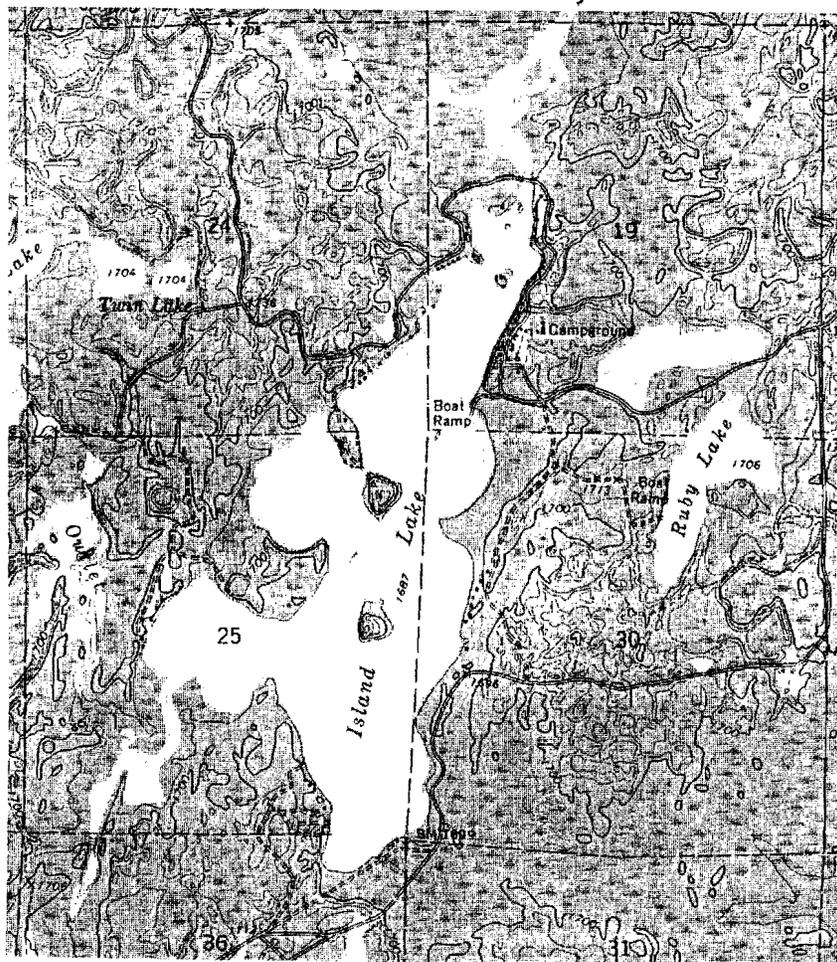


ISLAND LAKE SURVEY

Protecting Water Resources and Your Lake

Island Lake Property Owners Share
Their Views on the Value of Water Resources and Lake Issues



A Research Project Conducted by the
Iron County UW-Extension Office
1998

ISLAND LAKE SURVEY

Island Lake Property Owners Share Their Views on the Value of Water Resources

The Island Lake Survey was a joint project, initiated between the Iron County UW-Extension Office and the Price County Land Conservation Department, in 1997, to research how people view, value, and use water resources. The Island Lake project focused only on a survey of property owners on that lake and primarily on what they valued about their lake. The Price County project surveyed lakeshore property owners county wide and included more issues such as drinking water quality.

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ISLAND LAKE SURVEY

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BACKGROUND

This joint project, with the Price County Land Conservation Department and the Iron County UW-Extension Office, was initiated in February 1997, to research how people view, value, and use water resources. A survey of lakeshore property owners was chosen as the means to collect this information. By knowing more about the characteristics of shoreland property owners and what they value about water resources, researchers conducting this project hoped to find "common ground" between different water user groups. Establishing common values about the importance of water quality could improve future water resource planning efforts and help mitigate user conflicts.

In addition to asking about how people use and value Island Lake, other questions were posed to learn more about water quality issues facing Island and other Iron County lakes. Participants were asked about their perceptions about changing water quality and their opinions on changing Iron County's shoreland zoning regulations. Questions about septic system and drinking water system were included, at the Center's recommendation, to determine the potential for future water quality issues.

Island Lake was chosen as the location for this survey because of its unique location in Iron County and its mix of lake property owners and users. This 352 acre lake is located in central Iron County and is set apart from what is typically considered Iron County's "lake country". This "lake country" area, particularly the Town of Mercer, was extensively surveyed in the "Mercer's Future Project" in 1996 for Town planning purposes.

Island Lake has a unique mix of property owners including many long time local resident families owning vacation cabins, new full-time residents from out of the area, and non-local seasonal residents. Although traditionally considered a fishing lake, new uses including jet skis, sailing, and even sea planing are emerging. The Island Lake Association represents many of the lake owners interests.

The Iron County project differed from the Price County project, in that the Price County Land Conservation Department offered well water testing for survey participants as an extension of a program that began there in 1994. The Island Lake Survey did not offer this. The Price County project also surveyed lakefront property owners on 13 lakes, amounting to 303 surveys returned. The Iron County project focused exclusively on surveying the lakeshore property owners on Island Lake to learn more about what people valued in this water resource.

METHODOLOGY

To insure confidentiality of survey responses and to assist with data analysis, the University of Wisconsin-Extension Environmental Resources Center was contracted to administer a direct mail survey to all of the 108 households owning property on Island Lake, as identified by county tax records.

The Island Lake Survey was developed by Cathy Techtmann, Iron County UW-Extension Resource Agent, with assistance from Center researchers Robin Shepard and Ken Genskow.

Property owners were mailed surveys between January and March of 1998 with a cover letter from the Iron County Extension Office explaining the project's purpose. A stamped addressed envelope, returning the survey to the Environmental Resources Center was also enclosed. Participants were asked not to include their name on the survey to insure confidentiality of their answers. The surveys were coded to allow Center researchers to determine which property owners had not returned a survey.

Property owners not responding to the initial mailing received either a second or third reminder letter from the Center asking them to complete and return their survey. The "reminder letters" did garner an unbelievable 93% response rate on this survey. However, this persistence did get the ire of one participant who wrote back that the survey was "*an invasion of our property rights to locally (townships) govern our resources*".

SUMMARY OF FINDINGS

1. Enjoying peace & solitude and scenic enjoyment are activities that received the highest rates of participation as cited by an average of 90% of the Island Lake property owners who participated in this survey. These activities were also the most highly valued by respondents and represent values that are held in common by different user groups. "Enjoying the view, peace, and tranquility" was the top reason why respondents owned property on Island Lake. In terms of how the awareness of other people using the lake is affecting their peace and tranquility, the majority of property owners (60%) said it was receiving moderate use and/or they experienced few disturbances.
2. The water quality and its scenic beauty were rated as Island Lake's most highly valued attributes. To protect these values, 51% of property owners surveyed said that hours and/or areas should be designated for different uses of the lake.
3. Island Lake property owners more highly value fishing, with 45% saying it is among their top three activities, than have respondents in other lake research conducted by UW-Extension that found that fishing is not among the top reasons why people enjoy lakes. Two-thirds of respondents rated the lake's fishery as "fair" to "very good".
4. Fifty-six percent (56%) of property owners surveyed maintain a natural, undeveloped landscape as a buffer where their property meets the lake. Eighty-three percent (83%) said that they use a natural vegetative buffer to manage run-off water from their property to the lake. Maintaining a natural shoreline buffer zone is critical to maintaining water quality, wildlife and fish habitats, and the scenic beauty of Island Lake-- attributes which are highly valued by property owners.
5. Forty-one (41%) of respondents said that the quality of their experience on Island Lake has been "degraded" or "considerably degraded" since they first became familiar with the lake. The most significant changes noted in the lake were frequent to occasionally large fluctuations in water levels and occasional algal blooms.
6. When asked if changes in Iron County's shoreland zoning ordinance, to increase minimum lot sizes, setbacks, and allowable vegetative cutting would affect the value of their property, three-quarters of the respondents indicated they would either "not change" its value or would "increase" to "greatly increase" it.

