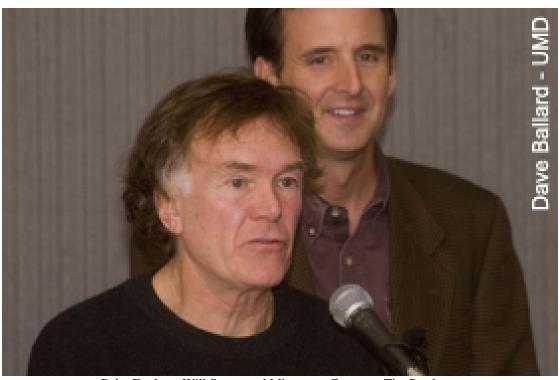
### Appendix F

# Making A Great Lake Superior Conference 2007 Evaluation Findings

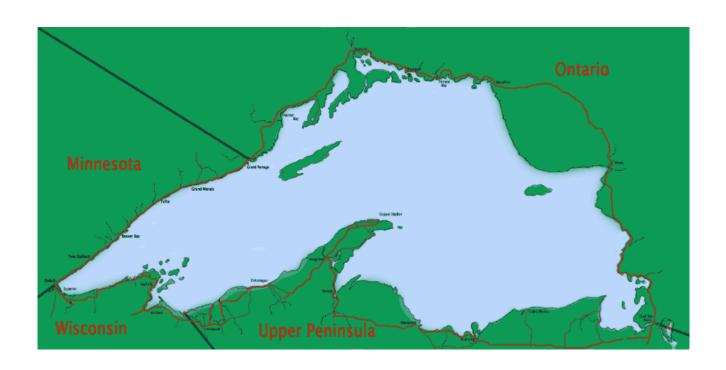


Polar Explorer Will Steger and Minnesota Governor Tim Pawlenty at a news conference during the *Making a Great Lake Superior 2007* conference. Photo credit: Dave Ballard, UMD.

Lake Superior Lakewide Management Plan 2008

### Making A Great Lake Superior Conference 2007

### **Evaluation Findings**



**February 6, 2008** 

Prepared for Conference Organizers by Jake Blasczyk, Ed. d., Evaluation Specialist and Sue Vang, Evaluation Assistant, Environmental Resources Center, University of Wisconsin Extension, 445 Henry Mall, Room 215, Madison, WI 53706

#### **TABLE OF CONTENTS**

		page
Summary of Outcomes		i
Introduction		1
Methods		1
Findings		2
Characteristics of Respondents	2	
Outcomes: Knowledge and Use of Information	3	
Reactions to the Conference and its Events	4	
Networking and Communications Between Targeted Groups	7	
Opinions and Effects of the Green Design	8	
Interest in Future Conferences	9	
Summary and Observations		10
Appendix A: Tables of Comments		13
Appendix B: Text for Web Survey		18
References		24

#### SUMMARY OF OUTCOMES

Making A Great Lake Superior Conference was held in Duluth, Minnesota, from October 29 through October 31, 2007, with 444 registered participants. Four hundred and two (402) with valid email addresses were invited to complete an electronic survey and 70% (281) did so. This represents a robust response rate. Data analysis supports the following outcomes.

#### **Increased Knowledge of Lake Related Issues**

Many survey respondents said that their knowledge about Lake Superior issues increased "somewhat" (55%) or "a lot" (32%) as a result of attending the conference. Those with "low" or "very low" prior knowledge tended to say that their knowledge increased "a lot".

#### **Large Numbers Used or Anticipated Using Information**

Eighty-six percent said that they had already used or foresaw using information from the conference. Some examples of use, based on comments, were collaboration with contacts made, using information when teaching, and for media and publications.

#### Mixture of Lake Researchers, Educators, and Managers Attended

A third of the respondents were from a government or private land or resource management position. Educators made up about a quarter and almost 20% were lake related researchers.

#### **High Levels of Networking**

Almost 60% reported that they networked at least 5 times or more at the conference, and approximately a third networked 3 or 4 times. Networking was defined as "informal sharing of information usually requiring you to initiate the sharing and may result in valuable on-going contacts." In addition, during breaks, between sessions, lunch, and on their own time, high percentages of individuals talked with an individual having a different affiliation.

#### **Effectively Fostered Dialog and Information Sharing**

Fifty-nine percent felt the conference was "somewhat effective" in fostering dialog and information sharing between the three targeted groups (researchers, natural resource managers and educators) and 26% said the conference was "very effective".

#### **Green Principles Successfully Demonstrated**

Almost 75% of participants were "very aware" of the conference's green design. A similar portion said that the conference's steps to minimize its environmental impact were "very important". A small percentage (9%) reported what they considered problems resulting from the green design (lack of abstracts, nametags, bike racks, or cups and a confusing waste/recycling system).

#### **Additional Conferences Wanted**

A strong majority (95%) said that the conference should be held on a regular basis and about half favored a biennial conference. A strong majority (81%) said they would attend future conferences on Lake Superior.

#### **High Levels of Satisfaction**

Ninety-seven percent (97%) rated their experiences at the conference as either "excellent" or "good", indicating high levels of satisfaction with the conference.

#### INTRODUCTION

Making A Great Lake Superior Conference held in Duluth, Minnesota from October 29 through October 31, 2007 attracted 444 registered participants. Conference organizers were the U.S. Environmental Protection Agency, Environment Canada, University of Minnesota Sea Grant Program, and the Lake Superior Binational Program. Numerous other agencies and organizations sponsored and helped plan the conference. The University of Wisconsin Extension's Environmental Resources Center, Madison, Wisconsin conducted the evaluation.

Preceding this introduction is a summary of outcomes. Next is a short methods section, followed by findings according to survey question categories. A summary and observations section concludes the report. Appendix A shows categorized comments. Since the evaluation charge was to only collect data and report findings, the report does not reach conclusions. However, a few observations about the conference are presented.

#### **METHODS**

The Environmental Resources Center (ERC) undertook the evaluation in support of a staff member, Nancy Larson, University of Wisconsin Extension Lake Superior Basin Educator. She was involved in planning and conducting the conference and requested assistance. Conference organizers provided extensive input as the survey was developed. In keeping with the "green" principles of the conference, the Web was used for survey implementation. The conference was conducted to minimize impacts on the environment and limiting paper use was important.

ERC administered the survey with the assistance of Jesse Schomberg, Conference Co Chair and Mary Lucas, UW-Extension Information Process Consultant. Jake Blasczyk, ERC Evaluation Specialist and his assistant Sue Vang analyzed the data. Neither Jake nor Sue was involved in planning or conducting the conference.

