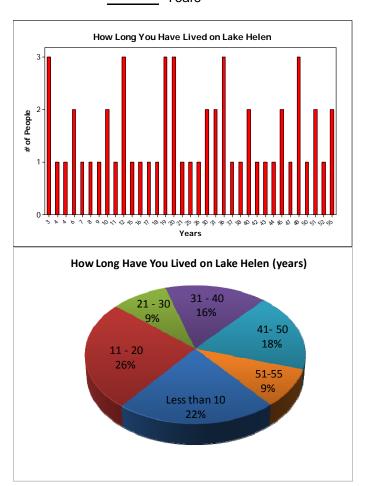
2008CITIZEN SURVEY OF HELEN LAKE WATERSHED

ABOUT YOU

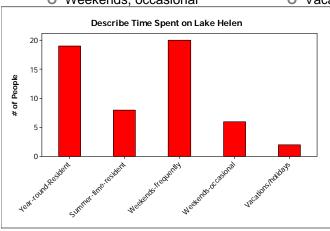
1. How long have you lived in the Lake Helen Watershed or visited / recreated on Lake Helen?

_____ Years



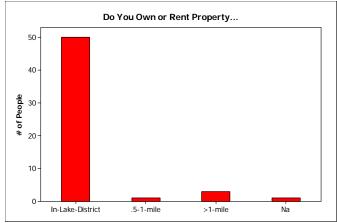


- O Year-round resident
- Weekends, occasional
- O Summer-time resident
- Vacations/holidays
- O Weekends, frequently



3. Do you own or rent property... (See map on letter for distances)

- O In the Lake District
- O 1/2 mile to 1 mile of the lake
- O Within 1/2 mile of the lake
- O More than 1 mile from the lake



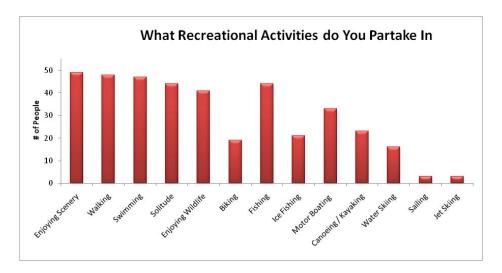
RECREATION

4. What activities do you enjoy partaking in on / near Lake Helen?

- O Fishing
- O Canoeing / kayaking
- Swimming
- Enjoying scenery
- O Solitude

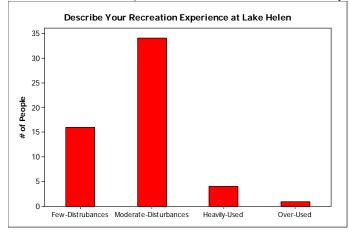
- O Ice fishing
- Motor boating
- Enjoying wildlife
- O Walking

- Water skiing
- O Biking
- O Jet skiing
- O Sailing

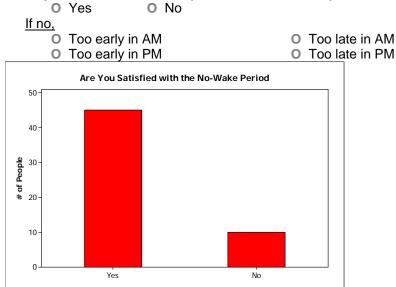


5. Which statement best describes your recreation/boating experience at the lake?

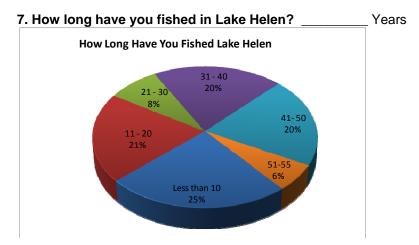
- O Few disturbances (Rarely see and hear another person)
- O Moderate disturbances (Sometimes the noise and activities of others disturb me)
- O Heavily used (Often the noise and activities of others disturb me)
- Over used (I have to regularly plan around the noise and activities of others)
- O Unusable (There is so much noise and activity that I normally can't enjoy the lake)



6. Are you satisfied with the 4pm to 10am No-Wake period?

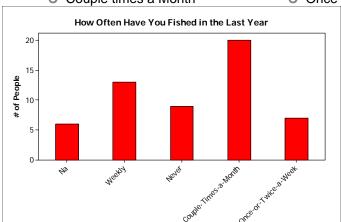


FISHING



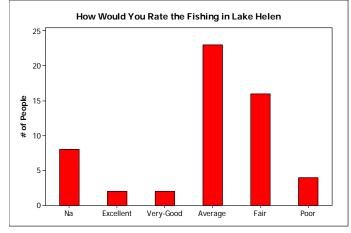
8. In the last year how often have you fished on Lake Helen?

