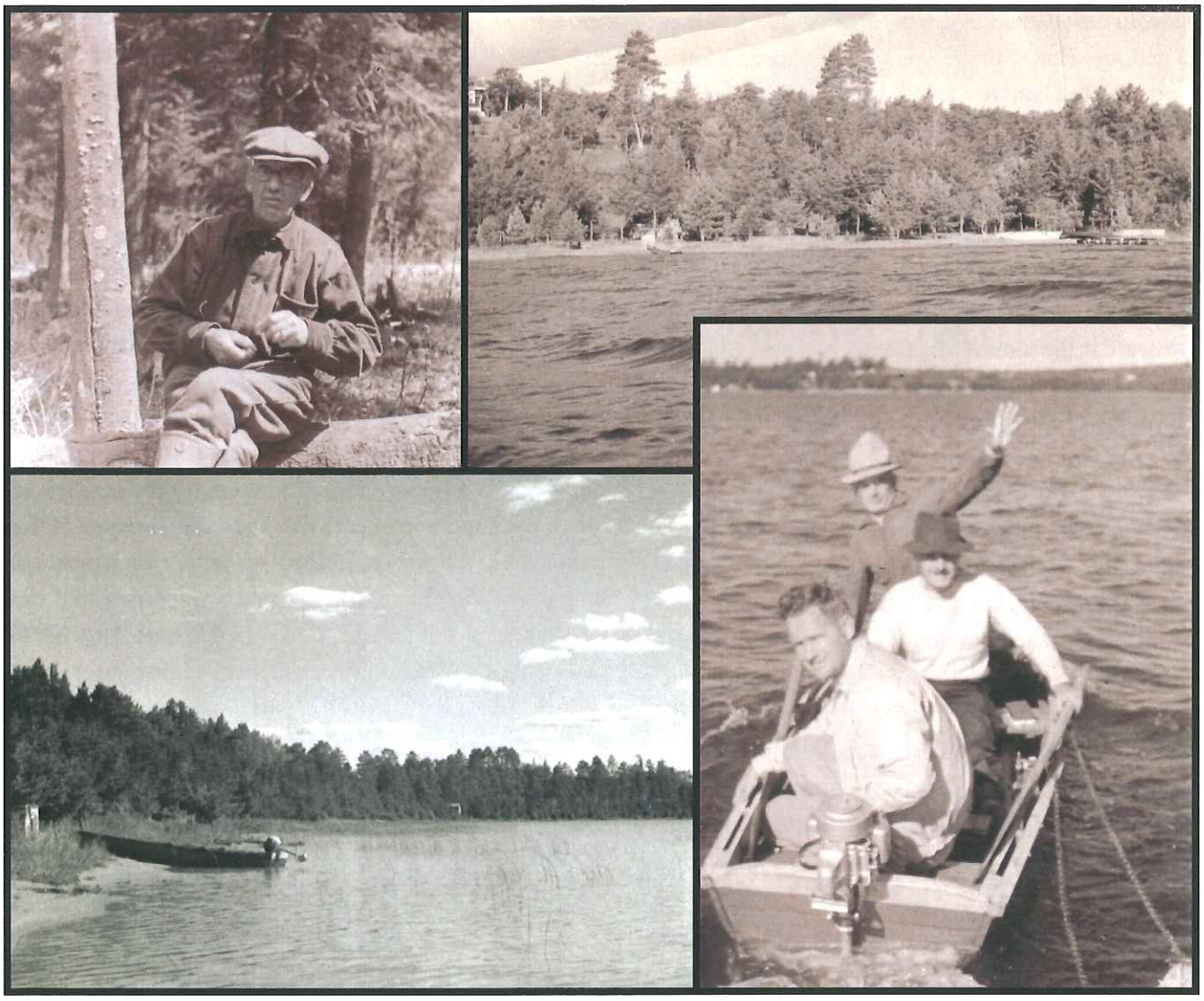
LPT-271-05

Whitefish Lake Watershed
2005 Interviews with Property Owners



Eric Olson, UW-Extension Center for Land Use Education
Kate Demorest and Kyle Slifka, UW-Stevens Point College of Natural Resources

Prepared as part of the Whitefish Lake Diagnostic and Feasibility Study 2004-2008
Funded in part by a Wisconsin DNR Lake Protection Grant

College of Natural Resources

Center for Land Use Education

UW Extension

Photos courtesy of the Paddock family collection. Clockwise from upper left: Hank Williams, one of the first settlers on the lake; berm on the beach at Blueberry Hill; Walter Schafer with friends on an early boat on the lake; another view of Blueberry Hill beach

Introduction

Effective watershed management plans are built on a foundation of information describing the resource's many aspects. This information base includes the social dimensions: the views, experiences, and activities of people interacting in and around the lake's watershed. To explore this dimension, researchers from the University of Wisconsin – Stevens Point spent time in the summer of 2005 getting to know the people of the Whitefish Lake community. Kate Demorest and Kyle Slifka, under the supervision of Eric Olson, reached out to all of the land owners in the watershed to engage in both short and long interviews to gather information and listen to the stories and concerns of watershed stakeholders. This report summarizes the findings from these conversations.

What we heard in the summer of 2005 provides a snapshot of Whitefish Lake's community at this particular point in time. For much of the information, there is no historical record to compare our findings against. As a result, we cannot clearly show trends in community change or accurately state what directions it may be headed in the future, although we heard a number of people discuss change and the future. We can compare the views and ideas of different people around the lake to find where agreement and clear differences exist among different types of stakeholders. We can also compare some of our results against similar lake surveys from elsewhere in Wisconsin. These comparisons can place the results into context and help highlight what is unique about the Whitefish Lake area.

Methods

Our goal was to contact as many of the watershed residents as possible, ideally through in-person interviews. We collected parcel ownership information from the Douglas County Land Records Department and used a watershed delineation provided by the U.S. Geological Survey to determine which properties were in or out of the watershed. We also collected contact information (telephone numbers) from the Whitefish Lake Conservation Organization. We sent letters to all property owners in the watershed informing them of our project, providing them with an informed consent form, and asking them to respond if we did not have their phone number (a reply postcard was enclosed).

We developed a standard questionnaire for the interviews, deriving questions from our interests in understanding the social and physical environment around Whitefish Lake. Several questions related to lake use and property management. We developed opinion questions that drew from similar surveys conducted in northwest Wisconsin. We also included a set of questions related to the Whitefish Lake Conservation Organization.

Beginning in June of 2005, Kate Demorest and Kyle Slifka began contacting watershed property owners to arrange times for interviews. Over the course of the summer, we managed to conduct 66 interviews. Interviews were conducted at a respondents' home or cabin at Whitefish Lake between June and August of 2005. We recorded responses on hard copy interview forms and later entered them into a database on a secure laptop. At the end of summer, we mailed paper copies of the interview questions in a survey format to property owners whom we were unable to meet with over the summer. After two-weeks, we mailed follow-up letters to encourage responses. We entered paper survey responses into our database and then transferred this database into SPSS and ArcView to summarize and analyze responses.

Kate and Kyle also conducted a subset of less formal, open-ended interviews to allow Whitefish Lake property owners to discuss any and all matters related to the lake which may not have been included in the standard surveys. These allowed Kate and Kyle to become more familiar with the detailed history of people and events around the lake. Overall, we achieved a 70% response rate. Table 1 below shows the break-down of respondents and non-respondents for the interviews. Figure 1 on the following page shows the spatial distribution of interview participants.

Table 1. Interview Response Summary

	Shoreland Property Owners	Non-Shoreland Property Owners	Total
Interviewed	65 (63%)	1 (7%)	66 (55%)
Mail Survey	14 (13%)	4 (26%)	18 (15%)
No Response	25 (24%)	10 (67%)	35 (30%)
Total	104	15	119