There were 444 conference participants and 402 participants with valid email addresses were asked to complete an electronic survey. The response rate was 70% (281/402) with 63% of all conference participants (281/444) providing data.

The high response rate and the resulting robust nature of the data are likely due to a combination of three factors: 1) survey procedures, 2) characteristics of participants, and 3) overall positive reactions to the conference. Survey procedures followed Dillman's (2007) recommendations, as well as recommended online survey procedures (Ritter and Sue, 2007). Before having access to the Web survey, respondents received an e-mail announcing the survey and explaining its importance. During administration, those not responding received two reminders. These procedures influenced response rate.

Survey responses, especially written comments, suggested that respondents were committed to learning about Lake Superior issues, as well as concerned about the Lake itself. In addition, overwhelming numbers of respondents reacted positively to the conference. These two factors likely also influenced the high survey response rate.

Survey data was entered and analyzed using the statistical software, SPSS. Various tables and graphs from the survey data were created and examined for central tendencies. Trends in frequencies were determined. Through a combination of inductive (Thomas, June 2006) and deductive reasoning, inferences were made which eventually became findings.

Some cross tabulation analyses were also conducted. For example, survey question 5 was analyzed against question 6 to determine if prior knowledge affected how much increased knowledge occurred after the conference.

Written responses and comments were entered and coded in Microsoft Word, then sorted using Excel. Some were coded and counted more than once because they reflected multiple themes.

#### **FINDINGS**

The robust data and analysis resulted in six categories of findings (listed A-F below).

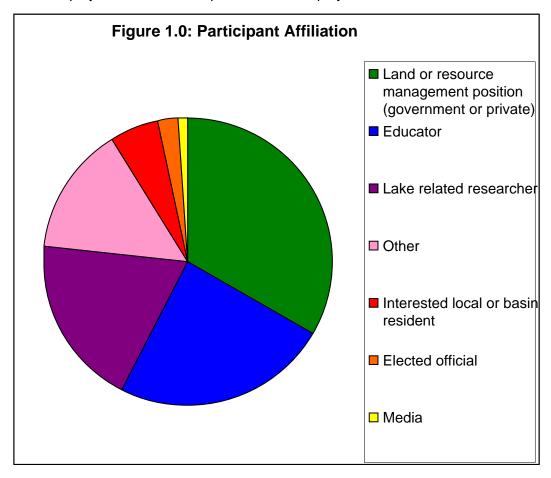
#### A. Characteristics of Participants (Questions 21, 23-24, 5)

Four findings about characteristics of participants are listed below. More details follow.

- Researchers, educators, and managers represented.
- Many learned about the conference electronically.
- About a third never attended a Great Lakes related conference or workshop within the last two years.
- Many had a high level of knowledge about Lake Superior issues prior to the conference.

#### 1. Researchers, Educators, and Managers Represented.

As Figure 1.0 shows, more respondents (33% or 93 of 281) had a land or resource management position, either government or private. Educators made up almost a quarter (24% or 67) of the respondents and 19% (53) classified themselves as lake related researchers. Less than 6% each were interested residents, elected officials, media representatives, non-profit organization employees, consultants, public sector employees, and students.



#### 2. Many Learned About the Conference Electronically.

Nearly half (45% or 125 out of 281) learned about the conference electronically, either through email or the website. Another 36% or 100 heard about it through personal communications with an individual. Other ways were meeting announcements (5%), newsletters (1%), invitations to

the conference (1%), workgroups (1%), and through work (1%). Two percent each reported learning about the conference because they were on a planning committee, the Binational Forum, or because they were an organizer or involved agency/program for the conference.

Cross tabulation analyses revealed that over half of educators, local residents, and lake researchers learned about the conference electronically. Land managers were split almost evenly between talking with an individual (40%) and through the internet (39%).

### 3. About a Third Had Not Attended a Great Lakes Related Conference or Workshop Within the Last Two Years.

About a third of respondents (35% or 99 of 281) had not attended other conferences or workshops on the Great Lakes in the last two years. A fourth (25% or 71 participants) attended more than three Great Lakes related conferences or workshops in the past two years. The remainder attended related conferences/workshops once (18%), twice (14%), or three times (7%) in the last two years.

Land managers (24%) and lake researchers (19%) were less likely to have attended conferences 5 or more times, compared to interested residents (56%) and educators (49%).

#### 4. Many Reported High Knowledge of Lake Superior Issues Prior to Conference.

Respondents reported high levels of knowledge about Lake Superior issues prior to the conference. Over two thirds reported "high" (53% or 149 of 281 participants) or "very high" (15% or 43 of 281) knowledge. Meanwhile 26% (74 participants) reported "neither high nor low" knowledge. A small portion (4%) reported "low" or "very low" knowledge. Local or basin residents were split between reporting "neither high nor low" knowledge (44%) or "high" knowledge (44%), while most lake researchers (66%), land or resource managers (55%), and educators (51%) reported "high" knowledge.

#### B. Outcomes: Knowledge and Use of Information (Questions 6, 7)

Outcomes included increased knowledge and plans to use information gleaned at the conference. Specifically:

#### 1. Most Experienced an Increase in Knowledge.

After attending the conference, respondents reported increases in knowledge of Lake Superior issues. Most (55% or 155 of 281) reported that their knowledge increased "somewhat". About one-third (32% or 90) reported increasing their knowledge "a lot". Eleven percent (11%) increased their knowledge of Lake Superior issues "a little" or "not at all".

#### 2. Most Plan to Use or Have Already Used Conference Information.

Eighty-six percent (238 of 276) have either already used or plan to use the information in the future. Participants have already used or plan to use contacts made during the conference (42 comments), share information with others (37 comments), or use the information to teach classes or educate the public (34 comments). Fifteen comments each indicated that use of information was work related, involved climate change information, and meant now having good background information, as well as increased understanding of Lake Superior issues. More educators (99%) and land managers (90%) said that they were likely to use the information compared to lake researchers (75%) and local residents (67%).

#### C. Reactions to the Conference and its Events (Questions 2-4, 17-20, 30)

Nine findings are presented below. Respondents felt positive about the conference, rated it as being "excellent" or "good", and experienced few problems from its green design. Fifty-three respondents (19%) experienced difficulties due to the number of sessions, their length, and scheduling of sessions. These issues did not affect their positive reactions to the conference.

Many respondents reported memorable conference events; the plenary sessions were frequently mentioned, especially the one on climate change. This plenary session also received a high rating on a four point usefulness scale. Breakout sessions on climate change, water/lake levels, invasive species, and toxics were often listed as very effective sessions. Percentages considering breakout sessions as very ineffective were relatively low.