- DailyCouple times a Month
- WeeklyOnce or Twice a Year



9. How would you rate the fishing in the lake?

- O Excellent (I catch fish every time I go out and they are often big enough to keep)
- O Very Good (I catch fish almost every time I go out and most are big enough to keep)
- O Average (I catch fish sometimes and some of them are big enough to keep)
- O Fair (I sometimes catch fish and most are too small to keep)
- O Poor (I rarely catch fish and when I do they are often too small to keep)

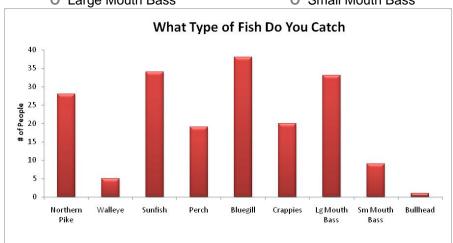


10. What type of Fish do you catch?

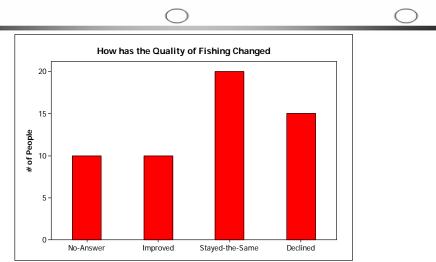
- Northern PikePerch
- O Large Mouth Bass

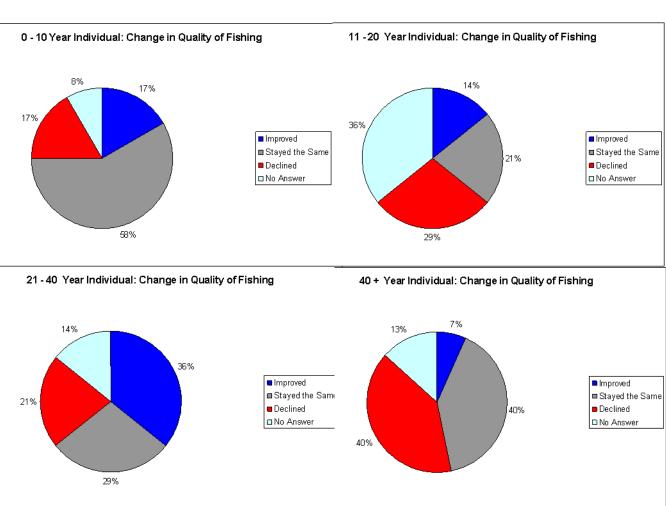
- O Walleye
- O Bluegill
- O Small Mouth Bass
- SunfishCrappies

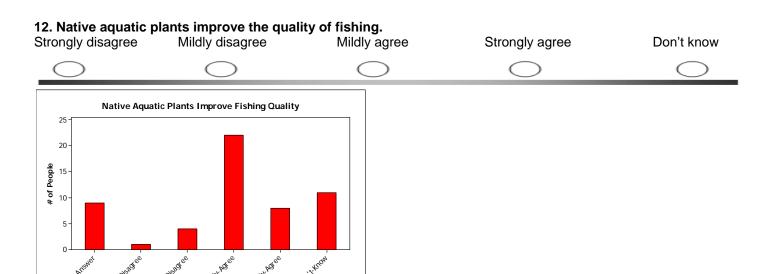
O Never



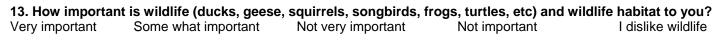
11. In general, how has the quality of the fishing on Lake Helen changed since you began? Improved Stayed the same Declined

