Introduction

In the spring and summer of 2003, UW-Stevens Point worked with the LLPA to design and implement a stakeholder survey on issues and actions in the Long Lake watershed. The survey is intended to provide greater detail on the views and opinions of area landowners and Association members. The results of the survey are being used by the LLPA and by local comprehensive planning committees as these groups

	Mailed (number / % local)	Total Responses (number / %)	Local Responses (number / %)
LLPA Members	480 / 28%	223 / 46%	70 / 31%
Non-	1762 / 36%	315 / 18%	112 / 34%
Members Total	2242 / 34%	538 / 24%	182 / 34%

Table 1. Surveys mailed and received

For most of the survey analysis, two groups are considered: LLPA members and non-members. With the exception of the nineteen people mentioned above, all LLPA respondents are also landowners in the towns. Table 1 above shows the number of surveys mailed to members and non-members.

In addition to members and non-members, the responses can be analyzed on the basis of residence: local or non-local. Those with mailing addresses in the towns were considered local. Table 1 above shows the residential status of those receiving and responding to the survey. Only 28% of the surveys mailed to LLPA members went to local addresses, while 36% of the surveys mailed to non-members were considered local residents (34% overall). This generally reflects greater proportion of seasonal lakeshore homeowners in the LLPA membership.

It can be seen in Table 1 that 182 of the responses are from local addresses. At 34% of the total responses, this is comparable to the portion of all landowners in the three towns considered local residents (34%). This suggests that the survey respondents are not all that different from the total population. For example, if only lakeshore property owners had responded (regardless of membership in LLPA), then the portion of local responses would have been much lower than 34%.

develop action plans for the future of the Long Lake area. This report provides an overview of the survey results.

Who Was Surveyed? Who Responded?

The survey was sent out to every property owner in the towns of Madge, Long Lake and Birchwood. In addition, the survey was mailed to LLPA members who do not own property in the area (75 households, of which 19 responded).

The responses were entered into a database for statistical analysis and summary. The survey includes five sections:

- I. Water Issues in Your Community
- II. Community Education and Information
- III. Protecting Water Quality
- IV. Importance of Lakes and Natural Resources
- V. The Long Lake Preservation Association

The first four sections of the survey were identical for member and non-member mailings. The fifth section included questions about the LLPA and was designed differently for Association members and non-members. Non-members were asked about their general impression of the LLPA, while members were asked questions about overall LLPA operations and strategic direction.

I. Water Issues in Your Community

Seven of the survey questions ask respondents to indicate their level of agreement with a range of statements regarding issues in the Long Lake area. The questions covered a range of water-related land use issues, from the need for education opportunities to the perceived quality of the county's zoning enforcement.

Results

Issue Statement	Percent Indicating Highest Level of Agreement	Percent Indicating Any Level of Agreement	
The development of large tracts of shoreline on area lakes is reducing the aesthetic beauty of the lakes	52%	77%	
People do not often consider the connection between what they do on their land and the quality of surface waters in the area	47%	81%	
More incentive is needed for people to restore shoreline buffers and wetland areas for water quality protection	41%	79%	
More educational opportunities are needed on topics related to water quality protection".	41%	81%	
Construction and expansion of homes and cabins is having a negative impact on the water quality of the area	31%	57%	
Conservation groups like the LLPA should be doing more to protect lake water quality The Washburn County	25%	36%	
government does a good job enforcing the existing zoning and land use regulations	1070	3070	

Respondents agree overall with the survey's issue statements, with the exception of the statement regarding the performance of Washburn County's regulation enforcement. For the statement concerning aesthetic effects of development, more than half the respondents indicate the highest level of agreement on the provided scale. The statements concerning educational needs and the lack of consideration given to water quality effects of land use are met with large amounts of agreement, with more than 80% of respondents indicating a more-than-

neutral level of agreement. At the other end, the statement concerning enforcement of zoning and land use regulations was only agreed with by about one-third of the respondents.

II. Community Education and Information

The second section of the survey looks more closely at educational strategies for increasing community capacity to protect water quality. A series of six watershed topics are listed in the survey, and respondents indicated their level of interest in the topic as well as their preferred delivery format. Respondents could select multiple formats from the following options:

- ➤ Hands-on Workshops
- > Brochures and Pamphlets
- Computer Webpages

Respondents indicate high levels of interest for all six of the educational topics, but there are slight differences among the different topics. The topic of "Proper septic system maintenance" received the greatest level of interest, with nearly half the respondents indicating "very interested". The second most popular topic is "How to test your well water quality and understand results", with 41% of respondents reporting that they are very interested. Both of these popular topics could be seen as relevant to both lakeshore and non-lakeshore property owners, so it should be expected that they receive such across-the-board support. The remaining four topics were met with nearly identical levels of interest.

Regarding delivery of education topics, most respondents requested the same delivery format across the six topics. The most popular format is brochures and pamphlets; 41% reported this as the sole preferred format, and another 40% preferred brochures and pamphlets along with other formats. Web pages were also popular, with 18% preferring this format alone and another 25% preferring web pages along with other formats. The total of 43% indicating that web pages could be used for delivery is somewhat surprising, suggesting that the LLPA website and other web pages could be more thoroughly geared to educational topics.