Two less well attended activities were field trips and facilitated workgroups. About 14% of respondents participated in the field trips with many rating them as "very useful". About a third of respondents attended the facilitated workgroups and approximately equal numbers rated these as "very useful" and "somewhat useful".

Attendance at the facilitated workgroups was skewed towards educators with more of them participating compared to lake researchers and land or resource managers. Otherwise, the mix of educators, lake researchers, and land or resource managers attending other events appeared more balanced.

#### 1. High Ratings for Conference.

Just over half (55% or 154 of 281) of the respondents selected "excellent" to rate their conference experiences, while 42% (118) rated them as "good". The remaining 3% (8) selected "fair". Nobody selected "poor". Fewer (38%) lake researchers selected "excellent", compared to 75% of local/basin residents, 60% of educators and 55% of land/resource managers.

### 2. Two Thirds Recalled a Memorable Scheduled Event with Climate Change Plenary Mentioned Often. This Plenary Also Rated High on a Usefulness Scale.

Almost two thirds of the respondents (62% or 165 of 265) recalled a memorable event. Many cited the Tuesday plenary session on climate change and specifically mentioned the keynote speaker, Dave Phillips.

Tuesday's plenary also received high ratings on usefulness. Sixty-six percent (158 of 238) rated it as "very useful", compared to 46% (71 of 153) who rated the Wednesday keynote as "very useful". Sixty-four percent (131 out of 206) found the Monday keynote "somewhat useful" and 56% (89 of 158) rated the Wednesday plenary similarly.

Other memorable events included the climate change lunch panel featuring Governor Tim Pawlenty and Will Steger (29 comments), John Austin's Wednesday speech (13 comments), the tours and field trips (12 comments), the luncheon with teachers and scientists (10 comments), and climate change topics and breakout sessions (10 comments). Also mentioned were the Sunday night activities, the banquet/presentation, the mayor panel, and the opening ceremony.

#### 3. Almost Half Recalled an Effective Breakout Session.

A little less than half (46%, 120 of 259) of respondents recalled a breakout session which they considered to be very effective at increasing their knowledge of Lake Superior issues. The five most frequently mentioned sessions were on climate change (17 comments), water levels and withdrawals (15 comments), lake levels (8 comments), aquatic invasive species (7 comments), and toxic pollutants (7 comments).

#### 4. A Few Recalled an Ineffective Breakout Session.

Ten percent (25 of 259) recalled a breakout session which they considered as very ineffective in increasing their knowledge about issues regarding Lake Superior. The five most commonly listed sessions for ineffectiveness were facilitated workgroups (4 comments), sustainability and aquatic invasive species (3 comments each), and water levels and managing woodlands on red clay plains (2 comments each).

### 5. Generally All Conference Elements Rated High On Usefulness of Information—Another Indicator of Positive Reactions to the Conference.

As Table 1.0 shows more respondents rated elements of the conference as being "very useful" or "somewhat useful" rather than "not very useful" or "not useful at all". The trend across the scale of usefulness shows positive reactions to the various elements of the conference.

**TABLE 1: Usefulness of Conference Elements (Percentage of Respondents)** 

	"Very Useful"	"Somewhat Useful"	"Not Very Useful"	"Not Useful At All"
Element				
Field Trips to Local Areas of	600/	240/	160/	00/
Interest (N=62) Global Climate Change Panel	60%	24%	16%	0%
(N=217)	47%	44%	8%	1%
Concurrent Breakout Sessions Attended (N=246)	41%	55%	4%	0%
Panel: Perspectives on Past and Future States of Lake Superior				
(N=186)	32%	60%	7%	1%
Lake Superior Art and Video (N=211)	31%	52%	13%	4%
Panel-Sustainable Communities: Local Governments Help Protect				
and Restore the Lake (N=152)	30%	57%	13%	1%
Facilitated Workgroups on				
Education, Management, and Research (N=148)	26%	41%	21%	12%
Poster Session (N=222)	19%	59%	19%	4%

#### 6. Low Participation on Field Trips While Being Rated as "Very Useful".

While attendance on field trips was relatively low (62 participants), most who participated considered them to be "very useful" as indicated in Table 1.0. All local/basin residents attending the field trips found them "very useful", compared to 58% of educators and 50% each of lake researchers and land managers.

### 7. Low Attendance at Facilitated Workgroups With About Two-Thirds Saying That These Were "Somewhat Useful".

About a third of respondents participated in facilitated workgroups. Sixty-seven percent (67%) considered them to some extent useful with the remainder indicating workgroups were "not very useful" or "not useful at all". More residents (50%) and educators (41%) found the facilitated workgroups "very useful", compared to 14% of land managers and 11% of lake researchers.

## 8. Attendance at Facilitated Work Groups Skewed Towards Educators. Otherwise Attendance of Educators, Lake Researchers, and Land or Resource Managers at Other Events Was More Balanced.

Attendance according to group affiliation reflecting four major groups (see Table 2) showed a relatively balanced distribution of the four groups at each event, except at the facilitated workgroups. Attendance at workgroups was skewed toward educators with 81% of educators responding to the survey attending compared to 37% of lake researchers, 49% of land managers, and 53% of local or basin residents (see Table 2.0).

**TABLE 2: Attendances of Events According to Group Affiliation** 

Affiliation	Panel: Perspectives on Past & Future States of Lake Superior	Global Climate Change Panel	Concurrent Breakout Sessions	Poster Session	Facilitated Workgroups	Panel- Sustainable Communities: Local Governments	Field Trips
Educator							
(any type)	71%	89%	97%	73%	81%	65%	19%
Local or basin resident	80%	73%	81%	73%	53%	60%	20%
Lake related researcher	80%	92%	82%	96%	37%	38%	16%
Land or resource manager	80%	82%	96%	93%	49%	55%	23%

#### 9. Few Difficulties Reported.

Most participants (81% or 225 of 278) reported no difficulties or problems negatively affecting their conference participation. The 19% (53 participants) who experienced difficulties listed issues with attending different sessions in different strands. Twenty six comments specifically addressed the fact that the three different strands had sessions which did not start or end at the same time, so moving between strands was difficult. Other cited issues were moderators not keeping sessions on time, and communication problems with organizers prior to the conference.

The comments below illustrate some of the common concerns about concurrent sessions.