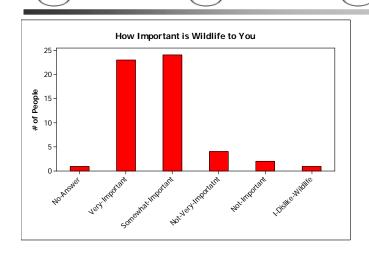






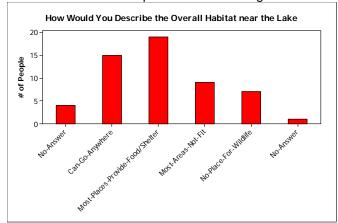
WILDLIFE



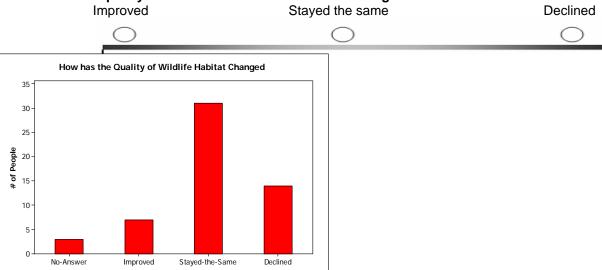


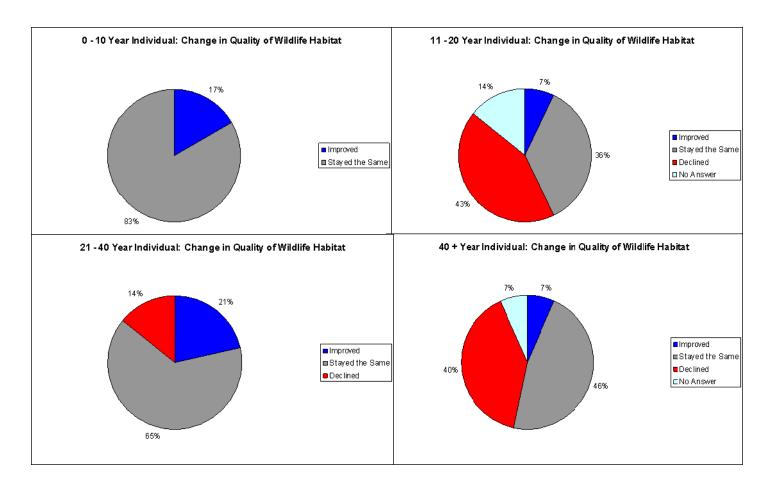
14. How would you describe the overall wildlife habitat near / in the lake?

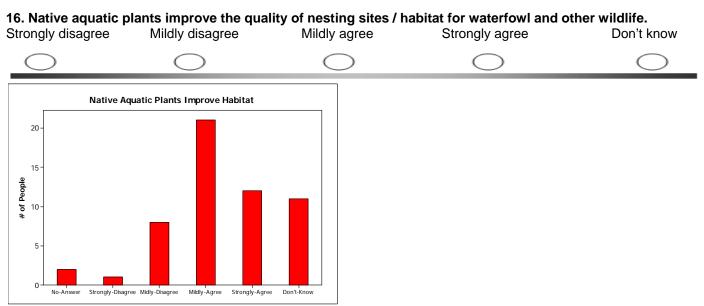
- O Wildlife can go anywhere to find food and shelter
- O There are a few places that wildlife can't go, but most places provide food and shelter
- O There are parts of the area where wildlife can't find food and shelter
- O Most areas are not fit to provide food and shelter for wildlife
- O There is no place for wildlife to go







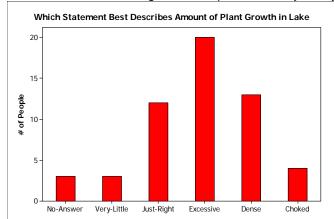




AQUATIC PLANTS

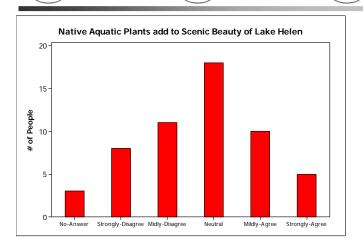
17. In your opinion, which statement best describes the amount of aquatic plant growth in Lake Helen?

- O Very little, less than optimum for fish and wildlife
- O Just the right amount for fish and wildlife
- O Excessive, more than optimum for fish and wildlife
- O Dense growth, the plants limit my use of much of the lake and are unattractive
- O Choked with growth, the plants ruin my ability to enjoy the lake

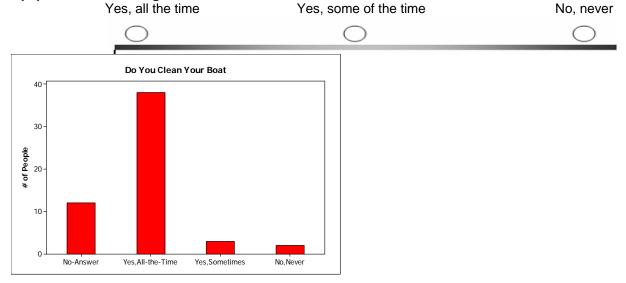


18. Native aquatic plants add to the scenic beauty of Lake Helen.

Strongly disagree Mildly disagree Neutral Mildly agree Strongly agree



19. To help prevent the spread of exotic plants into Lake Helen, do you clean your boat, trailer, and fishing equipment before using it in Lake Helen after it has been used in another lake?