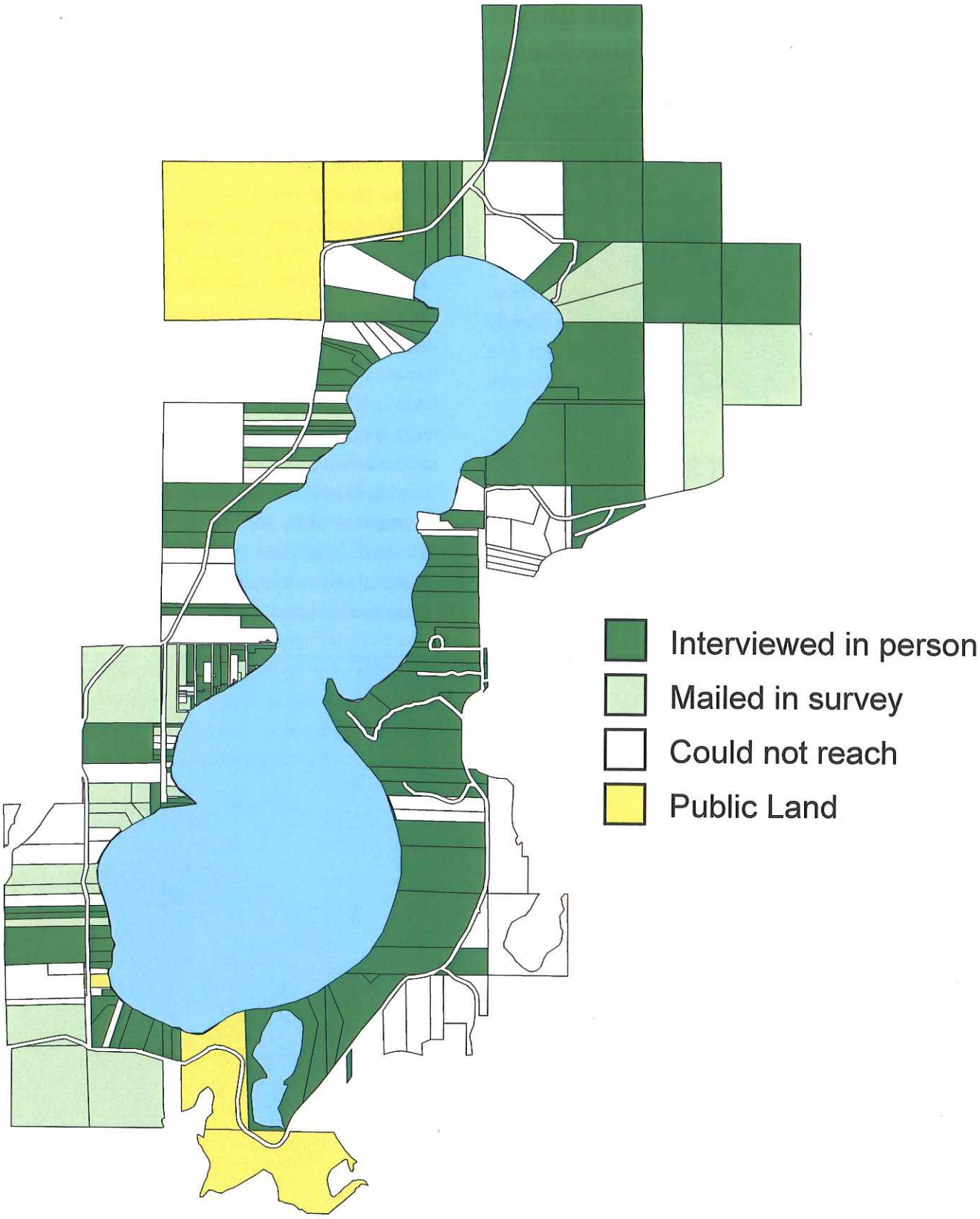


Figure 1. Map of the Whitefish Lake Watershed illustrating the interview status of property owners.

Overall Histories at the Lake

The first section of our discussion focused on the properties held by watershed residents and their history at Whitefish. Most of the people we spoke with have long histories at Whitefish Lake. The earliest visitor we spoke with first came to Whitefish Lake in 1929. The average respondent has been coming to the lake for just over 50 years. Two thirds of our respondents first came to the lake to visit friends or family. This personal connection extends to how Whitefish community members have come to own their property: many people (44%) have acquired their property through a family connection, either inheriting it or purchasing it from a family member. This is over twice the percentage found in a recent regional study of lakes in Washburn and Burnett Counties.

Not everyone has long family connections on the lake. Eight percent of our respondents first came to Whitefish as part of a visit to an area resort, and nine percent came on a day trip for fishing or other recreation. Another 18% came on a visit to look at available real estate. As one would expect, those without long term extended family connections to the lake have a shorter family tenure. Those who inherited property reported that it had been in their family for, on average, 72 years. Those who purchased from a family member reported an average family tenure of 51 years, while the 56% of property owners who purchased from non-family members have owned their property for 24 years on average. Overall, the average property has been in one family's name for over 51 years.

This last measure is remarkable given the rate of land value appreciation over this same period and the rapid turnover in ownership found on other lakes. On many lakes in Wisconsin and elsewhere, owners sell properties more frequently, either due to raising taxes or the desire to convert their real estate equity into other properties or uses. Such turnover can create a social environment with a large and often increasing number of "newcomers". Whitefish Lake runs counter to this trend and is instead quite stable over time.

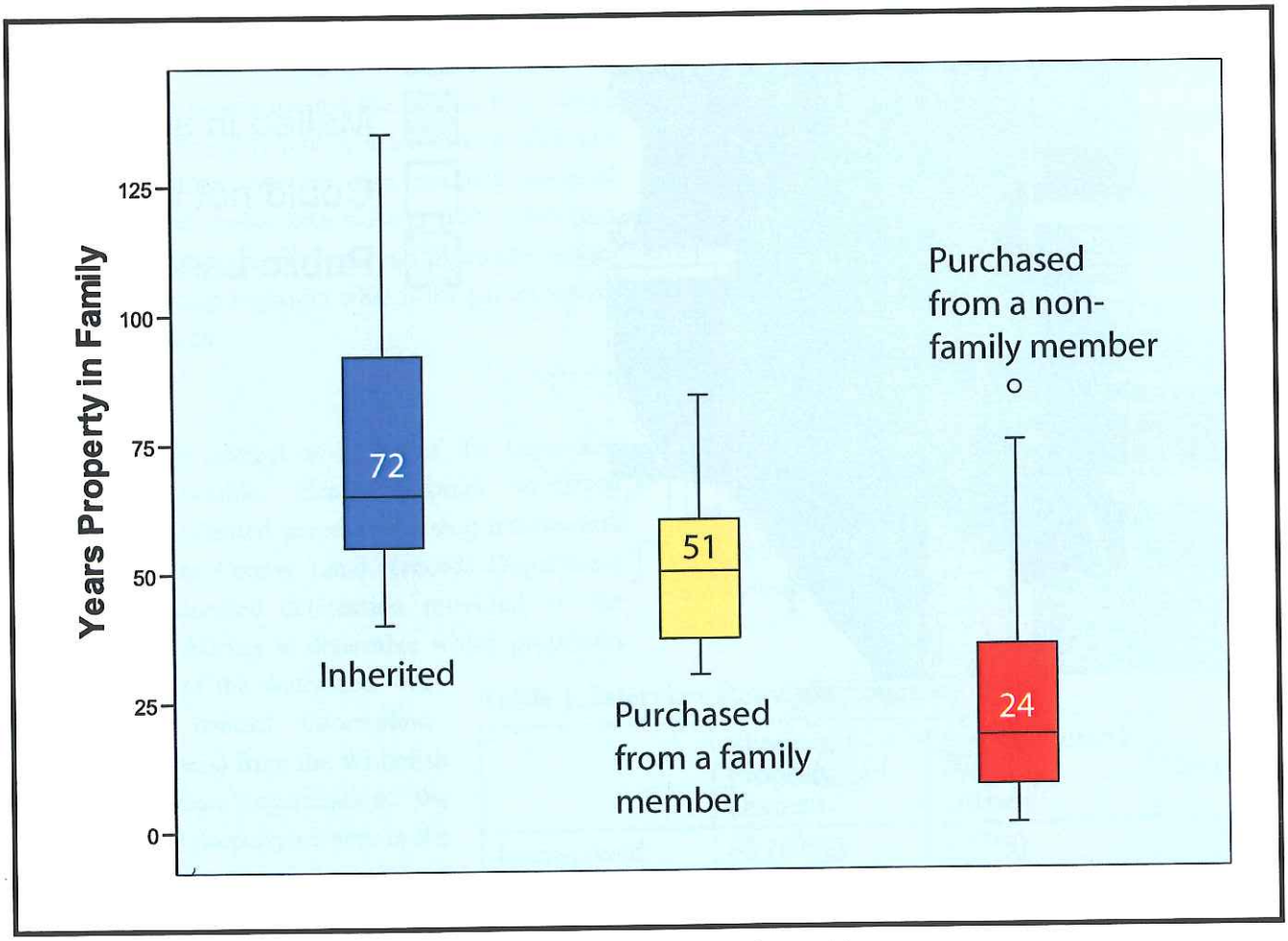


Figure 2. Years of family tenure shown according to means of acquiring property

This is not surprising given that Whitefish has remarkable scenic qualities and clear waters that are highly desirable for recreation. We asked people who did not come to own their property through their family why they chose Whitefish Lake in particular. Those without past experience on the lake had heard about its unique qualities- the clear water and sandy shores- from friends or from real estate agents. Many people mentioned the lake's water and scenic beauty as factors that led them to choose Whitefish. Others told us about their personal, historical connections to the lake. They had visited friends or family members at Whitefish, sometimes since they were very young. Some had visited the lake to fish its waters and ended up seeking a cabin.

Cabins, Homes, and Improvements

After hearing about people's initial experiences at the lake, we asked several questions about the structures on their property. The owner of the oldest residence we spoke with reported that their building dates back to 1910, shortly after the clearing of the pine trees in the region. The average residential structure dates back to 1964. Most lots (77%) have one residential structure, while a few of our respondents (4%) had no residential structure on their lots and 19% have more than one. The majority of owners (83%) also have at least one garage or other accessory building on the property.