III. Protecting Water Quality

The third section elicited the level of support for fifteen different water quality protection strategies. The majority of strategies included in the list were regulatory in nature, but the list includes action-oriented, monitoring, incentive, and education-based strategies as well. Respondents indicated their support on a scale with

seven boxes between "Strongly Support" and "Strongly Oppose"; the middle box indicated "Neutral".

Regulatory strategies received a fairly high level of support. Land use regulations that would constrain the locations of potential water quality threats consistently rate with the strongest levels of support. Limiting phosphorous fertilizer use and requiring and enforcing erosion control standards also rated highly.

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Water Quality Strategy	Percent	Percent
	Indicating	Indicating
	Highest	Any Level
	Level of	of
	Agreement	Agreement
Regulate the future	75%	96%
establishment of		
commercial and industrial		
facilities using hazardous		
chemicals that could		
pollute groundwater		
Restrict the potential	64%	89%
establishment of large-		
scale animal farms		
("factory farms") to areas		
where water impacts are		
minimal		
Carefully monitor	62%	95%
groundwater to detect		
early signs of		
contamination from		
nearby waste landfills		
Restrict the use of	60%	89%
phosphorous fertilizers in	3370	0570
residential yards near		
lakes, rivers and wetlands		
Strictly enforce erosion	56%	90%
control standards at	2070	70,0
residential construction		
sites near lakes, wetlands		
and streams		
Require more stringent	51%	85%
erosion control measures	3170	0570
for public works projects		
(roads, culverts, utilities,		
etc.)"		
Provide greater	46%	81%
enforcement of no-wake	1070	01/0
rules near shorelines and		
sensitive areas		
Regulate the future	46%	82%
location of high-capacity	70/0	0270
groundwater wells where		
they may negatively		
impact groundwater		
quality		
Provide educational	41%	73%
	41 70	1370
materials that encourage		
fishing tournament		
participants to protect		
water quality	<u> </u>	

40%	83%
200/	84%
38%	84%
270/	710/
3/%	71%
36%	71%
35%	69%
19%	57%
	38% 37% 36%

Less popular were actions that involved drawing from the public purse. Acquiring lakeshore, helping farmers meet runoff goals, and providing assistance to those who are improving buffers all received relatively low levels of support. This partly reflects the prevailing mood towards taxes and public expenditures.

LLPA members and non-members responded similarly to most of the strategies, as did local residents and non-local landowners. Where differences do exist between these groups, they are not so great to suggest that consensus cannot be reached on future water quality protection strategies.

IV. Importance of Lakes and Natural Resources
The fourth section of the survey asked respondents to
indicate the importance of ten different reasons for
owning land and/or living in the Long Lake area. In
addition, the respondents reported their level of
satisfaction with the ten reasons. Respondents replied by
checking boxes on five category Likert scales, rating
each item from "Not Important" to "Very Important"

and "Not Satisfied" to "Very Satisfied". These two dimensions- importance and satisfaction- are then mapped onto a chart to show how they rate compared to each other. The resulting figure is commonly referred to as an importance-performance analysis (IPA) diagram.

Figure 30 shows the overall IPA results for the ten items. The four quadrants of the IPA diagram are labeled based on their position relative to the grand mean of *all* importance and satisfaction ratings. Those reasons that rate to the right of the vertical axis are more important than the average reason importance score, and those to the left are less than average. The horizontal axis divides those reasons with higher and lower than average satisfaction ratings.

Note that reason #10- the high level of water quality in the area's lakes, rivers and streams- is located very close to the mean score for satisfaction. An interpretation of this result is that while respondents are generally happy with surface water quality, they are on the brink of being dissatisfied. This perception of water quality as "on the edge" reflects the water quality monitoring efforts conducted in the past ten years. Water samples have shown an increasing presence of nutrients and algae in the lake, and the water body has recently been reclassified by the Wisconsin DNR as a eutrophic lake.

The two reasons that fall into the "High Importance/ Low Satisfaction" quadrant provide some evidence of numerous people who are relatively unhappy with the current state of affairs on the lake or in the watershed. It should be noted, however, that the lowest average satisfaction score of 3.0 for *the overall quality of fishing* resources in the area falls exactly on the midpoint between "not satisfied" (score of 1) and "very satisfied" (score of 5). This reason also received the highest percentage of "not satisfied" responses (13%) among all of the ten choices.

V. The Long Lake Preservation Association
Non-members responded to a series of questions
regarding their awareness of the LLPA, the responses are
shown in table 2 below. The high level of contact with
the newsletter reflects the fact that all addresses included
in the survey were mailed a copy of the Association's
Spring 2003 newsletter. That some 30% of the
respondents did not recall seeing the newsletter is
disappointing but perhaps not very surprising, as there is
no way to track what happens to such mailings once they
are removed from the recipient's mailbox.

	Yes	No
Have you ever been a member of the	18%	82%
LLPA?		
Have you ever seen and read the LLPA	70%	30%
newsletter?		
Have you visited the LLPA's website?	13%	87%

Table 2. Non-member awareness of the LLPA

Non-members were also asked to rate their overall opinion of the LLPA. Responses are shown in figure 31. This chart shows an overall *unfavorable* rating of only 9%. Fully one-third of the respondents checked the box mid-way between "very favorable" and "very unfavorable".