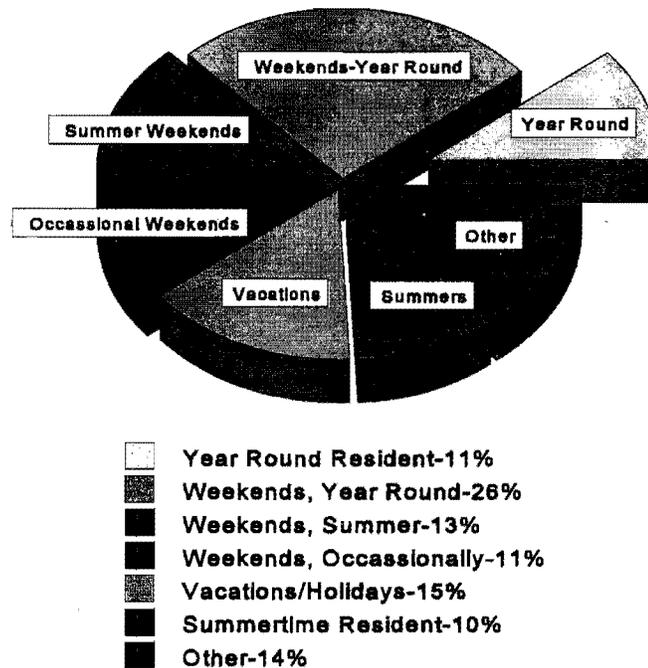
7. Slightly less than 25% of respondents who owned undeveloped shoreline, said they would consider using a conservation easement or land trust to preserve this property from being developed.
8. Almost half (49%) of property owners were uncertain how they felt about the level of lakeshore development occurring in northern Wisconsin and Iron County. Occasional lakeshore property users, including summer-time residents, and respondents who most valued observing wildlife and enjoying the scenery were the least in favor of this development trend.
9. Respondents favored that authority over managing Island Lake rest with local residents or the local lake association. Fifty-six percent of respondents said that they are lake association members.
10. Despite 84% of homes and cabins included in this survey being built before 1960, property owners appear to be doing a good job in maintaining their septic systems and holding tanks. Although a high percentage of properties, 44%, use a privy/outhouse as their main sanitary system, 95% of these systems are used with a seasonal home and may not pose a threat to water quality.
11. When asked what 3 things respondents would change about Island Lake, the following were the most frequently suggested:

General:	<i>Improve roads, noise ordinance, regulate/ban planes,</i>
ATV's:	<i>Ban ATV's, snowmobiles, trails. Reduce/prohibit trailers</i>
Boat & Jet skis:	<i>Regulate or limit motor size; regulate or ban jet skis, waterskiing; educate jetskiers</i>
Development Issues:	<i>Protect undeveloped land, stop building, limit/manage development, get rid of strict zoning, zoning laws, bigger lot sizes</i>
Fishing:	<i>Stock fish, reduce limits, excessive walleyes, no spearfishing</i>
Land Issues:	<i>Erosion control, shoreline issues, appearance of home, demolish old buildings, more state-federal land, control litter and dumping</i>
Water Quality:	<i>Regulate and upgrade sanitary systems, limit (lawn) chemical use, lake water level, improve water quality</i>
Resource Management:	<i>Stop/regulate clear cutting, deer management</i>

FINDINGS

Island Lake Property Owners

Figure 1. When Are You Most Likely to Use Island Lake?



The average number of years that participants said they either lived at or visited Island Lake, whether year 'round or seasonally, was 27 years. The average age of respondents was 55 years old.

Island Lake property owners tend to be occasional users. Only 11% of those surveyed said that they are year 'round Island Lake residents. The majority of respondents use their Island Lake property occasionally-- the largest percentage, 26%, said mostly on the weekends. Only 10% said that they were full time summer or "seasonal" residents.

The higher weekend use levels suggest that there may be a lower impact on lake water quality, due to the more infrequent use of septic systems and domestic water use, than if there were a higher percentage of year 'round residents. It also suggests a higher level of lake activities being concentrated on the weekends which may generate more user conflicts.

Those who were not year 'round residents drove an average of 226 miles, one way, from their permanent residence to get to their Island Lake property.

Island Lake property owners are primarily from Wisconsin, with a high percentage being from within the Iron County area. Of the property owners indicating a home Zip code, 57% were from Wisconsin, 33% resided in northern Wisconsin. Nineteen (19%) of Wisconsin respondents said their permanent address was in Iron County and 4% of the respondents were from neighboring Upper Michigan counties. Only 9% of respondents lived in Illinois and only 4% were from Minnesota. A large percentage, 21%, of respondents did not list their home Zip code.

Participating in Activities on Island Lake

The survey asked property owners about activities that they participate in on Island Lake. This information was used to put survey participants into "Activity Groups" based on their interests.

Figure 2.
Activities Respondents Participated In That Depended on Island Lake
(within the past 12 months)

Top 5 Activities (with participation rates above 65%)	
	% of Respondents Indicating Participation
Peace & Solitude	91%
Scenic Enjoyment	89%
Fishing (includes ice fishing)	78%
Wildlife Observation	73%
Motor or Pontoon Boating	69%

Other popular activities respondents said they participated in that depended on Island Lake were:

- Entertaining Friends- 63%
- Swimming/Scuba Diving- 56%
- Hunting- 52%
- Canoeing/Rowing/Kayaking- 43%
- Picnicking- 32%
- Hiking- 31%
- cross country skiing- 31%
- Snowmobiling- 30%

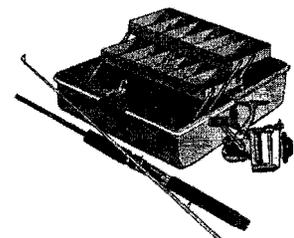


Figure 3.

Activities With the Lowest Participation Rates (Activities with less than 20% participation)	
Water Skiing	16%
Sailing/Windsurfing	9%
Personal Water Craft (Jet Skiing)	5%
Ice Skating	5%

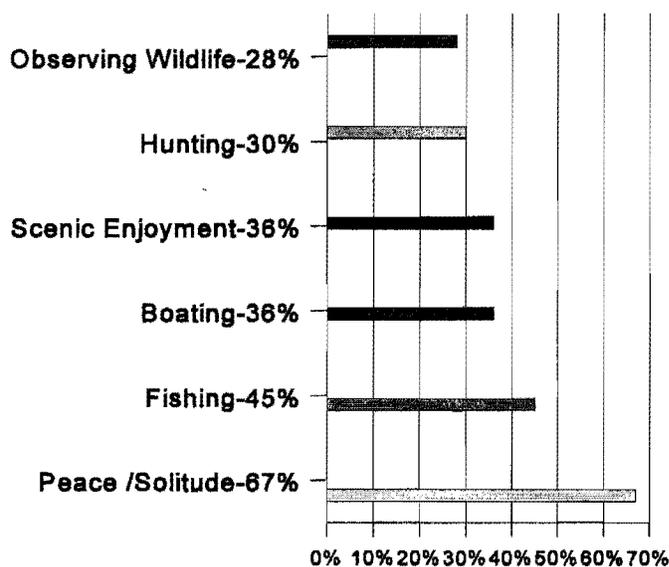
Based on these results, respondents were placed in the Activity Groups for future questions that examined how different interest groups value Island Lake:

Activity Groups

- Anglers- property owners who said they fish
- Paddlers- property owners who said they canoe, kayak, or sail
- Motorers- property owners who motor or pontoon boat or waterski
- PWC Users- property owners who said they drive a jet ski

Figure 4.

What Are The Three Activities on Island Lake That You Most Value? (All Respondents)



A goal of this study was to examine what people value about their lake, not only what activities they do there.