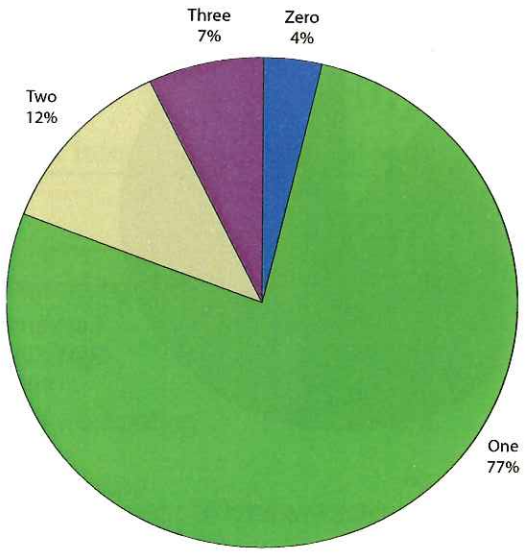


Figure 3. Number of residential structures on respondents' property

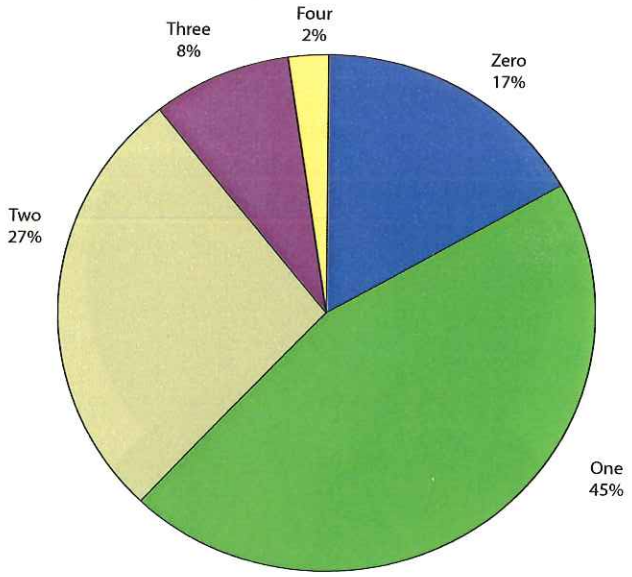


Figure 4. Number of non-residential structures on respondents' property

Most of the respondents are still using the original residential structure built on their property, while about one-third are in a replacement building of one form or another. In those cases, the original building on the property was commonly quite old. Eleven respondents knew when the original was built and the average response was 1935. The oldest dated back to about 1900.

One obvious distinction on Whitefish Lake and many other lakes in northern Wisconsin is between the year-round residences and those who only use their lake home on a seasonal basis. Just over a quarter of the people we spoke with considered Whitefish to be their primary residence. Most part-time residents use their lake for about 90 days out of the year. Some stay as long as eight months. About half of the part-time respondents come up to the lake at some point during the winter. We asked seasonal residents if they plan on using their Whitefish property year-round at some point in the future; only one in five indicated that they would. This is significantly lower than reports from other lakes in the region, where as many as half of seasonal residents plan to someday live full time at their lake property.

Seasonal and year-round residents have different patterns of use for their property. Year-round residents have smaller households and reported that, on average,

between 2 and 3 people occupied their home. Seasonal residents, in contrast, average between 3 and 4 people. The largest number of people staying at a seasonal property was 15, while the largest response for year-round residents was 6. The average year-round resident has been calling the lake full time home for 13 years, and it is understandable that they would tend to host smaller gatherings than those who only come to the lake seasonally or on occasions.

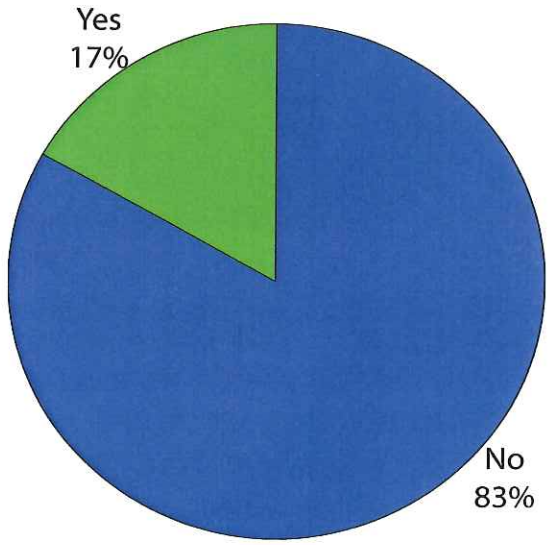


Figure 5. Responses to question "Do you have any additional construction planned for this property?"

We asked people if they had any future construction planned for their Whitefish property. Responses are shown in figure 5 above. Most (83%) do not.

We also asked if people had completed or planned to complete any natural restoration projects on their land. About 43% responded in the affirmative. About one third of those involved in restoration had received grant assistance to help pay for their projects. As illustrated in figure 6, We found that members of the Whitefish Lake Conservation Organization (WILCO) were more likely to be involved in restoration projects; 89% of those involved in restoration were also WILCO members. Most people who were not involved in restoration projects felt that their property was not in need of such efforts. Only 11% reported that their property could benefit from restoration.

We asked several questions regarding the water systems at people's properties and our findings are shown in

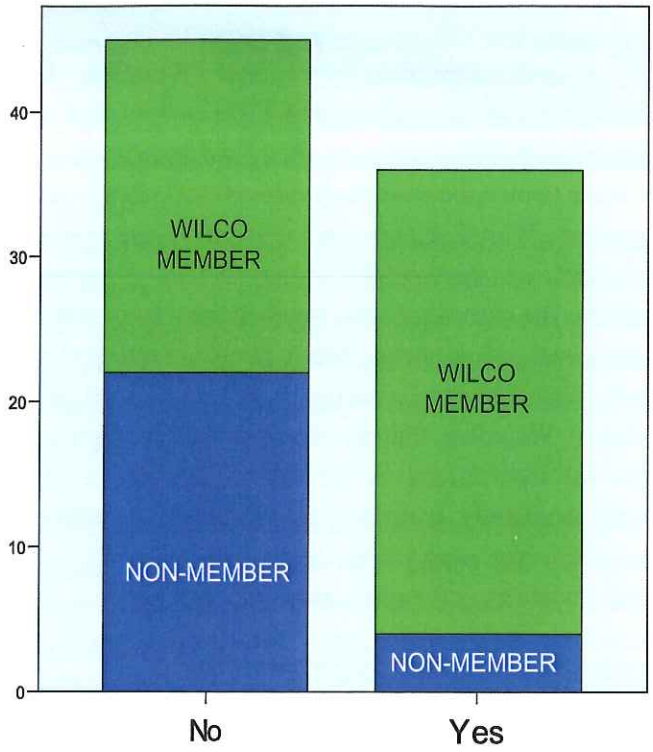


Figure 6. Responses to question "Have you completed or are you planning to complete any projects to restore natural areas on the property" shown by WILCO membership

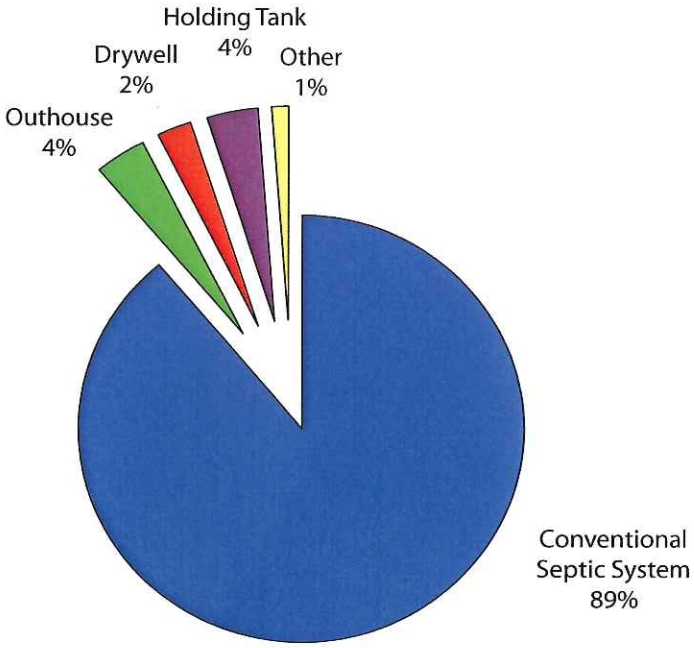


Figure 7. Wastewater systems of respondents

figure 7. Most buildings are served by septic systems (89%), while the rest are either served by a holding tank, dry well, or outhouse. The oldest wastewater system (an outhouse) was reportedly installed in the 1920s, but on

average systems are just under 50 years old. The dry wells were installed in the 1940s and 1960s, but all of the holding tanks were installed after 1990. About one-third of respondents indicated that they had replaced their wastewater system at some point in time.