WATER QUALITY

20. Which of the following do you think are Lake Helen's major water quality problem(s)? (check all that apply)

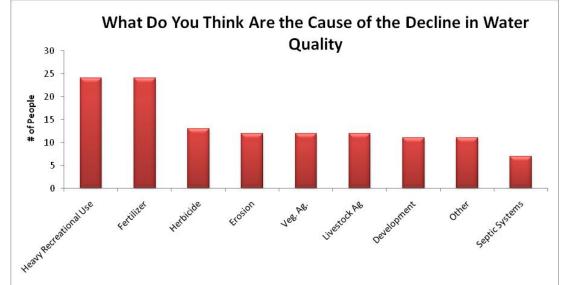
		,	O Litter		0	Water Clarity
Smell/Odors			O Aquatic	Plants	0	Other
What	t Do You 1	Think are the	e Major P	roblems with	Lake	
		He	elen			
Aquatic Plants	Algae	Other	Litter	Water Clarity	Smell	
		What Do You	What Do You Think are the	What Do You Think are the Major P Helen	What Do You Think are the Major Problems with Helen	What Do You Think are the Major Problems with Lake Helen

21. In your opinion, what are the top three causes of possible decline of water quality.

- O Development
- O Heavy Recreational Use
- O Livestock Agriculture
- O Fertilizer Use
- O Septic Systems
- Vegetable Agriculture
- O Herbicide/Pesticide use

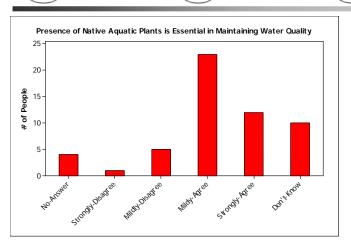
O Soil Erosion

O Other_

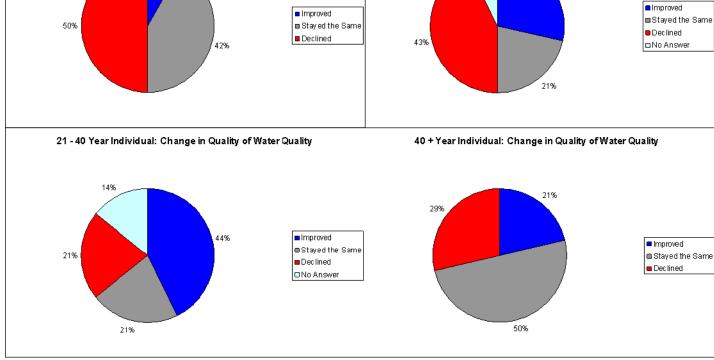


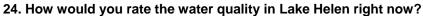
22. The presence of native aquatic plants is essential to maintaining the water quality and water clarity of Lake Helen.

Strongly disagree Mildly disagree Mildly agree Strongly agree Don't know

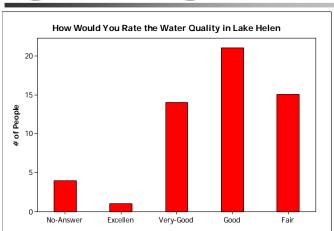


23. In general, since you have lived near Lake Helen, do you feel that the lake water quality has...? Improved Stayed the same Declined Change in Water Quality 20 15 # of People 10 No-Answer Improved Stayed-the-Same Declined 0 - 10 Year Individual: Change in Quality of Water Quality 11 - 20 Year Individual: Change in Quality of Water Quality 8% ■ Improved ■ Improved ■ Stayled the Same 50% Declined ■ Declined 42% □No Answer 21% 21 - 40 Year Individual: Change in Quality of Water Quality 40 + Year Individual: Change in Quality of Water Quality



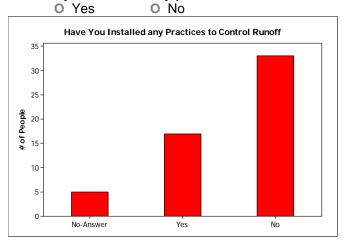




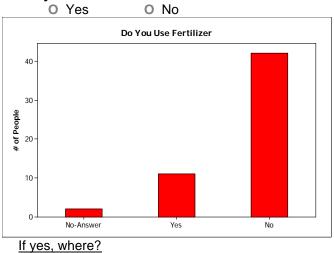


LAND MANAGEMENT

25. Have you installed any practices to control stormwater runoff? (rain gardens, grass swales, buffer strips)?



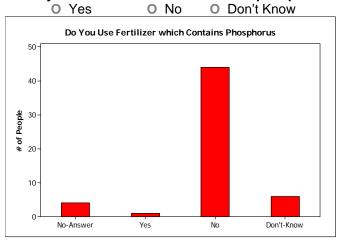
26. Do you use fertilizer?



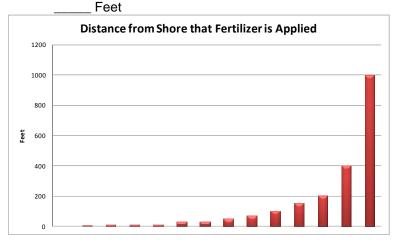
O Agricultural Fields

O Garden O Lawn

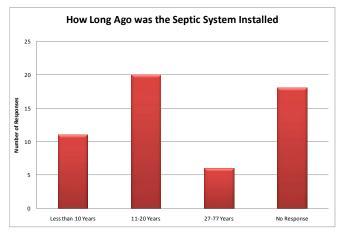
27. Do you use fertilizer which contains phosphorus?