This survey reinforces the high value placed on peace and solitude and scenic beauty that lakes provide to property owners. Over two thirds of all respondents most value the peace and solitude Island Lake offers them.

A 1994 survey done of 2334 people, conducted through the UW-Extension Lake Tides bulletin, found that 78% listed natural beauty and peace and quiet as their top reason for enjoying lakes.

Fishing was also a highly valued activity by 45% of Island Lake property owners. The Lake Tides survey indicated that only 14% of their survey respondents valued fishing as a top reason for enjoying lakes.

Let's take a closer look to see how people in different Activity Groups value different types of recreation that Island Lake offers.

Figure 5.

<u>Activity Group</u>	<u>Percentage That Value These Top Ranked Activities</u>				
	<i>Solitude</i>	<i>Fishing</i>	<i>Boating</i>	<i>Scenic</i>	<i>Hunting</i>
Anglers	90%	100%	83%	91%	57%
Paddlers	95%	90%	76%	90%	48%
Motorers	89%	94%	100%	88%	51%
PWC's	100%	100%	100%	100%	80%

Note: "Scenic" refers to scenic beauty. PWC refers to personal watercraft use.

Each of the Activity Groups, whether they preferred motorized or non-motorized recreation, highly valued enjoying the solitude and the scenic beauty of Island Lake. This points to two environmental attributes where even people with divergent activity interests may find they agree.

Fishing was also a highly valued activity, by all groups. Motorized Boating was less valued by the Paddlers representing the "silent" watersport users, than it was by Anglers who more frequently use motorboats in their activities.

Contrary to what might be expected, people who participated in jet skiing most highly valued the peace and solitude of Island Lake of any activity group. Caution must be used in drawing conclusions from this data due to the very small size of the sample group (only 5 respondents). These PWC users are also Island Lake property owners and may have different values about a lake than would a transient jet ski user.

Common values between water user groups, that are traditionally considered "in conflict" with each other due to the nature of the activities they enjoy, could point to areas where agreement over use of lake resources could begin.

What Do You Value About Island Lake?

Respondents first were asked to indicate the relative value they place on a number of attributes of Island Lake. Then they were asked to rank which they felt were the top three attributes.

Figure 6. How Much Do You Value the Following Attributes of Island Lake?

Attribute	Not	Somewhat	Very	
	Important	Important	Important	Important
	-----Percentage of Respondents-----			
Quality of Lake Water	2%	1%	13%	84%
Investment Potential of property	13%	19%	42%	26%
Size of Lake	4%	8%	53%	35%
Family Tradition of coming here	9%	9%	21%	60%
Quality of Fishing	2%	13%	41%	44%
Investment potential of <u>your</u> property	11%	29%	33%	27%
Low numbers of people using lake	4%	7%	26%	63%
Scenic Quality around this lake	1%	1%	10%	88%
Neighbors or acquaintances here	6%	18%	29%	47%
Other	0%	0%	11%	89%

The quality of the water resource was the most highly valued attribute of Island Lake by all respondents.

Low numbers of people using the lake was highly valued. As will be discussed later in the survey, the majority of Island Lake property owners (60%) who were surveyed felt that the lake received only moderate use to few disturbances. Seventy-one percent (71%) were satisfied with the current level of development.

A family tradition of coming to Island Lake was valued even more highly than the quality of fishing. Given that the average number of years participants visited or stayed at Island Lake was 27 years, tradition plays an important part in valuing this lake.



Figure 7.
Top 3 Most Highly Valued Attributes About Island Lake

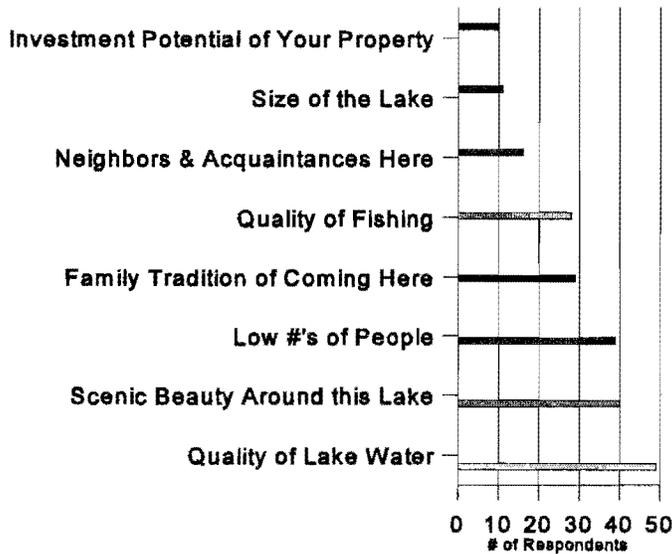


Figure 7 shows the level to which each attribute was selected as one of the top three that respondents valued. Looking at the lake's attributes in this manner, the quality of fishing falls in priority to other attributes including water quality, scenic beauty, low numbers of people, and family tradition.

The water quality of Island Lake and its scenic beauty were ranked as being the most highly valued of all attributes.

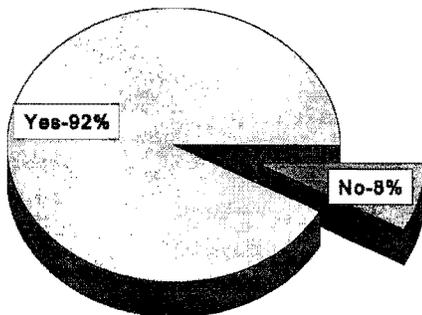
Based on what respondents said they valued about Island Lake, they were divided into the following "Value Groups":

- Value Groups**... Respondents whose
- "Peace"- top three values included peace & solitude
 - "Motoring" - top three values included motor boating
 - "Fishing"- top three values included fishing
 - "Scenery"- top three values included scenic beauty
 - "Wildlife"- top three values included observing wildlife

MANAGING YOUR ISLAND LAKE PROPERTY

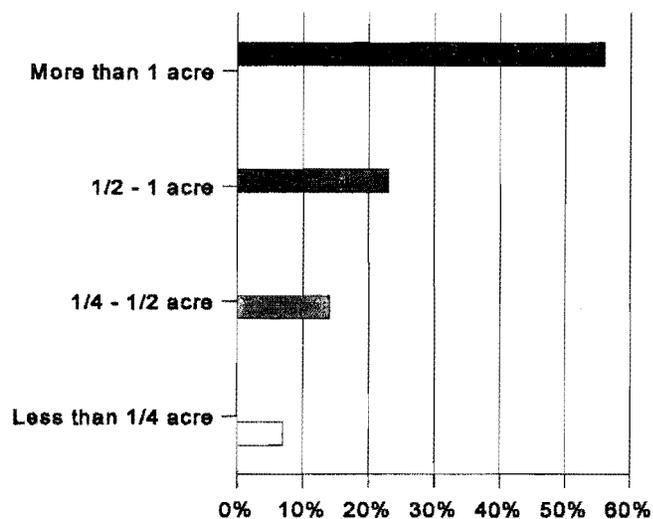
Property owners were asked a series of questions relating to their shoreland property. The intent of these questions was to learn more about factors that could effect lake water quality.

Figure 8. **Do you have property that borders the lakefront or shoreline?**



The majority of property owners (92%) owned land that bordered Island Lake. Of the 8% who said they did not own shorefront, 82% said that their home was within 1/4 mile of the lake and 81% said that they had deeded access to the lake.

Figure 9. Percentage of Lakeshore Property Lot Sizes
(Lakeshore property owners only)



Over half of the lakeshore property owners owned over 1 acre of land on the lake. The average number of acres owned was 9 acres, with the largest acreage being 54 acres. All of this property (100%) was owned, not leased.

Larger lot sizes typically means that there is less pressure on the lake's water quality. Larger lots mean fewer homes with and fewer septic systems. There is usually more space to maintain vegetative buffer areas that help to filter run-off water and nutrients.