Given the sandy conditions and shallow groundwater table, a surprising portion of property owners (over 50%) have drilled rather than point-driven wells. Amongst those who knew their well depth, the average was 86 feet. The deepest wells are at about 250 feet, while the most shallow are about 20 feet. Only about 15% of those we spoke with indicated any issues with their water supply, mostly reporting high iron content and sulfuric odors. Just over half could recall when their well water was last tested; on average, these respondents indicated it had been about 7 years since testing last, and no one reported ever receiving a poor result indicative of bacteria or other problems.

We spoke with people about their landscaping practices, particularly their use of fertilizer. We found that just under a quarter of households use fertilizers outdoors; over half of these respondents indicated that they use fertilizer on their lawn, while the balance fertilized particular plants. Only two of the households we spoke with reported using phosphorus fertilizers on their lawn, and these respondents indicated that they did not use much or could not really recall how much they use. Overall, we found that the vast majority of people around the lake do not use phosphorus on their lawns.

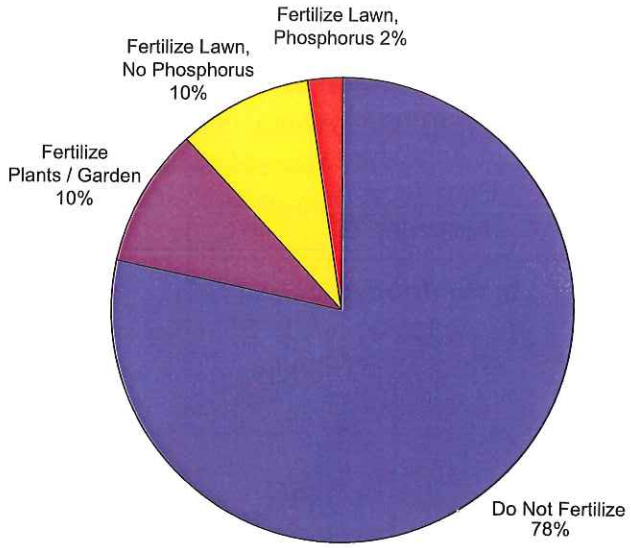


Figure 8. Respondents' use of fertilizers

Activities at the Lake

Nearly everyone participates in some form of recreation while they are at the lake. We asked how often respondents and their guests participated in a number of popular summer lake activities and summarized the results in table 2 below. The most popular of them all is swimming, which is also one of the most popular outdoor recreation activities across the entire state of Wisconsin. Only five percent of our respondents indicated that they or their guests never swim. Fishing, waterskiing, and leisure boating were, unsurprisingly, also very popular, although it is perhaps noteworthy that one in five indicated that they never participate in fishing. About four out of five respondents indicated that

Table 2. Interview respondents' participation in summer recreational activities

	daily	weekends only	several times	several times	only occasionally	never
Swimming	37%	17%	16%	12%	12%	5%
Fishing	6%	11%	9%	8%	44%	22%
Leisure boating	8%	15%	23%	16%	20%	19%
Waterskiing	3%	11%	5%	10%	15%	56%
Canoeing/kayaking	10%	10%	11%	9%	28%	33%
Jet Skiing	4%	4%	1%	5%	4%	82%
Other	13%	11%	20%	11%	16%	22%

Table 3. Ownership of watercraft by interview respondents.

a. Fishing boat Total: 55 Percent: 57% Average: .66	**d. Jet Ski** Total: 25 Percent: 13% Average: .30	**g. Paddleboat** Total: 18 Percent: 19% Average: .22
b. Pontoon boat Total: 31 Percent: 38% Average: .37	**e. Canoe** Total: 84 Percent: 63% Average: 1	**h. Sailboat** Total: 28 Percent: 30% Average: .34
c. Speedboat Total: 31 Percent: 35% Average: .37	**f. Kayak** Total: 49 Percent: 25% Average: .6	**h. Other watercraft** Total: 26 Percent: 22% Average: .4

they never participate in jet skiing at the lake, the largest non-participation rate amongst the six activities that we specifically inquired about.

All of this recreation is associated with a lot of "toys". Watercraft ownership is summarized in table 4 above. We estimate that for the entire lake, there are no less than 347 different watercraft, more than three per property. Canoes are the most common watercraft, but they are outnumbered by the over 125 motorboats and jet skis. Still, only about a third of respondents indicated having a motorboat of some kind, while one fifth reported owning two or more motorboats. We collected information describing over 150 motors that operate on the lake. Their average horsepower is 42, and about 17% are over 100 hp. Just over half the engines discussed were two-stroke, and the balance were four-stroke. We collected fuel usage information from 64 respondents; they reported between zero and five hundred gallons of use in a single season. Among those using some gas, the average seasonal total was about 44 gallons.

Views on the Lake and the Area

We also asked people to express their views and opinions about the lake. In one question, we asked people to let us know what they thought was the single most important issue facing the Whitefish Lake area. Many people could not limit themselves to just one issue. We categorized responses and they are summarized in figure 9.

Two related issues were most often mentioned, usually in conjunction with the concern for water quality:

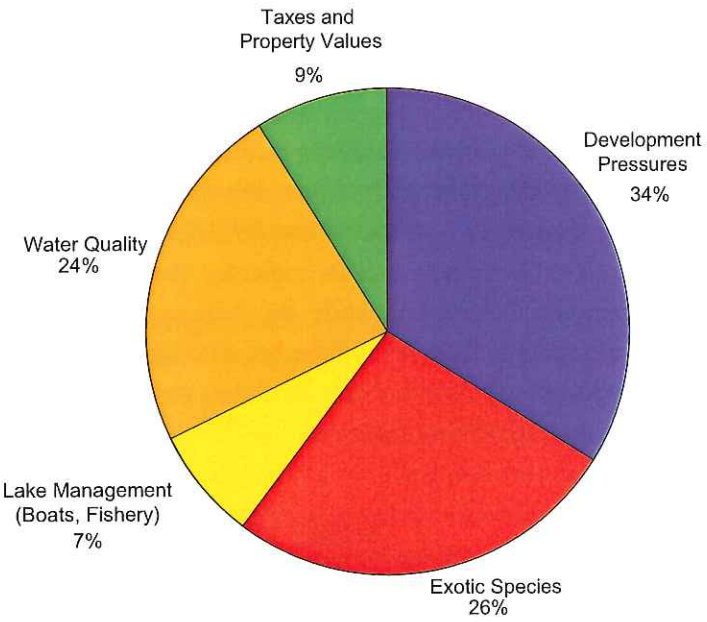


Figure 9. Respondents' single-most important issue at Whitefish Lake

invasive species and development pressures. There is a high level of awareness among lake residents concerning the inverse relationship between development levels and the lake qualities they seek: scenic shorelines and clear water. It is also evident that many people understand the potential threat posed by invasive species such as Eurasian water milfoil.

Not all issues were directly related to the physical environment of the lake. Several people thought that taxes were growing too quickly for some people to keep up, and they made the connection between people's

ability to pay taxes and the level of income and wealth needed to stay on Whitefish Lake long term. To these people, there was a growing issue that the lake was becoming more exclusive to the wealthy, and that should the lake become a "hot spot" for vacation home buyers, the newcomers may not share the same level of understanding of and concern for the lake. One person expressed concern that owners of large properties with undeveloped shore would be financially pressured to subdivide and sell lots, impacting the scenery and water quality as a result.

Another group of respondents thought that the enforcement of rules such as shoreland zoning is an issue. This group has two camps: those who feel that the rules are not adequately enforced, and those who feel that they are enforced with too little flexibility. A smaller group of people identified specific issues such as the use of jet skis, the level of water in the lake, and the management of the lake's fishery.

We let people share with us what they find to be the most positive aspect of owning property on Whitefish Lake. Figure 10 below shows how we clustered the responses. Most answers clustered around two themes: the solitude and quiet of the lake, and the beauty of the lake and shorelines.

We subsequently asked people to state the one thing that they would never want changed about the lake. We clustered responses and they are illustrated in figure 11. Most people discussed the current aesthetics of the natural environment or the quality of the lake water. In short, most people wanted the whole package to remain what it is today. Several expressed this in terms of limiting future development or ensuring that setback and vegetation rules are enforced. Others just wanted the area to remain silent and beautiful. Several people expressed that they didn't want the current rules and regulations to change in the future.