- "There were too many concurrent sessions. I missed some talks that I really wanted to hear because I couldn't be in two places at once."
- "The timing of the separate sessions was so far off that I ended up missing talks that I wanted to attend, or interrupt in the middle of someone's talk, thinking I was on time for the brief break between talks."
- "Sessions weren't all clearly organized around a single topic, so to hear speakers on a topic I'm interested in, I shifted from concurrent to concurrent session."
- "Staggered talk schedules and monitors who didn't stick to time schedules made it difficult to move from session to session."

#### D. Networking and Communications Between Targeted Groups (Questions 8-12, 22)

Conference organizers valued networking between participants and dialog or sharing of information between lake researchers, educators and land/resource managers. The majority of survey respondents agreed that these facets were important, with 58% reporting that they networked 5 or more times during the conference. About a quarter said that their contact network increased as a result of the conference. Fifty-nine percent rated the conference as "somewhat effective" in fostering dialog and information sharing between lake researchers, educators, and land/resource managers, compared to 26% saying the conference was "very effective".

High percentages of lake researchers, land/resource managers, and educators talked with another participant having a different affiliation during breaks, lunches, between sessions, and on their own times. This indicated a fair amount of inter-group communication.

#### 1. One Half Said That Networking at Conference Was "Very Important".

Most respondents (51% or 144 of 281) felt that networking at the conference was "very important". Thirty-six percent (102 participants) found networking to be "somewhat important"; while 10% (29 participants) said it was "neither important nor unimportant". One percent (3) felt that networking was "somewhat unimportant".

Lake related researchers were less likely (33%) to rate networking as "very important", compared to interested residents (56%), land managers (56%), and educators (54%).

#### 2. Most Participants Networked 5 Times or More.

Respondents networked with others from around the Lake Superior basin. Exactly 58% (163 out of 281) of survey respondents networked 5 times or more. Over 27% (77) networked 3 or 4 times, while 12% (34) networked 1 or 2 times. Four participants did not network at all. The majority of each affiliation networked at least 5 times, ranging from 47% of lake related researchers to 69% of interested residents and 100% of elected officials and media.

#### 3. A Fourth Increased Their Contact Network "A Lot".

A quarter of the respondents (26%, 72 of 281) reported that the conference increased their network "a lot" compared to 50% or 139 who said that their network of contacts increased "somewhat". Exactly 21% (59) reported "a little" increase in their network, and 4% (10 participants) stated that their network did not increase at all.

### 4. The Conference's Emphasis on Dialog and Information Between Researchers, Managers, & Educators Was Important to Most Respondents.

Fifty-nine percent (167 of 281) felt it was "very important" to dialog between researchers, managers, and educators, compared to 30% (85) feeling that this was "somewhat important". Roughly 8% (21) felt that the dialog was "neither important nor unimportant", and 1% each felt it was "somewhat unimportant" or "very unimportant".

Fewer lake researchers (45%) felt dialog and sharing between the conference's targeted groups was "very important". Meanwhile, 73% of the educators felt that the emphasis was "very important", compared to 67% of land managers and 63% of local and basin residents.

### 5. A Slight Majority Rated the Conference as "Somewhat Effective" in Fostering Dialog and Sharing.

Fifty-nine percent (167 of 281) rated the conference as "somewhat effective" in fostering dialog and information sharing between the three targeted groups, compared to 26% (72) that said the conference was "very effective". Nine percent of all participants (24) felt that the conference was "neither effective nor ineffective" in this aspect, while 5% (14) felt that it was "somewhat ineffective". According to cross tabulation analyses more local residents (44%) and educators (39%) said that the conference was "very effective" compared to lake researchers (23%) and land managers (22%).

### 6. High Percentages Talked to Others With a Different Affiliation Indicating a Fair Amount of Inter-group Communications.

The survey probed for who respondents talked with during breaks, lunch, between sessions or on their own time to learn the extent of inter-group communications. As shown in Table 3.0 a fair amount occurred during informal time blocks. For example, 75% of the educators talked to a lake researcher and 79% of land or resource managers talked to an educator. Fewer local or basin residents compared to other groups talked with lake researchers, yet nearly 60% did.

**TABLE 3: Inter-group Communication According to Affiliation** 

	Affiliation			
	Educator	Interested local or basin resident	Lake related researcher	Land/ resource manager
Percentage Who				
Talked to Lake				
Researchers	75%	58%	96%	84%
Percentage Who				
Talked to Land or				
Resource Managers	73%	85%	90%	98%
Percentage Who				
Talked to Educators	92%	71%	74%	79%

#### E. Opinions and Effects of the Green Design (Survey Questions 13-16)

Nearly three quarters of respondents were "very aware" that the conference aimed to minimize its environmental impact. About the same number felt that the green design was "very important". The green design did not cause problems for an overwhelming majority of respondents. Respondents selected composting, minimizing paper usage, and using local food as the three green-related steps which should be included in future conferences.

#### 1. Almost Two Thirds Very Aware of Conference's Green Design.

A majority (72% or 203 of 281) were "very aware" that the conference was designed to minimize its environmental impact compared to 9% (26) that were "aware" of this fact, while 16% (45) were "somewhat aware". Four were "unaware" that it was a "green" conference.

#### 2. Most Felt That Conference's Green Design Was Important.

Seventy-one percent (200 of 281) felt that a green conference was "very important" and 22% (62) felt that it was "somewhat important". Only 5% (15) felt that minimizing the conference's environmental impact was "neither important nor unimportant", and less than one percent felt it was "very unimportant".

According to cross tabulation analyses, less than half of all lake related researchers (45%) felt the green design was "very important", compared to 84% of land or resource managers, 79% of educators, and 63% of interested residents.

#### 3. Few Problems Resulting From Minimizing Conference's Environmental Impact.

The conference's green design included encouraging participants to bike, reuse their old nametags from past conferences, and bring their own reusable mugs. These efforts did not cause problems for most participants. Nine percent (26 out of 279 participants) reported problems. Of these 26 participants, the five most common issues were with the lack of abstracts (9 comments), lack of nametags (7 comments), the waste and recycling system (3 comments), lack of cups (3 comments), and lack of bike racks (2 comments).

#### 4. Repeat Composting, Minimizing Paper, and Using Local Food at Future Conferences.

Respondents were asked which steps should be taken to make future conferences green. The top three selected were: compost waste foods and disposable cups, etc. (89% or 249 of 281), minimize paper usage (88% or 248), and use locally grown/produced food (87% or 243). Reusing name tags (71% or 200) and carpooling (61% or 171) were also selected. Purchasing CO2 offset credits was the least selected action, which 36% (102) of respondents chose.