Figure 10. Percent of Lakeshore Structures and Average Year of Construction

Structure	Year Constructed (average)	% Existing
Winterized House	1969	29%
Boathouse	1954	10%
Private Dock/Pier	1977	66%
Summer Cottage	1953	63%
Detached Garage	1976	70%

The oldest structures on Island Lake date back to the 1920's while the newest were constructed as recently as 1997. Eighty-four percent (84%) of the homes and cottages were built before 1960.



Figure 11. Shoreland Zoning Characteristics of Island Lakeshore Property

Average Distance of Home from Water	73 ft.
Average Height of Home Above Waterline	16 ft.
Average Amount of Shoreline Owned	243 ft

The distance from the home to the water line or “setback” is regulated by state and county zoning ordinances. It is required to be a minimum of 75 feet. However, Island Lake has older cottages and homes that pre-date these zoning codes which would account for setbacks that are closer.

The average setback for Island Lake property owners completing this survey was 73 feet. The range of setbacks varied from a minimum of 2 feet to a maximum of 100 feet. By restricting building at the water’s edge, setbacks also help to preserve the natural look of the lake’s shoreline and allow all neighbors an unblocked view.

The setback distance and how it is maintained is important to a lake’s water quality, diversity of wildlife, and visual characteristics. The setback establishes a vegetative buffer zone which is important for keeping nutrients from running off the land and into the lake. This is also an important area for providing habitat for wildlife and aquatic species

Figure 12.
How Do You Manage Your Property’s Setback Area?
(Percent of Lakefront Property Owners)

Maintain this area as lawn	56%
Keep it undeveloped, natural landscape	50%
Landscape it with trees and shrubs	17%
Use retaining wall(s) or terraces	7%
Use rock gardens or masonry areas	8%
Keep it as sand/developed beach	8%

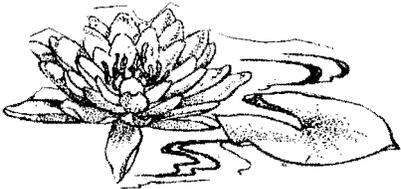
Island Lake participants were asked to check all of the shoreline management options they practice; therefore percentages in Figure 13 exceed 100%. A survey conducted in Price County in 1997 of 303 lakefront property owners, indicated that only 27.9% said that they still are maintaining a lawn to the water’s edge, while 40.6% keep a natural shoreline. In comparison, a much larger percentage of Island Lake owners (56%) said

they maintain a lawn surface down to the water's edge, while 50% said they keep it natural.

Research shows that an undeveloped buffer strip of natural plants, at least 25 feet in width, has the greatest beneficial effect on filtering nutrients from getting into lake water and for providing wildlife habitat. A lawn offers some filtering capability, but like retaining walls and masonry, it does not provide wildlife habitat or cover. If fertilizers are used on the lawn, they can run-off into the lake and fertilize lake weeds, lessening water quality.

Figure 13. What Best Describes the Area Where Your Property Meets the Lake?

Undeveloped, natural landscape	56%
Lawn	17%
Riprap (for stabilization)	14%
Landscaped trees and shrubs	4%
Masonry/concrete retaining wall	0%



The "riparian zone", the edge between the water's surface and the land, is critical to maintaining healthy lakes and the diversity of fish and wildlife. Natural riparian zones help filter run-off and erosion which can fertilize undesirable lake weeds, eliminate natural weed beds, and fill fish spawning areas with sediment.

From the results shown in Figure 13, it appears that the slightly over half of Island Lake property owners who were surveyed are maintaining a natural shoreline. Less than 20% report lawn surfaces to the water's edge. Lawn grass provides some filtering, but water tends to "sheet" off of it carrying lawn fertilizers and sediment into the lake.

Figure 14. How Do You Manage Water Run-off From Your Property Into the Lake?
(Percent of Lakeshore Property Owners)

Undeveloped, natural vegetative buffer	83%
Landscaped vegetative buffer	31%
Grass drainage ditch to divert run-off water	6%
Drainage tile	7%
Storm sewer inlet	0%

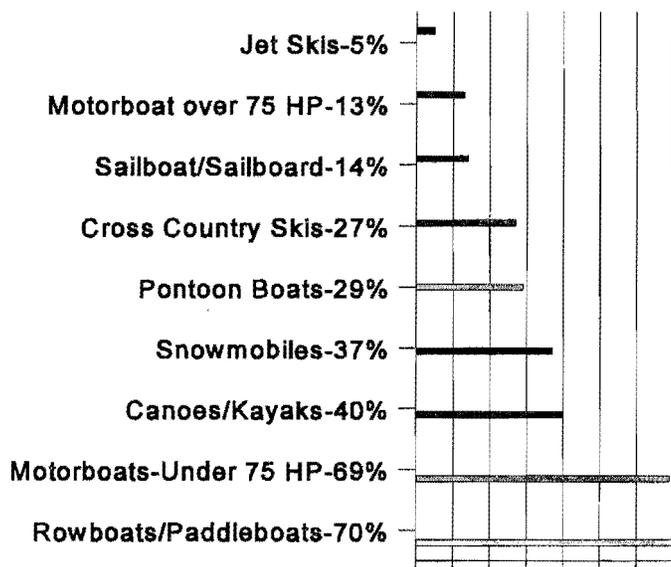
Natural vegetative buffers provide the best protection for slowing the velocity of run-off water and filter the nutrients it contains before it reaches the lake. Eighty-three (83%) of Island Lake property owners are using this system of managing run-off water.

ENJOYING YOUR LAKE PROPERTY

Survey participants said that they lived on or visited their Island Lake property an average of 23 years. This is compared to 18 years that was indicated in the companion survey of Price County lake property owners. These findings speak of the affinity Island Lake respondents have to their lake property.

The average number of people regularly using their Island Lake properties, at one time, was 4 people. Last year the average rate of use for Island Lake properties included in this survey was 12 adults and 6 children per year.

Figure 15. **Types of Recreation Equipment Used At Your Lakeshore Property**
(By percent of all respondents)



Ownership of recreational equipment provides insight into the types of activities lakeshore property owners value.

Almost the same percentage of respondents own "manually" powered rowboat/paddle boats as did those with moderate sized motorboats under 75 HP. Only 13% use larger powered motorboats in excess of 75 HP. Only 5% use a jet ski.

Compared to the Price County Lake study, Island Lake respondents tend to use more non-motorized type craft such as row/paddle boats, canoes/kayaks, and sailboats.

Island Lake owners kept more snowmobiles reflecting the winter recreational use of their property.

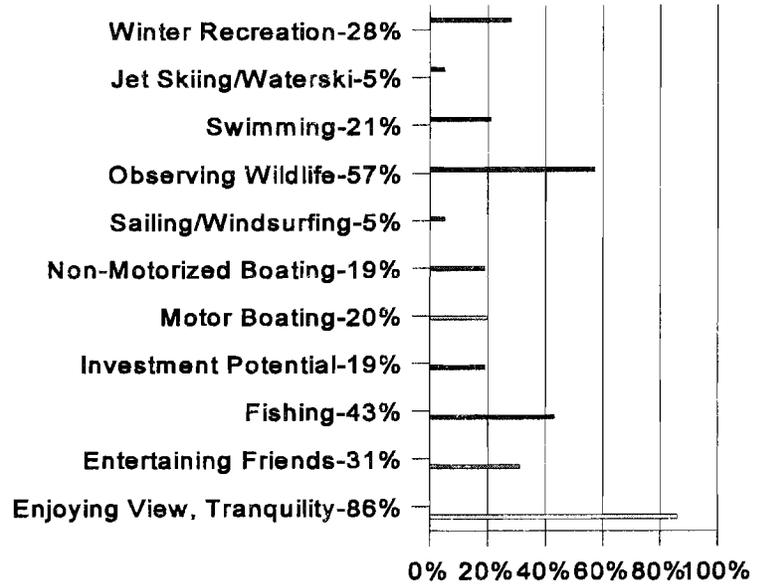


Price County Lakes Survey	% Used On Lakeshore
Motorboats under 75 HP	76%
Row or Paddle boats	50%
Canoes, Kayaks	36%
Pontoon Boats	34%
Snowmobiles	25%
Motorboats above 75 HP	18%