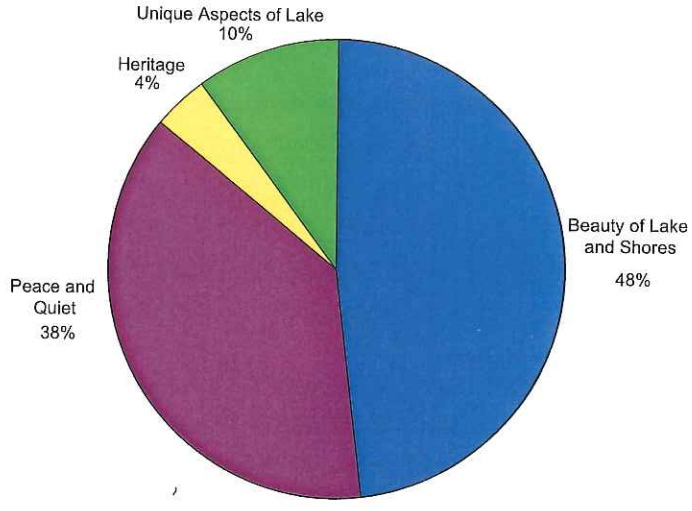


Figure 10. Most positive aspect of owning property on Whitefish Lake.

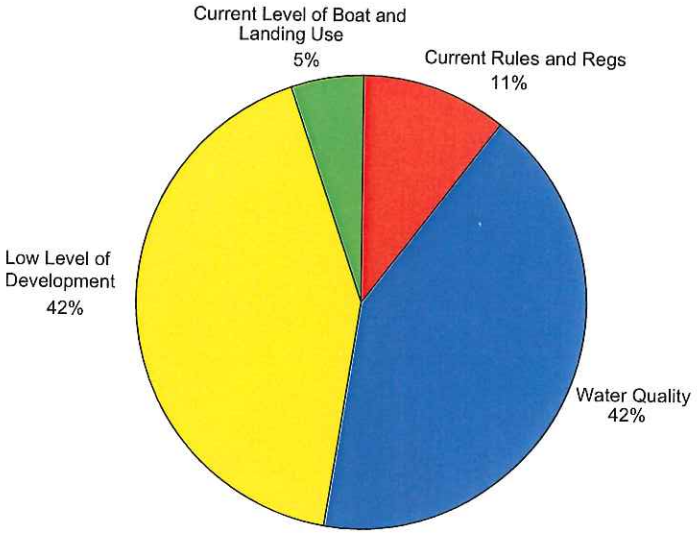


Figure 11. The one thing respondents never want changed at Whitefish Lake

We also wanted to know if people thought there was a downside to owning property at Whitefish Lake. Again, we clustered responses and illustrate them in figure 12 below. A number of people had a hard time coming up with something in response. The most common response was that taxes were making it difficult to maintain their properties from a financial perspective. Property value growth in recent years has shifted taxes towards lakeshore properties like those at Whitefish Lake.

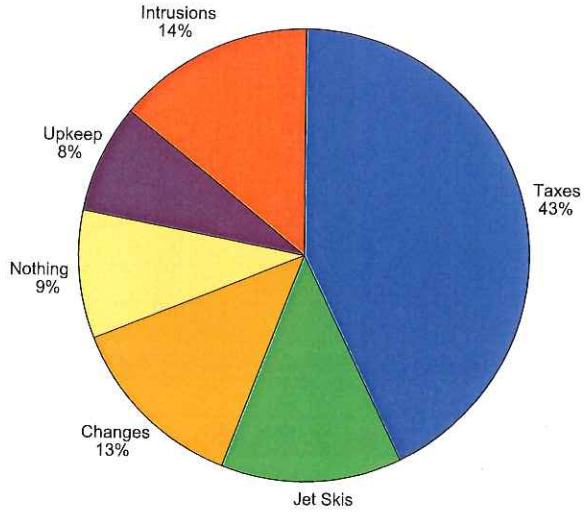


Figure 12. Most negative aspect of owning property on Whitefish Lake.

Others listed concerns about three main topics: the use of jet skis on the lake, the changes taking place in development levels and lake use, and the perceived intrusion of people who are advocating that the rules and regulations around the lake be more thoroughly enforced. A final group of respondents discussed difficulties finding the time and effort to keep their property in order and manage the errands involved in having a second home.

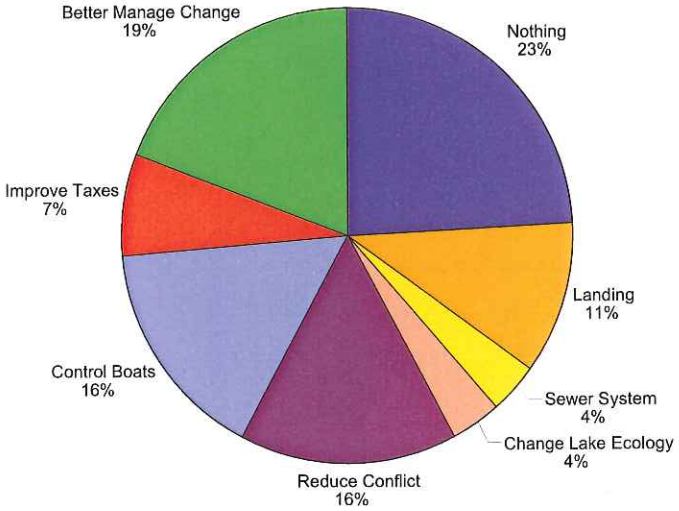


Figure 13. What respondents would change if they could change one thing at Whitefish Lake.

Related to the drawbacks of property, we asked what people would change about the lake if they could change one thing. Responses are summarized in figure 13. The most common responses indicated that people wanted nothing changed, that the lake was ideal as it is today. A number of people gave some complex responses that we summarized as "better managing change". These respondents discussed the use of fertilizers and septic systems around the lake, as well as development of lakeshore and backlot properties. Others indicated that they wished that there was less conflict between those looking to manage change and those who are seeking to make changes on their own property. Some of these respondents were frustrated with what they see as overzealous rule enforcement.

Two related themes involved controlling boats on the lake and managing the landing. A number of people wanted to see the public landing closed. Another common response was the desire to slow the growth or amount of property taxes. As mentioned above, some people perceive the tax issue as a challenge to keeping lake property ownership accessible to a wider range of income groups. Finally, several respondents discussed installing a sanitary sewer system around the lake, or making other changes to the lake's ecology (especially the fishery).

We also gave people a list of possible events or activities that might have negatively impacted their enjoyment of the lake. We asked people to let us know if these things impacted them almost daily, weekly, monthly, about once a summer, or never. Their responses are summarized in table 4 below.

Figures 14 through 21 show the breakdown of respondents based on whether or not they identified as WILCO members. A statistical analysis of the responses revealed that WILCO members answered these questions in a significantly different manner than non-members. In general, WILCO members responded with less certainty that the lake's water quality is getting better, and greater concern over human impacts on the lake.

Table 4. Frequency that different events have had a negative impact on respondents' enjoyment of the lake.

	never	once per summer	monthly	weekly	almost daily
Noise from Jet Skis	33%	8%	17%	23%	18%
Noise from other boat engines	55%	13%	14%	10%	6%
Reckless boating behavior	60%	27%	8%	3%	1%
Boaters disregard for slow-no-wake areas	48%	23%	15%	10%	3%
Noisy people	61%	15%	12%	8%	3%
Too many fishing boats on the lake	91%	8%	0	0	0
Poor water quality	95%	4%	0	0	0
Too much aquatic vegetation	98%	2%	0	0	0
Not enough desirable fish in the lake	83%	5%	5%	2%	4%
other	29%	23%	17%	17%	11%

The one question in this area where members and non-members responded alike was the statement regarding the inevitability of invasives coming to the lake.

Less than five percent of the total respondents indicated that too much aquatic vegetation, poor water quality, or too many fishing boats on the lake caused them problems, and for these people this was only an issue about once per summer. At the other end of the spectrum, nearly one in five respondents indicated that noise from jet skis negatively impacted their enjoyment on an almost daily basis, and another 23% indicated that this was a disruption on a weekly basis.

Other motor boating activities were also seen as disruptive; 45% of respondents were disrupted at least once per summer by noise from motorboats other than jet-skis, and 40% were affected by reckless boating behavior. People also shared a wide-ranging list of other things that impacted their time at the lake, ranging from fireworks to guns, ticks to float planes.

We asked people whether they agreed or disagreed with a number of statements concerning the lake. The strongest level of agreement came in response to the statement "If decisions need to be made between letting people do whatever they want with their property or protecting the lake's water and ecosystems, the lake should take precedence", with 28% responding "strongly agree" and another 50% responding "agree". Another statement with nearly the same level of agreement is that property owners around the lake should do whatever it takes to ensure that the lake's qualities are maintained in the future.

At the other end of the spectrum, only 10% agreed that property owners should be able to clear as much shoreland vegetation as they want to. The responses to this statement were the least ambivalent, with only 4% indicating that they neither agree nor disagree. The remaining 86% disagreed to this statement.