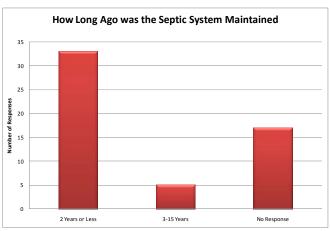


28. If you are a shoreline resident, what is the closest distance from the lake to the area that is fertilized?



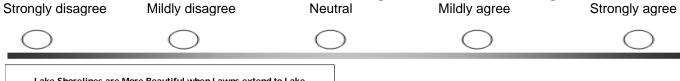
29. Do you know when your septic system was... Installed ____ Year/s ago Last Maintained ____ Year/s ago

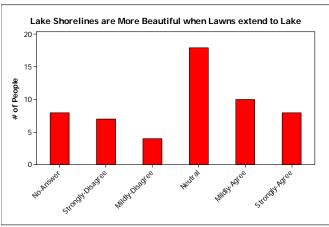




SHORELINE/LAKE DISTRICT RESIDENTS

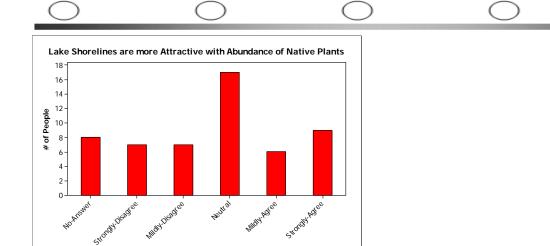
30. Lake shorelines are more beautiful when lawns are turf grass and mowed to the edge.





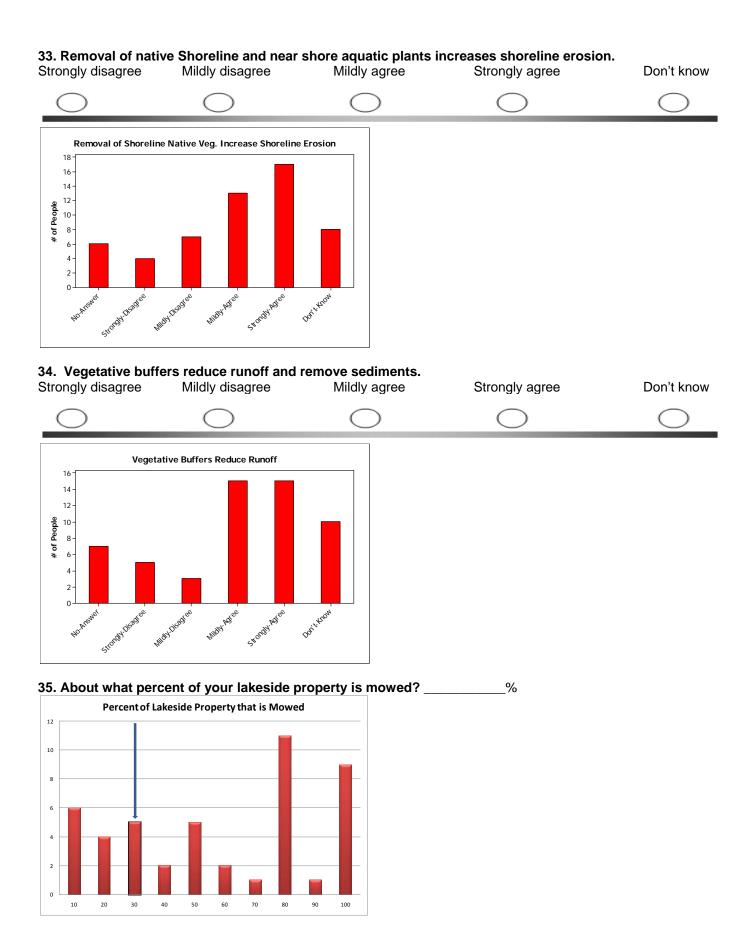
31. Lake shorelines are more attractive when they have an abundance of native plants.

Strongly disagree Mildly disagree Neutral Mildly agree Strongly agree

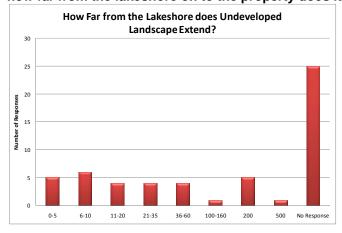


- 32. What best describes the location where the majority of your property meets the lake?
 - O Undeveloped natural landscape
- O Lawn
- O Rock riprap

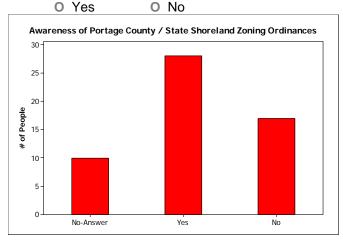
- O Landscaped trees and shrubs
- Retaining wall