#### F. Interest in Future Conferences (Survey Questions 25-29)

Interest in future Lake Superior conferences was high with an overwhelming majority favoring a regularly scheduled conference. Many would likely attend. Slightly more than half favored a conference every two years while a third favored a conference every three years. Suggested improvements focused on scheduling of breakout sessions and more diversity. Respondents seemed satisfied with topics already covered while offering a few additional suggestions.

#### 1. Most Would Attend Future Conferences.

Eighty-one percent (226 of 278 respondents) would attend future conferences on Lake Superior. Eighteen percent (51) were unsure, and one would not attend. High majorities of lake researchers (74%), educators (88%), land or resource managers (82%) and local/basin residents (81%) would attend a future conference.

#### 2. Almost All Want Conference Held on Regular Basis.

Almost all respondents (95%, 260 out of 275) said that a Lake Superior Conference should be held regularly. High percentages of local residents (87%), lake researchers (90%), land or resource managers (98%) and educators (97%) agreed.

#### 3. One Half Chose Biennial Conferences and a Third Chose Triennial Conferences.

A little over half (52%, 146 of 281) choose a conference every 2 years, while over a third (35%, 98 participants) recommended one every 3 years. A small percentage (11%, or 32) favored a conference every 5 years. More lake related researchers tended to want longer gaps between conferences; 49% suggested one every 3 years, and 19% suggested one every 5 years.

#### 4. Suggestions on Improvements Focused on Scheduling Sessions and Diversity.

Suggestions for improving the conference focused mostly on the scheduling of the breakout sessions (65 comments) and diversifying the conference in a multitude of ways (29 comments). Participants had a difficult time moving between strands for different sessions and attending all the sessions that interested them. Some suggestions for scheduling were: 1) include breaks in between sessions to allow for travel to other rooms, 2) provide longer sessions, 3) focus on fewer topics, 4) provide fewer sessions, 5) keep all sessions in the different strands on the same start/end times, 6) keep sessions on time and on track, and 7) have some repeat sessions.

Suggestions with diversification themes included more interaction between researchers, managers, and educators, mixing up the audiences and session teams, and including more participation from aboriginal communities, schools, industries, and the general public.

The following comments show the types of problems participants had with the scheduling.

- "Fewer topics with longer presentations would allow for a more detailed discussion of issues."
- "Having each track follow the same schedule so a person could attend breakout sessions from multiple tracks."
- "Coordinate sessions better, especially to keep speakers within their allotted time."
- "Too many concurrent session, unable to attend some talks."
- "Make it easier to move from strand to strand...maybe a five minute break after every other session?"
- "Provide more time between sessions to network, not running individuals from the same groups at the same time in different tracts."

Other suggestions included providing more time for networking (11 comments), improving the poster session (10 comments) and a few advertising and food suggestions.

### 5. Satisfied With Covered Topics With a Few Suggestions: Climate Change, Diversity, and Connection With Land.

Most respondents were satisfied with the topics covered at the conference. The top six recommendations for future topics were: diversifying the presenters and participants to include Native Americans, teachers, EPA, etc. (17 comments), climate change information (16 comments), more on the lake ecosystem and estuarine ecology (10 comments), predictions of sustainability and changes (7 comments), education, and toxics (4 comments each). A few mentioned community involvement, economics, land use, politics, and spirituality.

#### **SUMMARY AND OBSERVATIONS**

This report presented findings of a Web survey completed by 70% of 402 participants with valid email addresses who attended the *Make A Great Lake Superior 2007* conference. This means that 63% of all participants (281/444) provided data. Developed in collaboration with organizers, the survey ascertained outcomes while probing for reactions to the conference, including how information would be used. Results included eight outcomes and six categories of findings.

#### **Outcomes**

Outcomes identified were:

- Increased knowledge of lake related issues.
- Large numbers used or anticipated using information gained.
- Mixture of lake researchers, educators, and land or resource managers attended.
- High levels of networking.
- Effectively fostered dialog and information sharing.
- Green principles successfully demonstrated.
- Additional conferences wanted.
- High levels of satisfaction.

#### **Findings**

Findings fall into six categories.

#### 1. Characteristics of Respondents

Data showed that researchers, educators, and managers were represented at the conference. Many learned about the conference electronically and about a third had not attended a Great Lakes related conference during the last two years. Many reported a high level of knowledge about Lake Superior issues prior to conference.

#### 2. Outcomes: Knowledge and Use of Information

Two important and frequently reported outcomes were increased knowledge and plans to use information gleaned at the conference.

#### 3. Reactions to the Conference and its Events

Analysis resulted in nine findings regarding reactions to the conference and its events. Generally, survey respondents felt positive about the conference, rated it as being "excellent" or "good" and experienced few problems from its green design. Fifty-three respondents (19%) reported experiencing difficulties mostly due to the high number of sessions, length of sessions, and scheduling of sessions; however this did not negatively impact overall reactions to the conference.

Many respondents recalled and reported memorable events at the conference. The plenary sessions were frequently mentioned, especially the climate change plenary which also received a high rating on a four point scale. Very effective breakout sessions as listed by respondents included climate change, water/lake levels, invasive species, and toxics. Percentages recalling very ineffective breakout sessions were relatively low.

Field trips and facilitated workgroups were two less frequently attended activities. About 14% of survey respondents participated in the field trips and many felt they were "very useful". About a third of the respondents attended the facilitated workgroups and approximately equal numbers rated these as either "very useful" or "somewhat useful".

More educators compared to lake researchers and land or resource managers attended the facilitated workgroups. At other events, the mix of educators, lake researchers, and land or resource managers was more evenly balanced.

#### 4. Networking and Communications Between Targeted Groups

Conference planners and organizers valued networking between participants as well as dialog and sharing of information between lake researchers, educators and land and resource managers. The majority of respondents agreed that these facets were indeed important, with 58% reporting that they networked 5 or more times during the conference. About a quarter said that their contact network increased as a result of the conference. Fifty-nine percent rated the conference as "somewhat effective" in fostering dialog and information sharing between lake researchers, educators, and land or resource managers compared to 26% saying the conference was "very effective".

During breaks, lunches, between sessions, and on their own times, high percentages of lake researchers, land or resource managers, and educators talked with another participant having a different affiliation. This indicated a fair amount of inter-group communication.

#### 5. Opinions and Effects of the Green Design

Nearly three quarters of the survey respondents were "very aware" that the conference was designed to minimize its environmental impact. About the same number felt that the green design was "very important". The green design did not cause problems for an overwhelming majority of respondents. Respondents selected composting, minimizing paper usage, and using local food as the three green-related steps that should be included in future conferences.