The most ambivalent responses were to the statement "The water quality in Whitefish Lake is getting better over time", with 60% of the respondents neither agreeing nor disagreeing. Some did not feel qualified to make the judgment; while others couldn't honestly state that they'd seen a trend one way or another. One quarter of

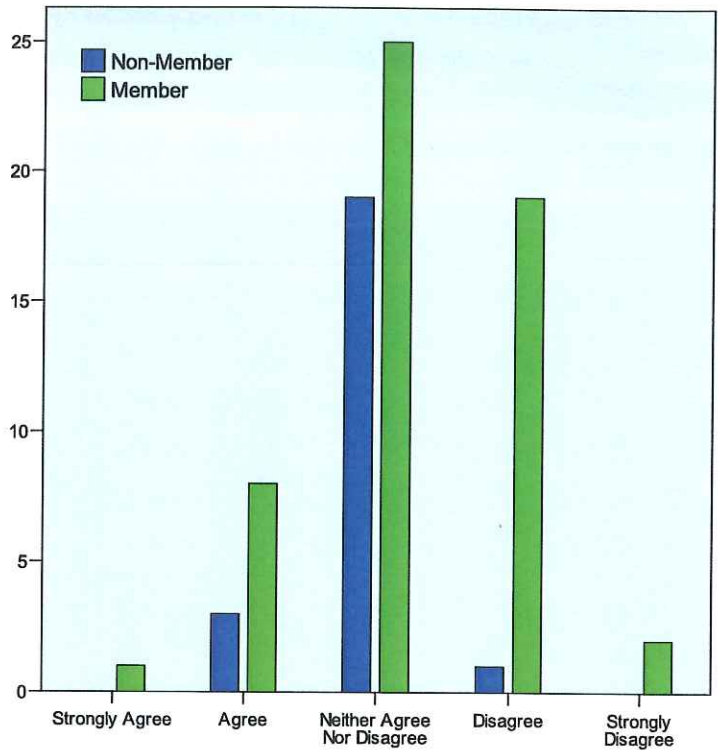


Figure 14. Responses to statement "The water quality in Whitefish Lake is getting better over time".

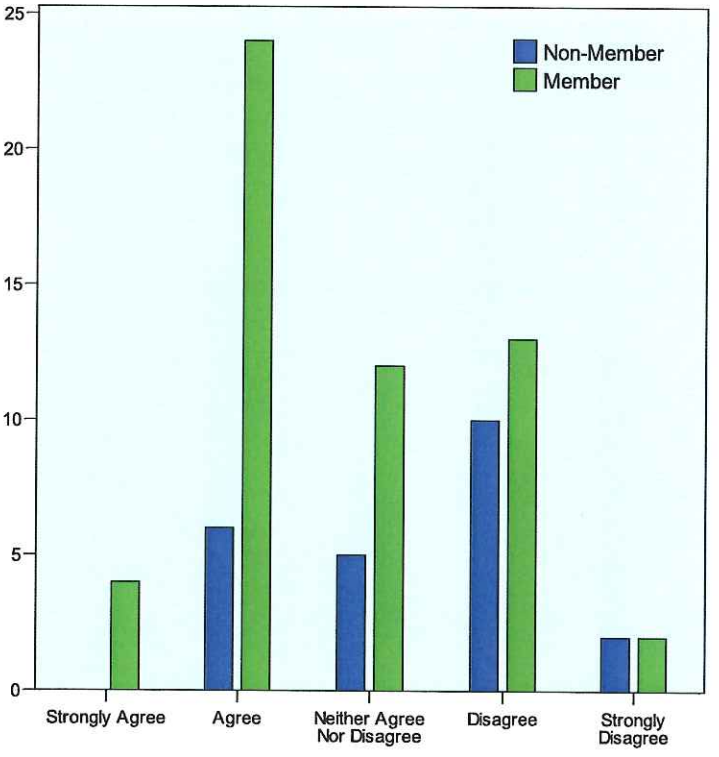


Figure 15. Responses to statement "What people are doing in and around the lake is having a negative impact on the lake".

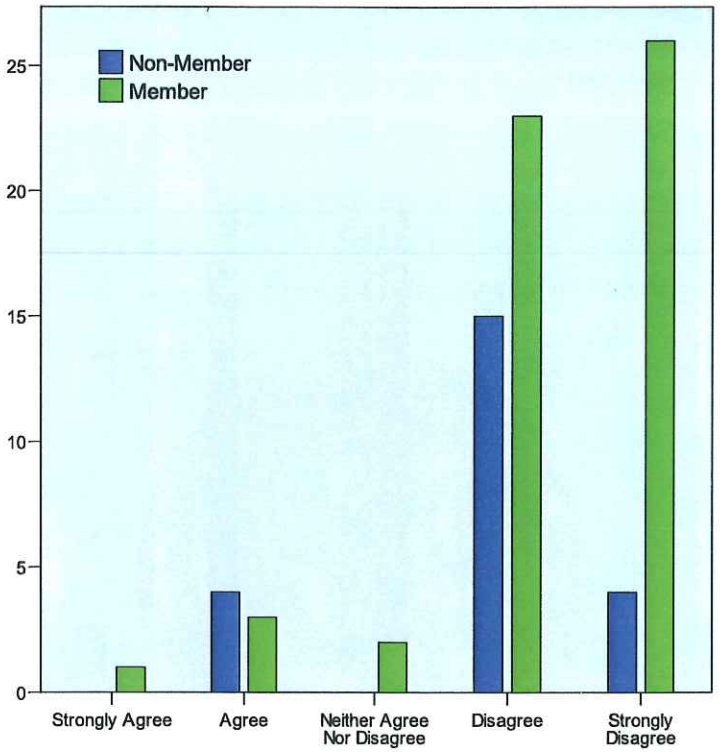


Figure 16. Responses to statement "Property owners should be able to clear as much shoreland vegetation as they want to".

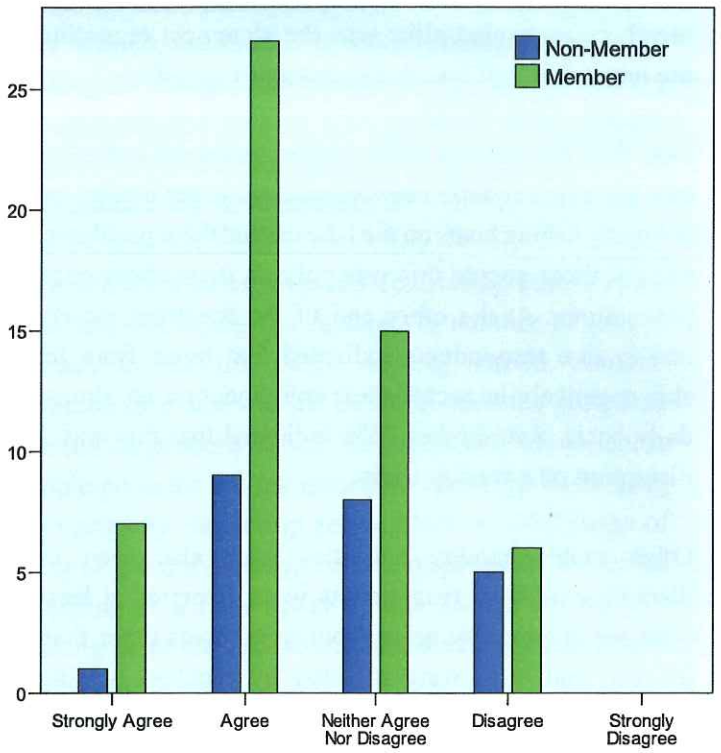


Figure 17. Responses to statement "It is only a matter of time before invasive species take hold in the lake".

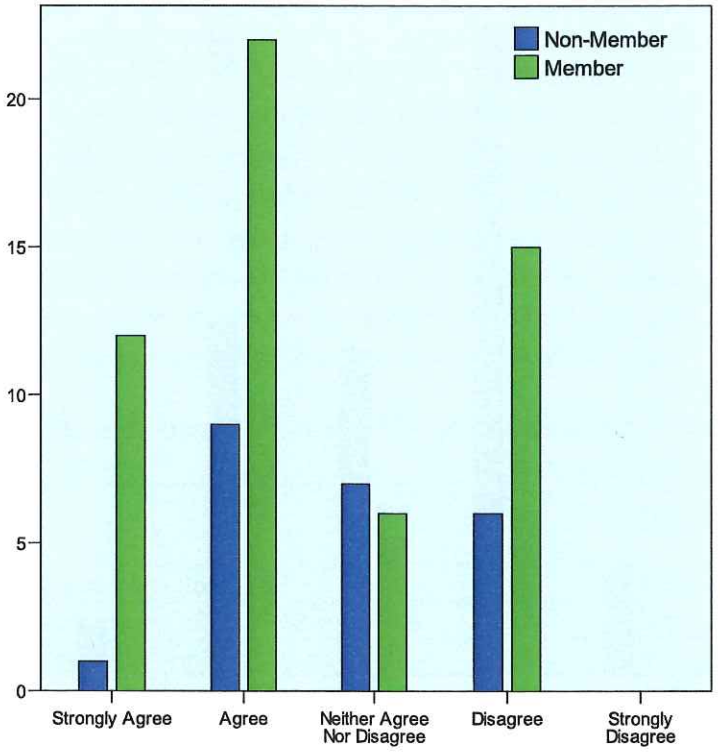


Figure 18. Responses to statement "Public access to the lake should be more regulated".