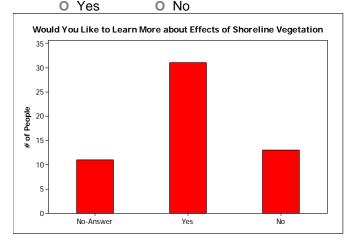
36. If you have undeveloped natural landscape or a combination of un-mowed vegetation with trees and shrubs, how far from the lakeshore on to the property does it extend? ______ Feet



37. Are you aware of the Portage County / State shoreland zoning ordinances?

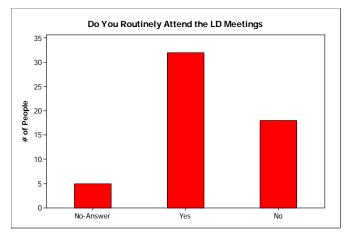


38. Would you like to learn more about the effects of shoreline vegetation and how it can improve water quality?



39. Do you routinely attend the Lake District Meetings?

O Yes If no, why not?



40. Would you be interested in being a Lake District Commissioner or a Member of the Lake Health Committee? If so, Please contact one of the Lake District Commissioners

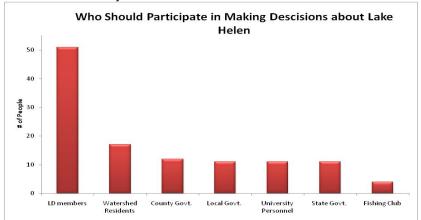
YOUR OPINION

41. Who should participate in making decisions about Helen Lake? (CHECK ALL THAT APPLY)

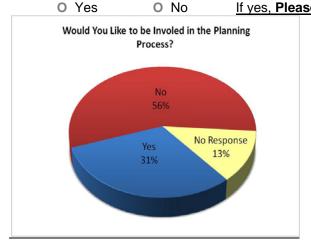
- O Lake District Members O Local Government
- O Watershed Residents County Government
- O State Government

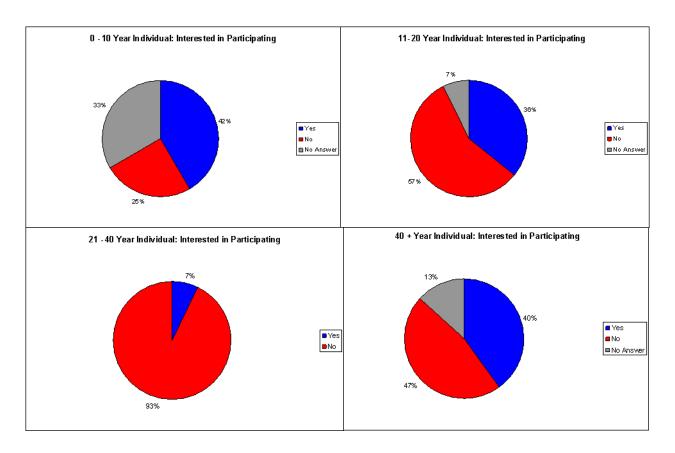
- University Personnel

O Fishing Club



42. Would you be interested in participating in the development of a management plan for Lake Helen? If yes, Please contact one of the Lake District Commissioners





43. In your opinion, what should be done to restore, maintain, or improve Lake Helen?

Determine the source of the deterioration problem and address it. The scientific source not the opinion source. Everyone take responsibility for changes we can make in our practices to improve water quality for fishing and swimming. West end of lake will fill in again, it's started again due to the east winds on the lake.

inforce boat cleaning. Remove drainage ditch accesses. Remove substantial overgrowth of aquatic life. Stock lake with fish

Get rid of bright large yard lights and some weeds. Enfore 4:00pm no wake. Close park at 10 pm, not 11pm no opinion weed cutting

needs to be cleaned more often

Address the firing of fireworks_ on nights other than 4th of july; also, firing off the fireworks after 10:00 pm. Residents need to be aware that other residents do not enjoy their display___ waking up children+elderly+ making it difficult for working folks. Need for awareness of laws governing distance of speeding boats from piers swimmers, and shorelines control weeds

I think the lake district is doing a fine job!

no comment

I need more information and the tools to make an opinion on what to do to restore and maintain , or improve lake helen. We have dredged the lake and that has improved it a lot.

Remove some of the vegetation from lake, add fish cribs, and a no jet ski law

Remove the dam, ust as the original lake consultant advised years ago. Let the lake decisions be made by professionals not the lake property owners, they are not qualified!!

prevent lawn fertilization. Allow harvesting of smaller northern pike slot size limit on northern pike

too many boats and jet skiis come to lake. But someone will get hurt while swimming in lake. The lake is over grown in weeds. No clear spots for the fish. Also people use ditch along lake helen rd from lake tro hwy 49 as garbage dump. Tires, bottles, cans, other garbage people have in there cars

Lake Helen Citizen Survey Results, UW-Stevens Point - May 2008

Cut some of the bad weeds in the lake!