Figure 16.
**Activities Rated "Very Important" to the Decision to Own/Lease
 Island Lake Property**

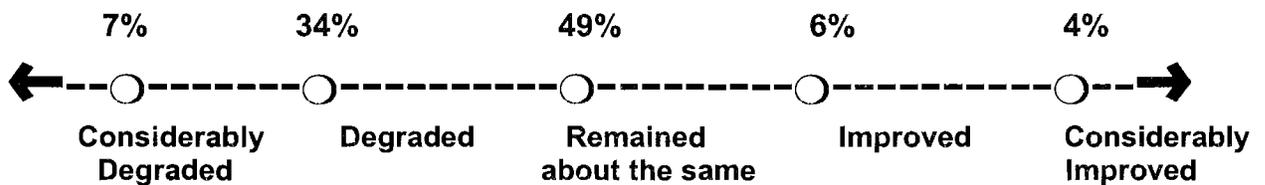
Why do people own Island Lake property? The view of the lake, peace, and tranquility were considered "very important" to 86% of participants decision to locate here. These findings are consistent with other lake research that points to natural beauty as the #1 reason why people purchase lakeshore property.

Observing wildlife was also considered very important by over one-half of all respondents. The management of shoreland property has a direct impact on the amount and diversity of wildlife that inhabit lakeshore areas.



Fishing was more highly valued as a reason for investing in and owning Island Lake property. The importance of fishing to Island Lake property owners and users emphasizes the need to maintain water quality, promote fisheries management, and allow for recreational opportunities to enjoy this resource.

Figure 17.
**How Has The Quality of Your Experiences On Island Lake Changed
 Since You First Became Familiar With This Lake?**



While almost 50% of respondents felt that the quality of their experience on Island Lake has remained the about the same as when they first became familiar with the lake, 41% felt it had either been "degraded" or "considerably degraded". Only 10% felt that their experience had "improved".

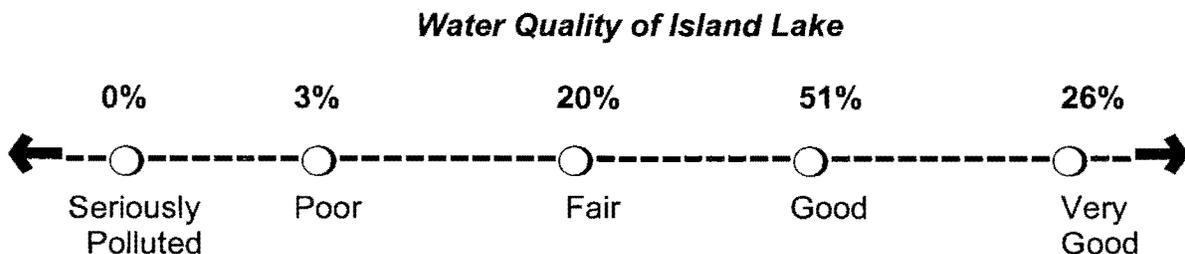
A series of questions were asked to determine how changes in Island Lake could have a bearing on the property owner's quality of experiences.

Figure 18. **Percentage of Respondents Observing Lake Quality Changes**

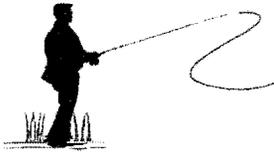
	<u>Never</u>	<u>Occasionally</u>	<u>Often</u>
Algal Blooms	36%	51%	13%
Excessive Lake Weeds	53%	38%	9%
Sedimentation due to Power Boats	67%	25%	8%
Large Fluctuations in Water Levels	21%	54%	25%
Erosion from Man-Made Waves	55%	33%	12%
Fish Kills	86%	13%	1%
Unusual Water Smell or Color	82%	15%	3%
Failing Septic Systems	89%	10%	1%

Fluctuations in water levels was the most significant observation noted by 79% of those surveyed who reported this occurring either "occasionally" or "often". Algal blooms, indicative of nutrient rich lake water, was indicated as an "occasional" problem by 51% of lake property owners who were surveyed and only 13% who observed this "often". The majority of participants said they "never noticed" other "symptoms" of water quality problems such as an unusual smell, failing septic systems, fish kills, excessive weeds, and power boat sedimentation.

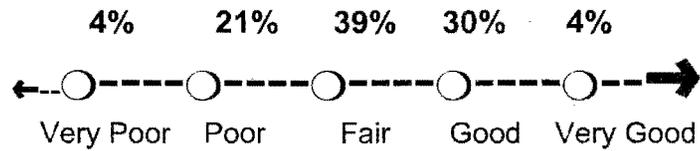
Figure 19.
Percentage of Respondent's Perceptions of Island Lake



The majority of respondents (77%) agreed that Island Lake's water quality was either "good" or "very good".

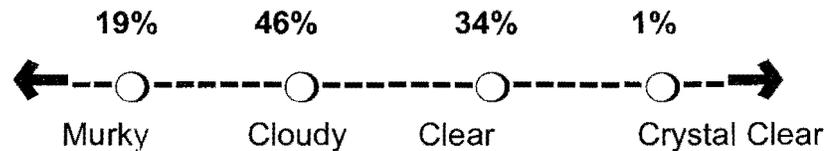


Fishery of Island Lake



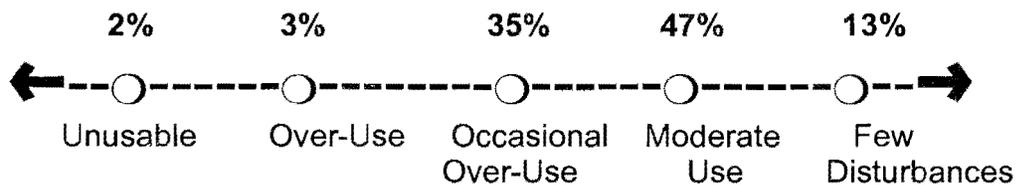
Fishing can always be “better”, but around 66% of participants felt Island Lake’s fishery was at least “fair” to “very good”.

Water Clarity During Summer Months



While 77% of those surveyed said that the water quality is “good” to “very good”, 65% say that its clarity is “murky” to “cloudy”. Island Lake’s water, like many Iron County lakes, is “stained” or tea-colored as a result of surrounding wetlands and decomposing vegetation. In the 1970 Wisconsin Department of Natural Resources “Surface Waters of Iron County” book, Island Lake is listed as having “slightly alkaline, medium brown water of moderate transparency.” This coloration does not negatively affect water quality in itself.

Peace & Tranquility as Measured by Awareness of Other People



- Unusable- Too much noise and activity to enjoy lake
- Overuse- Excessive noise and activity of others
- Occasional Overuse- Some disturbances of my enjoyment
- Moderate Use- Easy to share lake with others
- Few Disturbances- Rarely see/hear others

Most property owners (60%) also felt that Island Lake is currently receiving moderate use, or they had experienced few disturbances, and that it is easy to share the lake with others. Only 5% felt that Island Lake was “over-used” or “unusable”.

Figure 20.
**Percent of Respondent's With Opinions About
 The Amount of Housing & Cabin Development on Island Lake**

	Strongly Disagree	Disagree	Agree	Strongly Agree
This lake could accommodate more development	44%	24%	28%	4%
This lake has the right amount of development	2%	27%	48%	23%
This lake is overdeveloped	8%	50%	31%	11%

The majority of respondents (71%) either agreed or strongly agreed that Island Lake currently has the right amount of development. Less than half respondents (42%) agreed or strongly agreed that the lake is overdeveloped. Only 32% felt that the lake could accommodate more development.