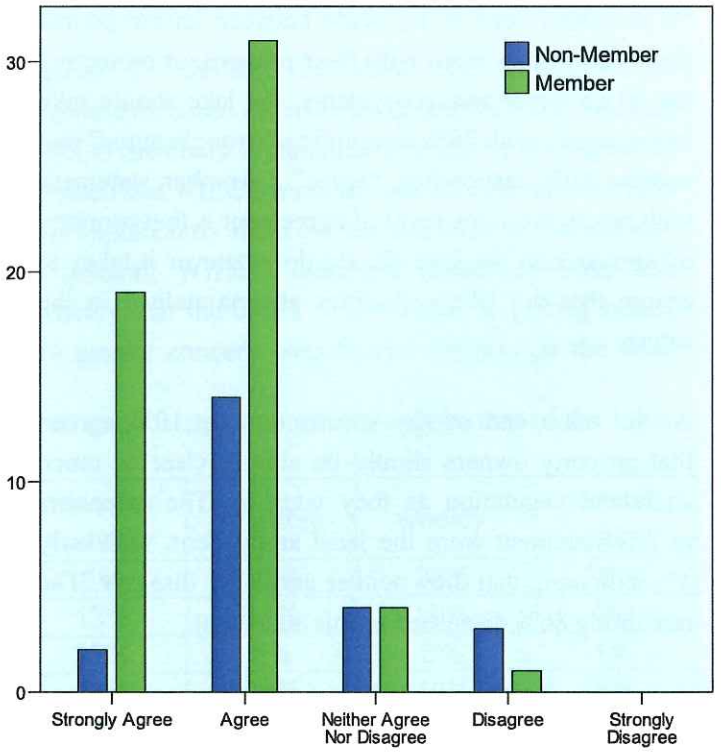


Figure 19. Responses to statement "Property owners around the lake should do whatever it takes to ensure that the lake's qualities are maintained in the future".

respondents disagreed with this statement, noting that the water is either obviously not changing or that it is in their eyes getting worse.

More people agreed (44%) than disagreed (34%) with the statement that "what people are doing in and around the lake is having a negative impact on the lake". In a sign of some pessimism, most people (56%) agreed that it is only a matter of time before invasive species take hold in the lake. In a somewhat related matter, about the same amount of people felt that public access to the lake should be more regulated, and several respondents related the use of the landing to their concern over invasives.

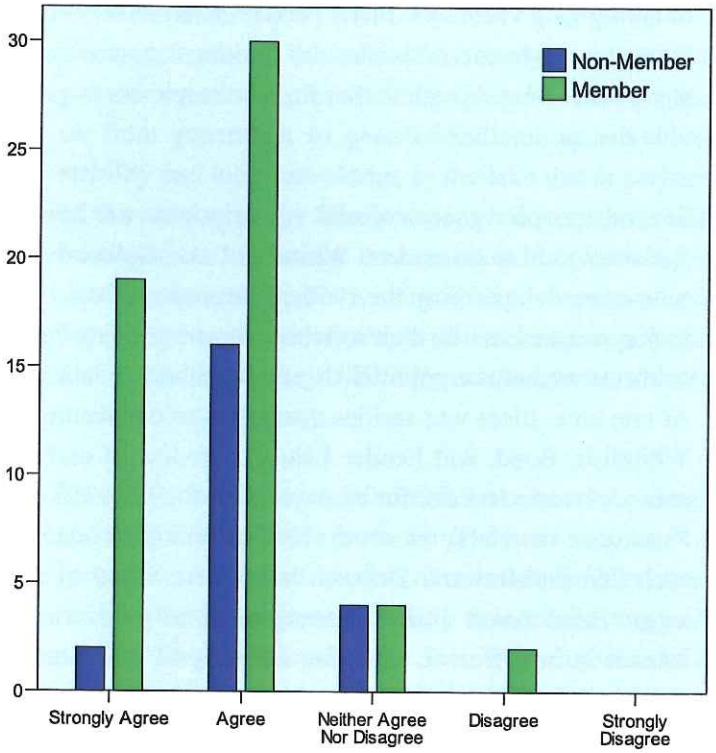


Figure 20. Responses to statement "If decisions need to be made between letting people do whatever they want with their property or protecting the lake's water and ecosystems, the lake should take precedence".

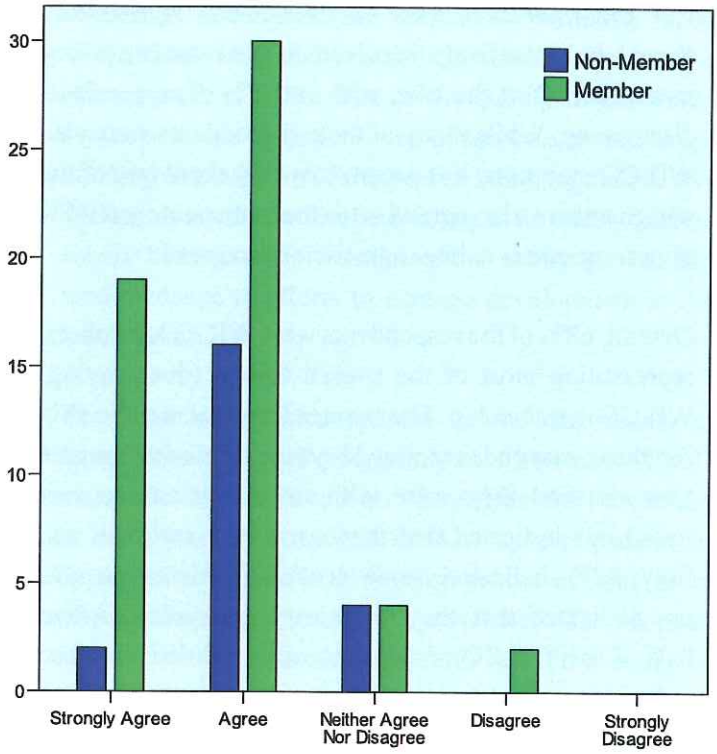


Figure 21. Responses to statement "The Whitefish Lake Conservation Organization should be proactively involved in government policy issues that affect the lake".

Table 5. Responses to statements concerning local decision making and the role of property owners.

	strongly agree	agree	neither agree or disagree	disagree	strongly disagree
I feel welcome participating in local government decision making	1%	42%	40%	14%	3%
I believe my views are considered fairly by local officials	0	35%	33%	38%	4%
I feel my input into local government decision making will not make a difference	5%	32%	23%	40%	0
The input of part-time residents into local government decision making is important	22%	73%	4%	1%	0
Part-time homeowners should not participate in local government decision making	0	3%	8%	60%	30%
The Whitefish Lake Conservation Organization should be proactively involved in government policy issues that affect the lake	22%	59%	14%	4%	1%

We also asked people about their perceptions of the decision-making process in the area. We summarized these responses in table 5. The strongest level of agreement came in response to the idea that the input of part-time residents into local decision making is important. Only one person indicated any disagreement with this statement. The second most agreed upon statement was that the Whitefish Lake Conservation Organization should be proactively involved in government policy issues that affect the lake, with only 5% of respondents disagreeing. While many of these respondents were also WILCO members, it is noteworthy that about half of the non-members also agreed with the statement, and 45% of non-members neither agreed nor disagreed.

Overall, 68% of the respondents were WILCO members, representing most of the overall formal (dues-paying) WILCO membership. The average length of membership for these respondents was 18 years. We asked people how satisfied they were with the organization; over two-thirds indicated that they were very satisfied, and fully 87% indicated some level of satisfaction. No one indicated that they were very unsatisfied. About half of the WILCO respondents reported that they had volunteered for lake organization activities, and about 17% of them indicated some interest in serving as a board member in the future.

A number of non-members expressed why they were not members. For a number of people in this group, the involvement by WILCO in local decisions has not been done in a manner that they agree with. As figure 21 shows, most people do agree that WILCO should be involved in local decisions that affect the lake, but there is disagreement over the positions that the organization should take and the conviction with which they argue those positions. Some view the organization as somewhat selective in the issues it chooses to champion and believe that the group focuses too intently on development and permitting matters. They expressed that the organization would remain unattractive to them until the agenda was broadened and greater consideration demonstrated for fellow property owners.

Unstructured Interviews

Kate Demorest and Kyle Slifka were able to meet with sixteen people around the lake for less formal, unstructured interviews. These were chances for people to let us know what interested them and provide more details about the lake's history.

These interviews provided a wide range of stories, issues and ideas. Several people shared their family's long history at the lake, discussing the closely-knit social scene that existed when families were still in the practice of taking long vacations. Many people lamented on how today's more hectic schedules are limiting longer stays at the lake and making it harder for lake neighbors to get to know one another.