Dreg

since we currently do not live there, we could not make suggestions

don't know

add some large fish to eat all the little fish and the little fish will begin to grow

need more fish

Ban all motors, dredge lake helen to provide deeper pocket so fish can survive winter, block off dam, too much runs out of south side of lake, provide natural plants to help fish survive.

remove or lower size limit on northern pike, add fish cribs, make sure boats are cleaned before entering lake at boat landing.

Reduce the farm runoff. Eliminate drainage culvert into lake. Stop farmers from plowing ditches.

Investigate water table decline, why, how, when. Stock fish. Control vegetation growth.

Slow down the # of residents built around the lake. It is not that big to hold everyone. Sewer development would be great. This could rid ground septic seepage. Keep the water level up. Then it rains we let the water out over the dam. When it is dry the lake drops in level

consider dredging again.

Have a few Lake pot lucks to get people to better know their neighbors. This to lead to more cooperation of people around the lake and have a time to socially discuss any concerns.

Restrict commercial companies from taking large amounts of water form lake helen-treating the lake like a commercial reservoir for their building needs. Are commercial companies also required to clean their equipment prior to putting the hoses in the lake-similiar to our boating clensing requirements.

if lake weeds are dense I would like to see them controlled somehow.

slow the growth of some of the weeds that overtake the lake in the summer.

I don't know. Work with the Lake District

1. Improve lake water quality, so fish can thrive. 2. Stock the lake with fish. Take action to reduce the weeds, within 75' - 100' from shore. Maybe a desire of some property owners but not all. This will improve swimming availability. take dam out

lake is too small and too shallow for motorized water-skiing, jet skis, etc. lots of aquatic plants get torn up and the water gets murky and churned-up. go to no wake status, require deep shoreline buffers, un-mowed except for a narrow path to the shore, ban leaf blowers, etc. for excessive noise.

1. Control run off into lake (through ditches on north & east side of lake. 2. Reduce speed or size of motors permitted on lake. Large motor wakes erode shoreline. When motors run in shallow water and agitate the muck and marl, these substances are redeposited in other parts of the lake causing further wee growth. Even public beach is becoming covered with muck and marl which has never been an issue before. After a week end of heavy use, shoreline is littered with chopped weeds and deadfish and turtle.



University of Wisconsin-Stevens Point College of Natural Resources 1900 Franklin St. · Stevens Point, WI USA 54481

Lake Helen 2008 Resident Survey Summary E. Harder and N. Turyk

A total of 110 surveys were sent to residents of the Lake Helen Watershed; 50% (55) of the surveys were returned. Most, but not every question was answered on each survey. The majority of the surveys returned (91%) came from individuals in the Lake District. The length of time respondents have lived or visited Lake Helen was quite evenly distributed by decade; 22% (12 responses) for 10 years or less, 26% (14) for 11–20 years, 9% (5) for 21–30 years, 16% (9) for 31–40 years and 27% (15) for 40-55 years. About one third of the respondents are year round residents (35%) and more than one-third (36%) are frequently at their Lake Helen homes on the weekends.

The most popular activities at Lake Helen included enjoying the scenery, walking, swimming, fishing, using Lake Helen as a place of solitude, and enjoying wildlife. Recreational boating on Lake Helen included motor boating (60%), canoeing/kayaking (42%), water skiing (29%), sailing (5%) and jet skiing (5%). The majority of respondents (62%) described their recreational/boating experience on the lake as having a moderate amount of disturbance ("sometimes noise and activities of others disturb me"), 29% reported few disturbances, 7% felt the lake was heavily used and one response felt it was over used. Of the surveys returned, 82% indicated that they were satisfied with the no-wake period on Lake Helen. Eleven percent felt the no-wake period began too early and many preferred to begin the no-wake period at 5 PM.

Fishing

Eighty-nine percent of respondents indicated that they fish Lake Helen and 75% have fished the lake for more than 10 years. Of those who indicated they fish the lake, 55% fish at least a couple times per month. Most felt the fishing was average (47%) and 37% felt the fishing was fair; several indicated the fishing was very good or excellent (need to find their fishing spots!). Bluegill is the fish species most frequently caught, followed by sunfish, LM bass, then northern pike. A little over a third of the fishers reported catching perch and crappies. Forty-five percent of the fishers felt the fishing has been about the same over time, 33% felt is has declined, and 22% felt is has improved. Naturally, this perception is also associated with the duration of time spent on the lake; the majority of folks fishing Lake Helen less than 10 years indicated the fishing quality has stayed the same, the majority in the 11-20 year population felt a decline in fishing quality has occurred, the majority in the 21-40 year population felt the fishing quality has improved, and those with more than 40 years of familiarity with Lake Helen were split between a decline and fishing quality remaining the same. The majority of respondents (65%) mildly or strongly agreed that native aquatic plants improve fishing quality, 11% mildly or strongly agreed with this statement, and 24% were uncertain about the relationship between native aquatic plants and fishing quality.