#### 6. Interest in Future Conferences

Interest in future conferences about Lake Superior was high with an overwhelming majority favoring a regularly scheduled conference which they would likely attend. Slightly more than half of the respondents favored a biennial conference while a third favored a conference every three years. Suggested improvements focused on scheduling of breakout sessions and more diversity. Respondents seemed satisfied with topics already covered while making a few suggestions.

#### **Observations**

This report resulted in the following observations. First, conference participants reacted positively to the conference. When asked to rate their conference experiences on a four point scale from "excellent" to "poor", most selected "excellent" or "good". In addition, measures of usefulness of information gained from various conference elements showed that an overwhelming majority of participants considered the entire conference to be highly useful. Analysis of comments also showed positive reactions to the conference.

Second, conference planners desired dialog and information sharing between groups of different affiliations, especially between lake researchers, educators, and land or resource managers. A fair amount of inter-group dialog and sharing seemed to occur. During breaks,

lunch, between sessions or on their own time, large numbers of conference participants reported talking about Lake Superior issues with a conference participant of a different affiliation.

Third, the conference appeared to have an adequate combination of lake researchers, educators, and land or resource managers, although the number of researchers attending was slightly lower. Having a well represented mixture of participants was another aim of conference planners. About 33% of survey respondents had a government or private land or resource management position compared to 25% being educators and 19% (53 participants) as lake related researchers.

Also noteworthy is that approximately one third of the survey respondents had not attended a Lake Superior related conference or workshop in the last two years. This suggests that the conference attracted those who do not attend Great Lakes conferences frequently and probably first timers or a new audience as well.

Fifth among the noteworthy outcomes is knowledge gained. Many participants reported having a high level of knowledge about Lake Superior issues prior to the conference. Yet these participants along with others with lower levels of knowledge reported that the conference increased their knowledge about Lake Superior issues, and for many the increase in knowledge was "a lot".

Sixth, most respondents favor another Lake Superior focused conference. Many want a biennial conference. Suggestions for improvement included better scheduling of concurrent breakout sessions.

Finally, conferences organizers are to be commended for a conference that was relatively problem free, while successfully minimizing its impact on the environment. The conference was specifically designed to be "green". To borrow the familiar adage: organizers and planners successfully "walked their talk". An overwhelming majority of participants recognized efforts to minimize environmental impact and considered these efforts as being important.

#### APPENDIX A

The following appendix provides summarized tables of the comments from open ended questions. The survey had a total of 11 questions with possible open ended responses (Questions 3, 4, 7, 15, 19, 20, 21, 23, 28, 29, and 30). Comments were analyzed for trends; some had multiple themes and thus were coded more than once. Italicized comments in the tables below indicate responses that may not be directly related to the question, e.g. a criticism on the conference in response to a question asking for memorable events.

Difficulties or Problems Experienced (Question 3)		
Category	# of Comments	
Scheduling of sessions not good (inconsistent start/stop times, too many		
sessions at same time, etc.)	26	
Sessions should stay on schedule	12	
Communication problems with organizers prior to conference, poor		
advertising, registration problems	5	
Moderator should keep sessions on time or have consistent introductions	4	
Wanted abstracts; presenter/scheduling related problems	3 each	
Full day agendas too much; improve poster sessions; topics too		
scattered/general; minor teacher related complaint	2 each	
Many individuals focused on own goals; change date; hearing problems;		
IT problems; temperature problems; Monday lunch panel not good; didn't		
like foreign aspect of opening ceremony	1 each	
Felt that attending sessions from different strands was doable	1	
General kudos/no problems	1	

Memorable Scheduled Event (Question 4)	
Category	# of Comments
Tuesday Plenary session on climate change	35
Governor Tim Pawlenty, Will Steger, and/or climate change lunch panel	29
David Phillips	24
John Austin (having him speak earlier, not at the end)	13
Tours and field trips (fisheries, stormwater, boat, rain garden)	12
Luncheon with teachers; climate change topics/breakout sessions	10 each
Opening ceremony and speakers, prayer ceremony	8
Banquet dinner and/or presentation	7
Mayor panel, sustainability	6
Sunday night activities (Fresh Energy, Will Steger)	6
Lake levels	4
Green aspect of conference; Tracy Mehan; inclusion of teachers	3 each
Craig Blacklock; mining; poster session	2 each
Art exhibit; ballast panel; closing speakers; Dave Ullrich; exotic species;	
GIS; Monday session on Great Lakes; Jerry Hembd; John Robinson;	
Jesse Schomberg; Mindy Granley; VHS; state of lake session; "practical"	
session; rip currents; shipping impacts; Todd Thompson; USGS	1 each
General comment on good keynote speakers, sessions, topics	28
Conference should include more industry, business, general public	2
People were able to sneak in to banquet by modifying their name tags	1
Not enough time	1
Complaints on keynote speaker; opening ceremony; Robert Caldwell	1 each

13

Conference Information To Be Used (Question 7)		
Category	# of Comments	
Making contacts, for information and future collaborations	42	
Sharing information	37	
Teaching	34	
Media and publications (presentations, articles, websites, papers,		
radio/media, videos, posters, and handouts)	25	
Climate change; increased background knowledge; work purposes	15 each	
Management purposes; plans/strategies/future initiatives	9 each	
Discussions	8	
Project ideas (including for science fairs)	6	
Aquatic invasive species; community involvement; local projects;		
personal life changes	4 each	
Economic benefits; grants/funding; ice data; monitoring purposes;		
research; stormwater treatment; water level; youth symposium	3 each	
Model for other conferences; case building; fish data; GIS information;		
lake stewardship; shipping industry information	2 each	
Areas of concern; coalition development; discharge issues; freshwater		
unit; human health issues; VHS, updating LaMP; fish population		
dynamics modeling; oil refineries/pipeline; new resources; furthering		
studies; references in talks; State of the Lakes Ecosystem Conference;		
sustainability; wastewater treatment of chemicals of concern	1 each	
Abstracts wanted; don't know	1 each	

<b>Green Efforts of Conference Which Caused Problems (Question 15)</b>	
Category	# of Comments
Wanted abstracts	9
Name tags didn't work, were inaccurate, did not know about the name	
tags prior to conference, or allowed people to sneak into banquet	7
Didn't know to bring own cup; recycling/waste system hard to find	3 each
More bike racks; wanted handouts; food (allergies or lack of salads)	2 each
Contact list wanted; not enough green measures; hotel did not encourage	
reuse; bad keynote speaker; lights left on during presentation; nothing	
new learned; participant list wanted; more time wanted; wanted other	
conferences to be green	1 each
None	4
Food (positive comment)	3
Good kitchen staff (found lost mug)	1