Several people gave colorful descriptions of how decisions used to be made at Whitefish Lake. Before the state created the DNR in the 1960s, lake property owners took management into their own hands, manipulating the connections between Whitefish and neighboring lakes. At one time, there was serious discussion of connecting Whitefish, Bond, and Leader Lakes. A review of early area plat maps reveals, for example, that the Bass Lake Road once ran along the south shore of Whitefish Lake, such that Pickerel and Deborah lakes were a part of a larger Bond Lake. Today's arrangement of roads and lakes is quite different, signaling a high level of human modification around the lake with relatively unknown consequences.

A number of people discussed the relations on the lake, recognizing the debates that have occurred over the

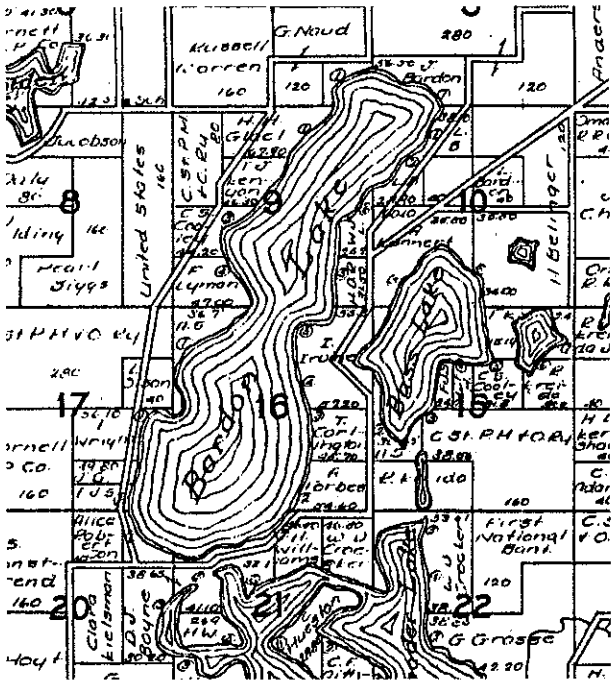


Figure 22. Detail of 1910 Whitefish (Bardon) lake area showing older road alignments

enforcement of shoreland zoning rules. Several people discussed in depth the strategic direction that WILCO has taken and expressed their support, recognizing that the lake needs advocates to ensure that the rules are enforced. Still, this has proven to be a challenge on a relatively small lake that affords little anonymity.

Summary Analysis

The people around Whitefish Lake know that they are a part of something special. Many properties are passed on from generation to generation, lending a level of stability and local knowledge to the lake that is perhaps as uncommon as the lake's deep, clear waters. It will be important to manage and maintain this knowledge through future transitions of property ownership. We heard from a number of people who acknowledged that due to their age, they will soon no longer be able to maintain their property.

The property owners at Whitefish Lake are on average good stewards of the resource. The vast majority of people are doing their part to ensure that the lake does not take a turn for the worse. Very few people informed us that they fertilized their lawns, and fewer still reported using phosphorus. This could be important, as phosphorus is the limiting nutrient for algae growth and the lake's current state is due largely to the low level of phosphorus it receives each year.

Many have participated in shoreland restoration projects. Boating around the lake, it is obvious that most people are content to keep as much shoreland vegetation in place as possible, making the lake appear less developed than it actually is.

Most people know that the qualities of Whitefish Lake are not to be taken for granted. They are concerned about development pressure and invasive exotics and the challenges these can bring to the lake. Many are already somewhat resigned to the notion that the infiltration of invasive species may be unpreventable. Some go so far as to suggest closing the public landing.

There are some among the Whitefish Lake property owners who are concerned about WILCO and the role of zoning regulations around the lake. While most people (over 80%) agree that WILCO should be involved in decisions affecting the lake, there are some people who would prefer that the organization maintain a broad agenda and spend less effort addressing specific building and zoning issues. This is a challenge for those who know first hand that the county is not always going to be aware of or particularly concerned about land use issues on Whitefish Lake. When those land use practices potentially impact the scenic qualities of the lake or the quality of the water, someone needs to be the voice of the lake, even though this may raise the ire of the person being regulated. The strong level of concern and interest in water quality, scenic beauty, and maintaining the status quo should lend credence to efforts to manage development in the lake's favor.

The issue of invasive species is one that seems to transcend whatever divisions may exist between WILCO members and non-members. Strategies for preventing or mitigating the impact of invasive species present an opportunity to build and develop on the existing level of cooperation and trust in the watershed. The adopt-a-shore program initiated by WILCO in 2006 is a step in this direction.

The uncertainty about water quality represents another opportunity. The ecology of water quality is not as "gin clear" as the lake's present state would suggest. We are continually learning more about the how the lake functions, and recent reports from the USGS,

Figure 23. View from top of Blueberry Hill across lake, c. 1945 (courtesy of Paddock family collection)

Wisconsin DNR, and others suggest that the lake's condition should not be taken for granted. The opportunity here is to develop a more sophisticated understanding of the lake and the factors that make it so desirable. Most people assess the lake's quality visually, casually noting the changes in color and clarity that result from changes in the algae community. Others have been involved with the DNR's self help program and they have been tracking clarity more carefully with Secchi discs and nutrient monitoring.

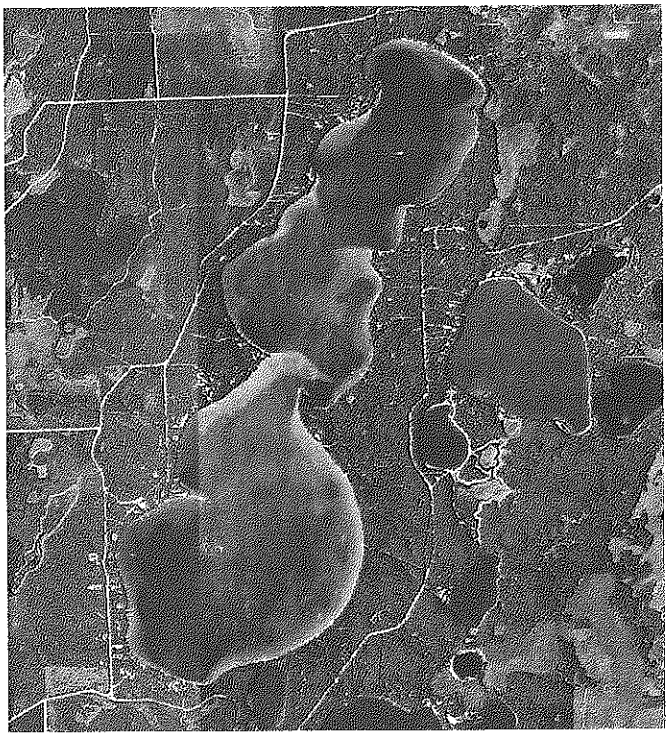


Figure 24. 2005 aerial image of Whitefish Lake

While some people around the lake understand the connection between phosphorus, algae, and water clarity, they perhaps don't appreciate the more complex relationships between plankton populations, the pelagic fishery, algae, and water quality. Explained in these terms, they may not want to appreciate this relationship! However, given the level of concern and interest in the lake, it is plausible that a richer ecological explanation of Whitefish Lake and its water quality would find a receptive audience among the shoreland residents. As this understanding develops, the people around the lake will have an opportunity to get to know their lake even better, understanding the amount of variation and change that is "normal" as well as the changes that could potentially reduce the lake's resiliency.

Overall, the interviews of 2005 support the effort to develop a proactive, long-term watershed management plan at Whitefish Lake. There's a high level of awareness regarding the lake's uniqueness, and a strong conviction that the current conditions need to be preserved. Still, we do not fully know or appreciate what it might take to make this a reality.

The planning challenge at Whitefish Lake brings to mind the Greek tragedy of Cassandra. Cassandra was cursed with the ability to foresee future calamity. Her curse was compounded by the Greek gods who saw to it that no one would believe her grim prophecies. Thus, Cassandra was doomed to see her terrible visions come true time and again.

At Whitefish, there are many people who want to break the curse, heed the warnings and do what can be done to head off trouble. Others view Cassandra as another chicken little and think that small changes cannot possibly make a difference to a lake the size and depth of Whitefish. Neither can be fully correct because the future is still in the making.

Breaking Cassandra's curse is doubly challenging in situations where real trouble may not be apparent for a number of years. This is because it will be difficult to distinguish between (1) a disaster averted by a prudent, proactive response and (2) a foretold disaster that never really could have occurred and so, not surprisingly, never does. The only resolution seems to be to ignore the warnings and see what happens, but then we have to face the potential loss, cost, and effort that would incur if the predictions did eventually come true. In the shadow of foretold disasters like the flooding of New Orleans, it seems less likely that people will want to take a casual wait and see approach.

In the short term, the majority of people around the lake indicate support for enforcing the zoning rules and taking other steps to ensure the lake's future. They wish to be prudent and proactive. In a longer term, it will be important to continually improve our collective understanding of how the lake's ecosystem operates. The lake community can use this knowledge and understanding to better detect abnormalities and act to protect the lake's resiliency. The lake ecology studies currently underway should provide a solid foundation for beginning this long term effort.