OPINIONS ON SHORELAND ZONING ISSUES

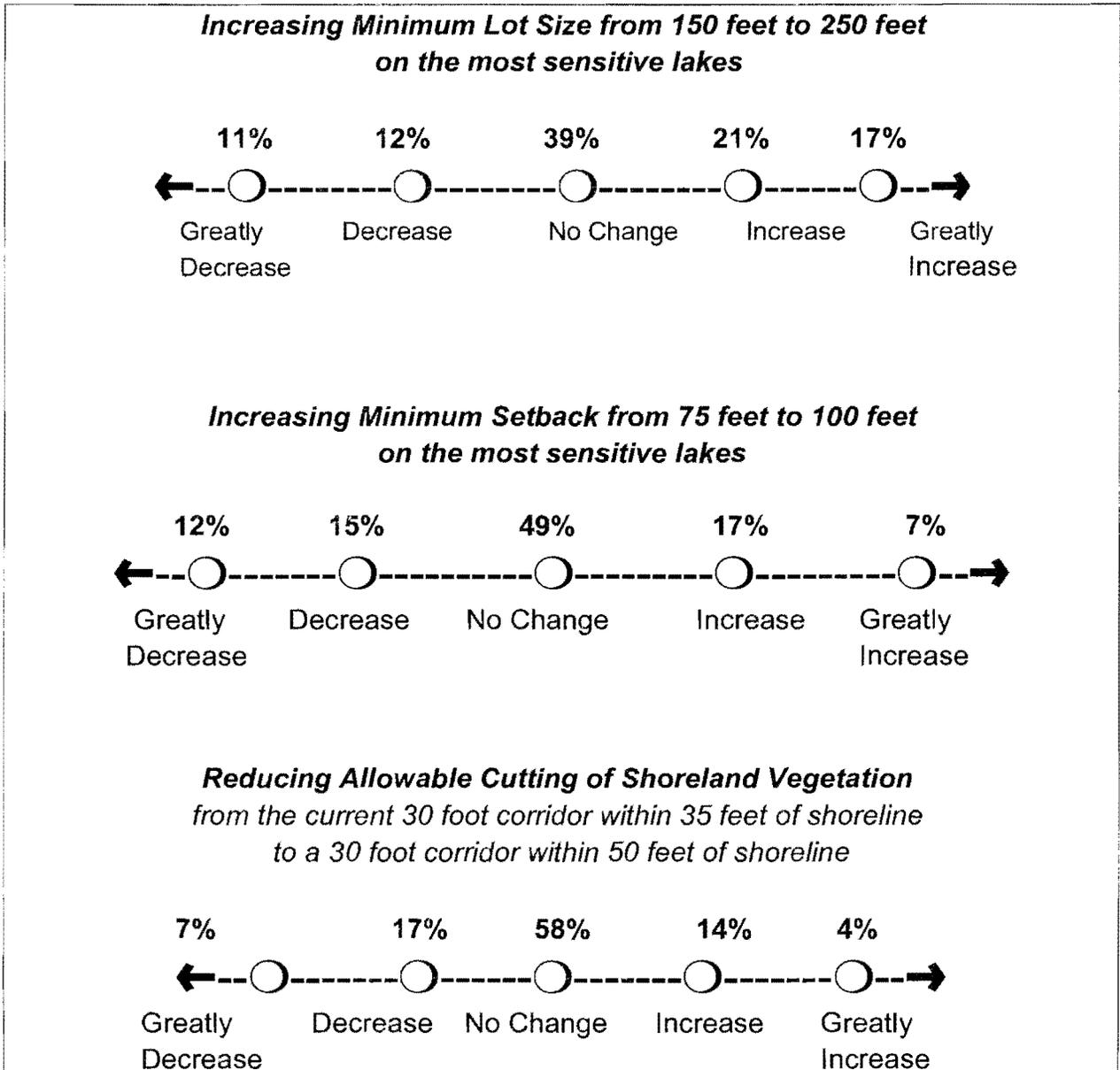


Since the date that this survey was mailed to Island Lake property owners, the Iron County Zoning Committee has amended the county's Shoreland Zoning Ordinance. The county's lakes have been categorized into two classes based on 6 biological factors that make lakes more vulnerable to degradation due to development pressures.

The new ordinance increases the minimum lot width on lakes classified as Class 1 Lakes (Least Vulnerable) from a minimum of 150 feet to 200 feet. On Class 2 Lakes (Most Vulnerable) and all rivers, the minimum lot width was increased from 150 feet to 300 feet. The changes pertain only to new shoreland development and do not affect lots of record.

Under the new County Shoreland Zoning Amendment, Island Lake is classified a Class 1 Lake (Least Vulnerable). The minimum lot size, for new lots, is now 200 feet.

Figure 21.
How Would Proposed Zoning Changes Would Effect Your Property's Value?

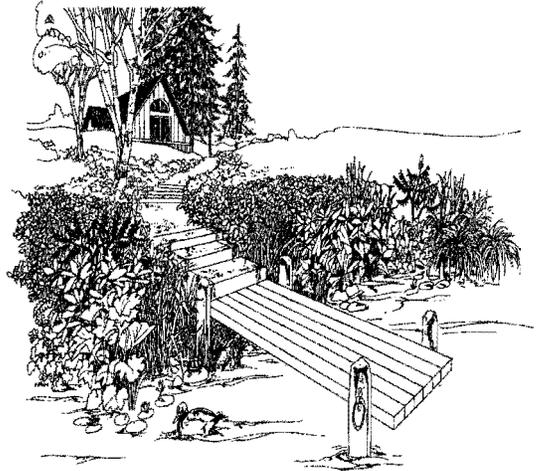


Respondents were not asked if they support these zoning changes, but their opinion of how such changes might affect the value of their waterfront property. For each of the proposals posed in the survey, over three-quarters of Island Lake property owners surveyed felt that these shoreland zoning changes either would **not change** their property's value or would **increase** or **greatly increase** it.

Seventy-seven percent (77%) of participants said that the effect of increasing the minimum lot size on sensitive lakes to 250 feet to the value of their property would be either "no change" or would "increase" to "greatly increase" its value.

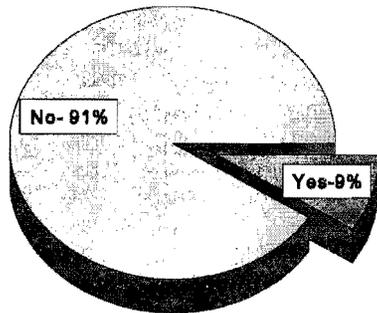
Almost one-half (49%) said that increasing the setback from the state mandated 75 feet to 100 feet, on the most sensitive lakes, would not change the value of their waterfront property. Twenty-four (24%) felt that it would either "increase" or "greatly increase" its value.

The issue of shoreland vegetation removal is an important one since it deals with two critical concerns of shoreland property owners: their ability to view the lake and the need for vegetation to buffer the shoreline area and maintain the natural beauty of the lake. The majority of respondents (58%) felt that reducing allowable cutting of shoreline vegetation would cause "no change" in their property's value. Twenty-eight (28%) believed it would "increase" or "greatly increase" their property's value.



CHANGING DEVELOPMENT PATTERNS

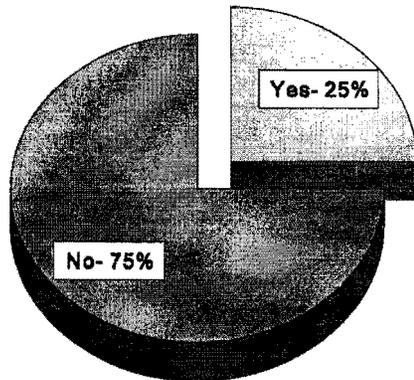
Figure 22.
Percent of Respondents Planning to Sell Island Lake Property



As might be expected from a group of property owners with strong family histories tied to this lake, there is limited property turn-over. The majority of respondents (91%) indicated that they did not intend to sell their shoreland property within the next 5 years.