Effective Breakout Session (Question 19)		
Category	# of Comments	
Climate change	17	
Water levels and withdrawals (Doug Wilcox)	15	
Lake levels (Jay Austin)	8	
Aquatic invasive species (Doug Jensen); toxic pollutants	7 each	
Areas of concern; fisheries strand; Jay Austin	5 each	
Ballast water; GIS sessions; Habitat Conservation and Species		
Management; human health session; ice session (Jay Austin); lake levels		
(Todd Thompson); teacher luncheon	4 each	
Mary Balcer; reserve mining; sustainability; VHS session; watershed		
stewardship	3 each	
Jim Meeker; NPS pollution; endocrine disruptors (Peter Sorenson); rip		
tides (Robert Caldwell); Monday/Tuesday evening education sessions;		
Susan O'Halloran	2 each	
Biohabitat presentation; biology workshops; Bob Krumenaker; dredging;		
Jeff Gunderson; Jerry Hempd; K12 education session; Lake Superior		
streams; Binational program; mining; rain gardens/field days; rip tides;		
Thunder Bay presentation; water quality issues	1 each	
General kudos, none	6	
Wanted more time to attend other sessions or GIS	3	
Research not new, too much emphasis on research	1	

Ineffective Breakout Session (Question 20)	
Category	# of Comments
Facilitated workgroups (be more interdisciplinary, or have better	
facilitation)	4
Aquatic invasive species; sustainability (too much theory, poor	
attendance/moderation)	3 each
Managing woodlands on red clay plains (Kristin Shy); water levels;	
networking sessions too short or unnecessary	2 each
Climate change (not enough perspectives, too focused & repetitive);	
facilitator's attitude; talk on fish on east/west coats; GLFWC talk; sessions	
with computer use or confusing graphs; John Gulliver; Karen Rodriguez;	
Binational forum breakout on public outreach; Marilyn Katz; research	
workgroup; rain gardens; Robert Hedy; breakout sessions too focused on	
show & tell instead of action; toxic pollutants	1 each

Other Types of Conference Participants (Question 21)	
Category	# of Comments
Non-profit; student	7 each
Government or EPA	5
Municipal	4
Consultant; industry	3 each
Policy & education/community organizing	2
Planning; organizational interest; stakeholder advisor to governments;	
LTWC staff; Binational Forum participant; researcher/educator/resident;	
conference speaker; fisheries biologist; tribe-affiliated	1 each

Other Method of Learning About Conference (Question 23)	
Category	# of Comments
Planning committee member	6
Binational forum member; organizer/partner	5 each
Superior Work Group member	4
Invited to attend/speak; club/association; workplace	3 each
Magazine; Cindy Hagley told director	1 each

Suggestions to Improve the Conference Attended (Question 28)	
Category	# of Comments
Scheduling of sessions (keep sessions on time, breaks between	
workshops, poor timing, longer sessions, fewer sessions, same start/end	
times for sessions between strands)	65
Be more diverse (diversifying sessions/audience/partners, use vocabulary	
that non-scientists can understand, collaborating with more groups)	29
More networking time, free time after lunch	11
Poster session improvement suggestions	10
Food complaint	7
More advertising and information available prior to or during conference	6
Lunch/dinner speakers/activities unwanted or too long	5
Have abstracts; change/reduce keynote speakers; keep focus of	
conference on sharing knowledge/LaMP/participants/nonpolitical aspects	4 each
Advertise art/poster room; diversify facilitated workgroups (less on LaMP);	
change focus from research; mix tours into schedule/agenda	3 each
Too much information; shorten banquet presentation; dim lights during	
presentations; have smaller and more frequent conferences with fewer	
topics; include teacher-friendly ideas and supplies; have better trained	
volunteers; action-based facilitated discussions; use comment	
boards/session highlights	2 each
Add workshops to agenda; more on areas of concern; keep building open	
until very end; change date; have scientific debate; reduce price of	
conference; include interaction with keynotes; get better kick-off speaker;	
change location; session on Lake Superior basics of science; more on	
land use change; more discussion groups; shorten/cut out mayor panel;	
don't reuse name tags; change power point presentations to shows; better	
communication between presenters and organizers; registration table by	
door; session details outside rooms; replace sustainability with	
regional/community initiatives; add terrestrial component; have annual	, ,
webcast/ teleconference updates; include daily debriefing workshop	1 each
General/none Control of the control	27
Good job on green efforts	2

Recommended Topics for Future Conferences (Question 29)	
Category	# of Comments
Be more diverse (tribes, EPA, DNA, east side, public)	17
More on climate change, better balance on climate change emphasis	16
More on lake ecosystem/earth science, estuarine ecology	10
Predictions of future conditions, impact quantification, population growth,	
how systems are changing, sustainability	7
Educational impacts/programs/partnerships; toxics	4 each
Community involvement; economics; fisheries/fishing; land use changes;	
mining; look at other areas (entire basin, offshore waters, middle of lake)	3 each
Aquatic invasive species; local regulations/grassroot efforts; lake levels,	
management/NATL legislative issues; politics of water management,	
results/success on BMPs; spirituality; updates on trends and progress	2 each
Air pollution; agency reporting/goal meeting; animal populations; liked	
drum ceremony; funding; changes at grassroots level; green tools for	
public education; human history; information booths too expensive;	
success stories in implementing indicators; in situ technologies; controlling	
erosion; change location; celebrate Lake Superior Day; fewer topics;	
river/stream protection; stop all day meetings; pollutants of concern;	
plenary on education of critical issues; call for papers and abstracts;	
updates through newsletter/journal; societal response to problems; social	
dimension; shipping environmentally-friendly; state of lake session for lay	
people; stormwater and sedimentation; survey results; sewage; not	
enough time for topics; water diversions; work group in morning with	
afternoon sessions for solutions	1 each
General kudos/none	23
Don't know	1

Additional Comments (Question 30)	
Category	# of Comments
General kudos on organizers, green efforts, interdisciplinary efforts,	
location/venue, food, sessions, art room, tours, speakers, etc.	100
Nothing	11
Scholarship gratitude/kudos	7
Include Native Americans, local government, industry, students	5
Information overload, keep presenters on time, reduce concurrent	
meetings	5
Interdisciplinary aspect made conference too technical, how to find all	
players?	2
Need future direction and actions, keep momentum up	2
Reduce focus on climate change; change location; less politicians; include	
diet specification option in registration; nothing new learned; include	
session highlights on other works	1 each

Below is the text for the Web survey. Format reflected the Web software program.

