</u> Wildlife monitoring (ex. frogs, turtles, loons, other waterfowl, mussels & clams)
<u>19</u> I am not interested in volunteering any time (skip to question 3)

2. How much time would you be willing to contribute to support any of the activities in Question 1 above?

<u>20</u> A few hours a year	<u>20</u> A few days a year	<u>2</u> Longer periods of time
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3. How satisfied are you with the following aspects of Lake Association activity? If you are unfamiliar with an activity, please check the last column.

	Very Satisfied	Somewhat Satisfied	Unsure	Somewhat Dissatisfied	Very Dissatisfied
Communication with community	17	19	17	3	2
Meeting Frequency	24	13	21	2	0
Meeting atmosphere (parliamentary procedure)	12	13	28	4	2
Executing Lake Association business	12	14	31	4	1
Promoting cooperation to achieve goals and objectives	10	12	27	9	1
Management of Association finances	17	10	29	4	0
Listening to property owners' needs and concerns	12	16	25	6	2

4. When information from Mud Hen Lake Property Owners Association is available, how would you most prefer to be contacted? **(Please check one)**

<u>24</u> Mail	<u>41</u> Email	<u>7</u> Phone	<u>1</u> In person	<u>1</u> I do not want to be contacted
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Written Comments from landowners how sent survey in:

- Shallow water; high plant density
- lake needs to be at a respectable level -- too low
- do not want wild rice
- water level/inconsistent shoreline allowance
- low water levels/shady people at beach
- meetings too early
- restrictions on vrbos to minimize uncontrolled lake usage
- improve lake levels
- did not know association existed
- water quality/septic system inspections
- septic systems should be outlawed
- wonderful lake, don't want human manipulation to ruin it
- water level; unsure how membership
- low water levels seem to impact weed or chiggers. It seems to come sooner and worse than in years past.
- waterlevels
- lake level and its affects on the wildlife, environment and residents
- aquathruster
- boat landing deeper; eastside of lake low
- weeds float on top of water surface/water levels low
- concerned with low water level and categorizing land around lake as "wetlands", making lots unbuildable