Of the 9% (totaling 8 respondents) who said that they did intend to sell, the average amount of frontage per potential seller amounted to 256 feet.

Figure 23. **Percentage of Respondents Owning Undeveloped Shoreland Property**



Only one-quarter of participants said that they owned undeveloped shoreline.

Preservation of undeveloped shoreline can help maintain a lake's natural beauty, improve wildlife habitat, and help reduce development pressure.-- all shown to be important values to Island Lake property owners.

However, the increasing value of shoreland and escalating property taxes can also make it increasingly unaffordable for landowners to retain these properties in an undeveloped state.

Some new tools, such as "conservation easements" are being used to both preserve shoreland property while providing a financial incentive for property owners to do so. The survey asked about respondent's willingness to these tools use which are voluntary and require the cooperation of the property owner and a qualified organization such as a "land trust".

Conservation easements, the purchase of development rights, and the use of land trusts have not been extensively used in Iron County. In other areas of Wisconsin, these are among the newest tools/methods to preserve unique shoreline areas while providing tax incentives to property owners.

Using a "conservation easement" the property owner sells some or all of the "development rights" to a parcel of land while still retaining ownership to the property. Land use is limited to activities agreed upon by the landowner and are typically conservation oriented. In exchange for "selling" development rights, the landowner preserves the land and can qualify for property and income tax deductions. Property owners may also sell or donate their property to a "land trust" or other qualified organization for conservation management. If the organization is non-profit, the value of the donation may be tax deductible, plus the land is permanently protected.

Figure 24.
**Respondents Interested In
 Placing Their Undeveloped Shoreland Property in
 a Conservation Easement or Land Trust**

(Only those respondents owning undeveloped shoreline)

Of the 23% of property owners who said "yes" to considering a conservation easement or land trust to preserve their undeveloped shoreland property, 60% said that they might use a conservation easement to protect that property.

Thirteen percent said they would consider these shoreline preservation options if a financial incentive was offered.

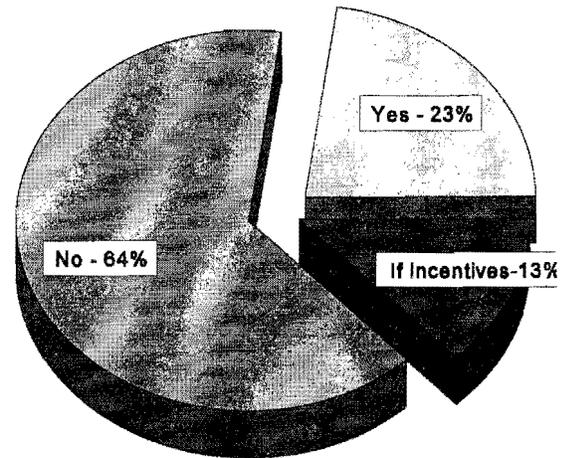
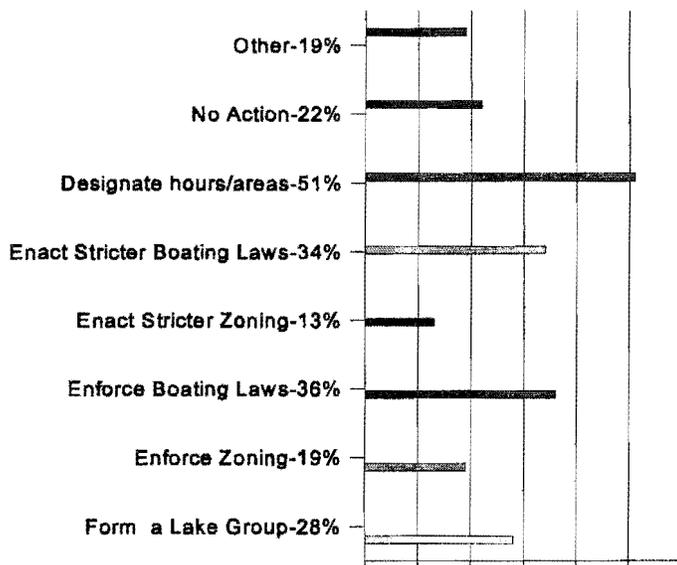


Figure 25.
**What do You Feel Needs To Be Done to Protect What You Value
 About Island Lake**

(Percentage of all Respondents)



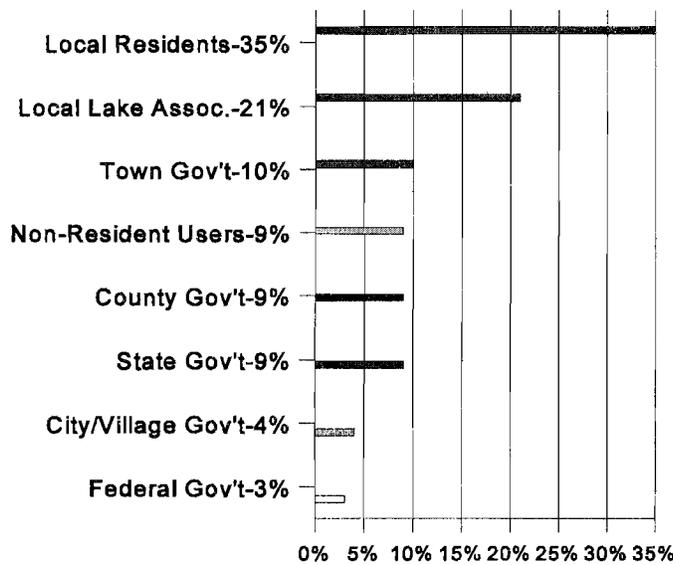
This survey has already established the importance of Island Lake's peace and tranquility, scenic beauty, and water quality as common values among all activity, frequency of user, and value groups.

The majority (51%) of all respondents felt that to protect what they value in Island Lake, hours or special areas should be designated for different lake users, such as jet skiers and fisherman. Designating hours of operation for certain watercraft is being used with more frequency, by Town ordinance, to accommodate conflicting water uses.

Slightly over one-third (36%) said the better enforcement of existing boating and water regulations would help. The majority of property owners surveyed seemed satisfied with the ability of existing zoning regulations, with 19% suggesting better enforcement. Only 13% said they wanted stricter zoning regulations than presently exist.

Forming a lake group to improve voluntary cooperation was suggested by 28% of participants. Island Lake already has a lake association, and this response may suggest that some property owners are still unaware of its existence. Or it may suggest that this issue is one that the Island Lake Association can provide leadership on, if it is not already being addressed.

Figure 26.
In Percentage, How Much Authority Should the Following Groups Have In Managing Island Lake?



Results to this survey question show that Island Lake property owners clearly favor local control over town, county, or other governmental control.

Each of the different lake groups all preferred control by local residents. The group most favoring local resident control were all-year lake residents, with 56% in favor. Summer-only residents were equally divided between favoring local resident control and local lake association control.

By state statute, Iron County is responsible for establishing and enforcing zoning regulations within the shoreland area; that is, the area within 1000 feet of a lake. Local residents and the lake association, working together, can still have great influence on zoning regulation decision making.

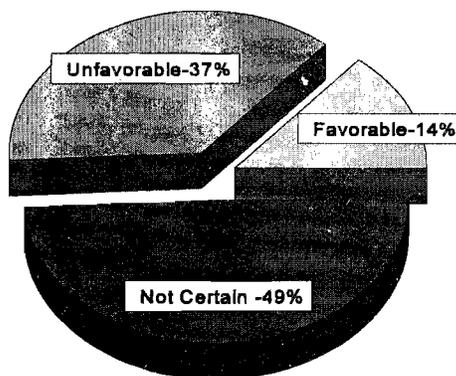


Figure 27.
How Do You Feel About the Increasing Lake Development In Northern Wisconsin and Iron County?