Wildlife

Eighty-seven percent of the respondents indicated that wildlife at Lake Helen is important to them, 11% felt wildlife at Lake Helen was not important, and one individual indicated that they dislike wildlife. One third of the respondents felt that food and shelter for wildlife can be found in most places, and 28% felt wildlife could find food and shelter anywhere around Lake Helen and the

balance of respondents indicated a lack of wildlife food/habitat around Lake Helen. Most residents (60%) felt that the quality of habitat for wildlife has stayed the same since they've been at Lake Helen, 28% felt it has declined, and 13% perceived an improvement in wildlife habitat. When broken down, the majority of respondents that had been at the lake less than 10 years indicated no change in wildlife habitat, the 11-20 year population was split between a decline (43%) and no change (36%), more than 65% of the 21-40 year population felt wildlife habitat had not changed, and the 40+ year population was split between a decline (40%) and no change (46%). When asked if native aquatic plants improve the quality of nesting sites/habitat for waterfowl and other wildlife, 62% agreed, 17% disagreed, and 21% did not know.

Aquatic Plants

At least 72% of respondents agreed that the presence of native aquatic plants is essential to maintaining water quality and clarity. When asked about the amount of aquatic plants in Lake Helen, 38% felt that the amount of growth was excessive, 25% felt it was dense, 23% felt it was just right, and the remaining 13% were split between very little growth and choked. The majority of respondents (69%) indicated that they always cleaned their boats, trailers, and fishing equipment before using it in Lake Helen, three indicated that sometimes they cleaned this gear, and only two individuals never cleaned their boat. Many (22%) did not provide a response to this question, but several wrote in that they do not use their boat in other lakes.

Water Quality

When asked about changes in Lake Helen's water quality, respondents were split between a perceived decline and no change. Fifty percent of the 0-10 year population felt the water quality had decreased, while 42% felt water quality had improved. About 43% of the less than 20 year population felt that the water quality has declined, 29% indicated it improved, and 21% indicated no change. In the 21-40 year population 44% felt water quality had improved, and both decline and no change were selected by 21%. Half of 40+ population said the water quality has remained the same, 29% observed a decline, and 21% observed improved water quality.

Algae, aquatic plants, and litter were identified as the top three water quality problems. The use of fertilizer and heavy recreational use were identified by 44% of respondents as the top causes of water quality problems. Development, herbicides, erosion, vegetable and livestock agriculture were each identified as causes for water quality problems by 24% of respondents.

Land Management

A number of questions related to land use practices. Although runoff was identified in the survey as a water quality problem, 66% of respondents have not installed any storm water runoff controls. Forty-six percent of the respondents mowed at least 80% of their lakeside property. The majority of respondents (78%) indicated that they do not use fertilizer. When fertilizer was used, only a few respondents indicated what was being fertilized (agriculture, lawn, garden). Only one person indicated that they use fertilizer that contains phosphorus and five were not sure; 85% indicated they do not use fertilizer that contains phosphorus. According to survey results, six respondents indicated that fertilizer is applied within 30 feet of the lake shore.

Over 63% acknowledged that removal of native shoreline vegetation increases shoreline erosion and that vegetative buffers reduce runoff; however, 21% were unsure about the relationship between buffers and runoff. Thirty-two percent felt that shorelines are more attractive with an abundance of native plants and about the same percent were neutral and about 30% disagreed with this statement. Forty percent were neutral when asked if shorelines are more beautiful when lawns are mowed to the edge and about the same percent felt that shorelines are more beautiful when lawns extend to the lake. Sixty-two percent indicated they were aware of Portage County/state shoreland zoning

ordinances. Seventy-three percent of the respondents would like to learn more about the effects of shoreline vegetation and how it can improve water quality.

Lake Helen Management

Who should participate in making decisions about Lake Helen? The majority (93%) felt that the Lake District should participate, 31% indicated watershed residents should be involved, about 20% felt County government and State government, University personnel, and Local government should participate and 7% felt fishing clubs should be involved in decision making. Thirty-one percent of respondents were interested in participating in the development of a lake management plan for Lake Helen but the majority (56%) indicated that they would not be interested. Ninety-three percent of individuals who have lived on Lake Helen for 21-40 years did not want to participate in developing a plan; the 0-10 year individuals were most likely to participate, and about 40% of the 11-20 and 40+ populations were interested in participating. Fifty-eight percent of respondents indicated that you routinely attend Lake District meetings.