Almost half of the Island Lake property owners that were surveyed (49%) were uncertain about how they feel about the increasing development of northern Wisconsin and Iron County lakes.



Lakeshore development often increases property values and may cause more infrastructure improvements to be brought to an area such as better roads. It can also mean more user conflicts, different expectations of newcomers towards traditional community systems and values, and escalating property taxes. The question that needs to be asked is "how" should development occur to preserve the quality of Island Lake, while accommodating people's desire to own property there.

Figure 28.
Opinions of Different Activity, User, and Value Groups on the Amount of Development in Northern Wisconsin and Iron County
 (Number in parenthesis = number of people in response group)

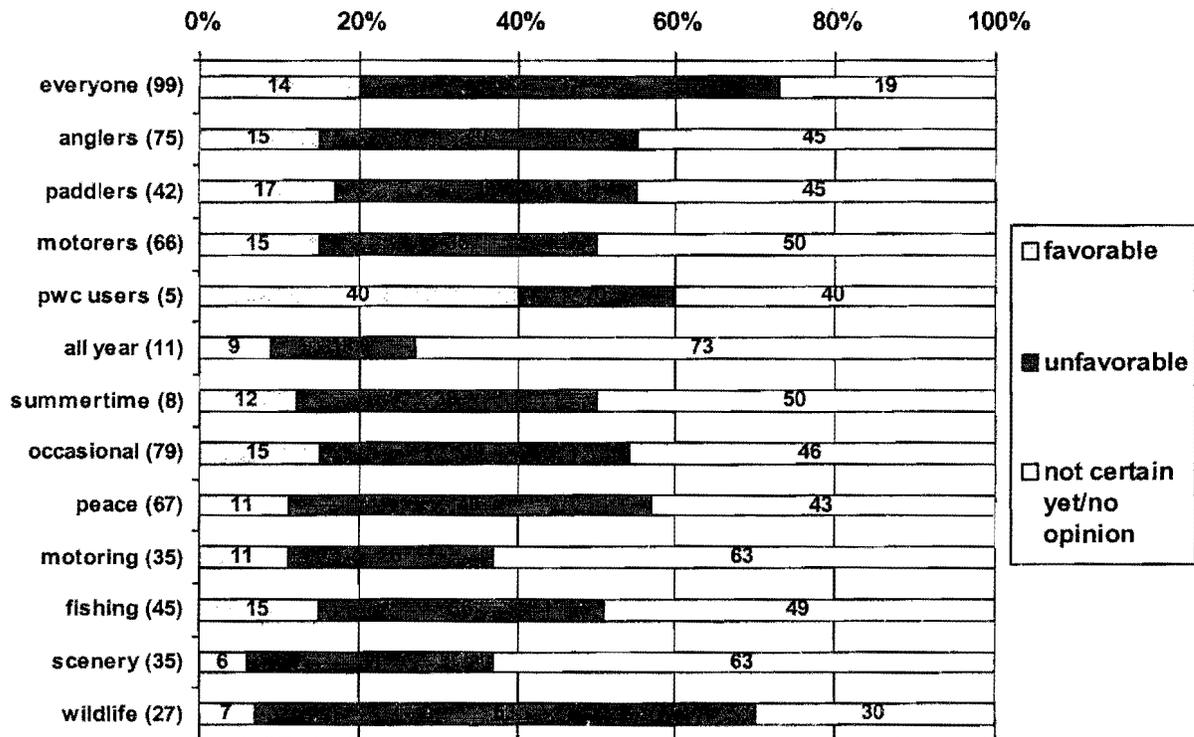


Figure 28 shows the opinions of different groups of Island Lake property owners toward development. Within the different "Activity" groups represented by survey participants (anglers, paddlers, motorers, and PWC users), PWC users were the most in favor of increasing development trends at 40% in favor.

As might be expected, respondents who valued "wildlife" and "scenery" were the least in favor, at 6% and 7%, respectively. Those in the wildlife value group were the most decisive of all groups about their opinion on increasing development, with 63% giving it an unfavorable rating.

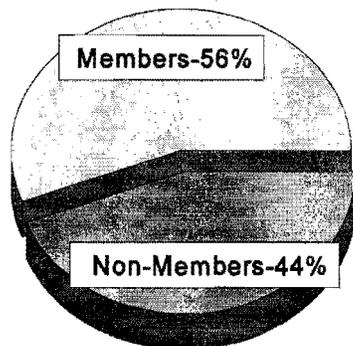
Surprisingly, the largest group of respondents that were uncertain about development trends were year 'round Island Lake residents. Seventy-three (73%) of this group were not certain or had no opinion about recent development trends. These residents might be expected to have a strong opinion, one way or the other, since they see changes caused by development on a "daily" basis.

Summer-time and "occasional" users were more strongly against what they perceived as lake property development trends with 38% and 39% of these groups being opposed.

Island Lake is geographically separated from what is typically considered Iron County's "lake country" which is now experiencing the most intense development pressures. The long-term property ownership patterns and potential low property turn-over rate pointed to in this survey suggest a more moderate rate of development is occurring at Island Lake which may not yet be an issue to year 'round residents.

As pressure on undeveloped shorelands continues to increase, the opinions of Island Lake property owners on this issue may change over time.

Figure 29. **Percent of Respondents That Are Lake Association Members**



Lake associations can be very effective in furthering the interests of lake property owners through group action. Qualified lake associations are eligible for special DNR grant monies that can be used for a variety of lake improvement projects including those highly valued in Island Lake such as water quality and fishing.

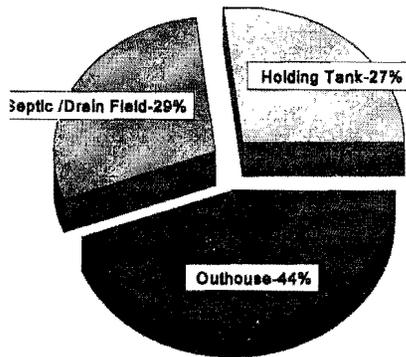
Only slightly more than one-half of the property owners participating in this survey belonged to a lake association. Many of the issues posed in this survey are ones that could be addressed through a lake association.

LAKE RESIDENCE WATER QUALITY ISSUES

The survey asked property owners questions, not only about what they valued about Island Lake, but also about their water quality issues at their lake residence. The purpose for these questions was to identify potential threats to ground and surface water as a result of improper water or waste handling systems which could impact Island Lake's water quality.

Figure 30.

What Kind of Septic System Do You Use at Your Lake Residence?
(Percent of Respondents)



Almost one-half (44%) of lakeshore property owners use a privy or outhouse, and 95% of these facilities are used with a seasonal home. Although this is a very high percentage, the seasonal use of these facilities may not pose a threat to water quality.

Of the 25 respondents who said their property used a septic tank/drain field, 91% said their field is pumped every 5 years or less. This indicates good maintenance on the part of property owners that will help insure against leaking or improperly functioning septic systems.

The age of septic systems around the lake also does not appear to be an issue. Only 28% of the septic systems were 16 years or older which is considered an "aging" system. Compare that percentage with findings from the Waupaca Chain of Lakes Survey where 70% of the septic systems were over 16 years, which poses a serious threat to water quality.

Holding tanks were used by 27% of respondents. Again, respondents indicated good maintenance of their systems, with 100% indicating they pumped their tank every 4 years. Ninety-five percent (95%) pumped their system every two years. The majority of the holding tank systems, 61%, were less than 5 years old.

It also appears that most distances between the residential drinking water and sanitary systems are acceptable.

Considering that over 80% included in this survey were built before 1964, most lakeshore property owners appear to be doing an exemplary job in maintaining their water and sanitary systems.