If you have any questions please contact Jake Blasczyk, Conference Evaluator, at

#### Making a Great Lake Superior Conference

Thank you for completing this survey about your reactions to the *Making A Great Lake Superior* Conference. We greatly appreciate you taking time to do so. Your feedback is very important to planning future activities and to evaluating the conference.

The survey takes no more than ten minutes to complete. Please note that you must now complete the entire survey. You can not stop and log-in later to complete it. Please check one response unless otherwise directed as well as provide any requested information.

608.890.0718 or iblasczy@wisc.edu. Your e-mail address Your e-mail address is needed so we know you completed the survey. It will be removed before data analysis. 1. Overall how would you rate your experiences at the conference? 0 Excellent 0 Good 0 Fair  $\circ$ Poor 2. Did you experience any difficulties or problems that negatively affected your conference participation? 0 No  $\bigcirc$ Yes, please identify the difficulty or problem 3. Was there any one scheduled event that now stands out as being particularly memorable? 0 No 0 Yes, please identify the event and explain why it was memorable. 4. Before the conference, how would you describe your level of knowledgeable about the issues facing Lake Superior? 0 Very high 0 High 0 Neither high nor low 0 Low Very low 5. As a result of attending the conference, how much would you say your knowledge of issues facing Lake Superior increased? 0 A lot 0 Somewhat

0

0

A little

Not at all

6.		what are				ation in the near future he information in the	<del>)</del> ?
	0	No					
	0	Yes, ł	nere's how:				_
7.	7. How important or unimportant was networking at the conference for you? Networking is informal sharing of information usually requiring you to initiate the sharing and may resu in valuable on-going contacts.						
	0	Very I	mportant				
	0	Some	what important				
	0	Neithe	er important or ur	nimportant			
	0	Some	what unimportan	ıt			
	0	Very ι	unimportant				
8.	About h	now mar	ny times during tl	ne conference did	you network wi	th others from around	the
	5 or n	nore	3 or 4	1 or 2	Not at all	Can Not Recall	
	C	)	0	0	0	0	
	0 0 0	A lot Some A little Not at	)				
10		-	•	•		asis on dialog and gers and educators?	
	0	Very i	mportant				
	0		what important				
	0	Neithe	er important or ur	nimportant			
	0	Some	what unimportan	it			
	0	Very ι	unimportant				
11				the conference in esource managers	•	g and information shar ?	ing
	0	Very 6	effective				
	0	Some	what effective				
	0	Effect	ive				
	0	Neithe	er effective or ine	effective			
	0	Ineffe	ctive				
	0	Some	what ineffective				
	0		neffective				

	vare or unaware were you that the conference was designed to minimize its mental impact (i.e. a "green conference)?
0	Very aware
0	Somewhat aware
0	Aware
0	Unaware
0	Somewhat unaware
0	Very unaware
	portant or unimportant was it for you that the conference took steps to minimize its mental impact?
0	Very important
0	Somewhat important
0	Neither important or unimportant
0	Somewhat unimportant
0	Very unimportant
	orts to minimize the conference's environmental impact create any problems for nference participation? If yes, please explain
0	No
0	Yes, please explain
	if any, of the following steps for reducing the conference's environmental impact ou definitely like to see at future conferences?
0	Organizing carpools
0	Using locally grown/produced food
0	Encouraging re-used nametags
0	Minimize paper usage
0	Compost waste foods and disposable cups, etc.
0	Purchase CO <sup>2</sup> offset credits
0	None of the above

16. How useful were each of these keynotes and plenary sessions?

Keynote and Plenary	Did Not Attend	Can't Recall	Not at all	Not Very	Somewhat	Very
Monday Keynote – "Resilience: Managing the Greatest Lake in the Face of Changes and Uncertainty	0	0	0	0	0	0
Tuesday Plenary – "Climate change in Lake Superior"	0	0	0	0	0	0
Wednesday Plenary – "What Have We Learned & Next Steps"	0	0	0	0	0	0
Wednesday Keynote – Economic Future of the Great Lakes"	0	0	0	0	0	0

17. How useful were each of these other conference elements for you?

Elements	Did Not Attend	Can't Recall	Not at all	Not Very	Somewhat	Very
Panel: Perspectives on Past and Future States of Lake Superior	0	0	0	0	0	0
Global Climate Change Panel	0	0	0	0	0	0
Concurrent Breakout Sessions	0	0	0	0	0	0
Poster Session	0	0	0	0	0	0
Facilitated workgroups on education, management and research	0	0	0	0	0	0
Sustainable Communities: Local Governments Help Protect and Restore the Lake	0	0	0	0	0	0
Field trips to local areas of interest	0	0	0	0	0	0
Lake Superior art and video	0	0	0	0	0	0

18	. Did you recall	attending a l	oreakout ses	ssion that yo	ou thought was	very effective in
	increasing yo	ur knowledge	about Lake	Superior is:	sues?	

0	No
0	Yes, Please identify this very effective breakout session
	A

		ı recall attending a b ing your knowledge				fective in	
	0	No					
	0	Yes, Please identif	fv this <b>verv ine</b>	ff <b>ective</b> ses	sion		
		A.	.,		<b></b>		
		74.					
20. V	Vhich (	one of the following	best describes	you as a cor	nference participant	?	,
Lake related management position (government or private)		Elected official	Educator (any type)	Interested local or basin resident	Media	Other	
0		0	0	0	0	0	0
		breaks, lunch, between issues with a confe				bout Lake	
	0	Yes					
	0	Can't recall					
		Carrerooan					
	-	breaks, lunch, betwe or issues with a confe		•	_		
	0	No					
	0	Yes					
	0	Can't recall					
	_	breaks, lunch, between issues with a confe		•	-	bout Lake	
	0	No					
	0	Yes					
	0	Can't recall					
		unting the October co akes issues have yo		•		orkshops al	bout
	0	None					
	0	One					
	0	Two					
	0	Three					
	0	More than three					

0	Electronic (e-mail, Web site)					
0	Announcement at another meeting					
0	Newspaper					
0	Other (Please identify)					
	nave any suggestions for improving the Lake Superior conference you attended? lease list below.					
27. Would y how fred	ou recommend that a Lake Superior Conference be held on a regular basis? If so quently?					
0	No					
0	Yes					
28. How ofte	en should a Lake Superior Conference be offered?					
0	Every two years					
0	Every three years					
0	Every five years					
29. Would y	ou attend future conferences focusing on Lake Superior?					
0	No					
0	Maybe					
0	Yes					
30. Do you l below.	nave recommendations about topics for any future conferences? If yes please list					
	anything else you want to tell us about the conference and its usefulness to you? lease do so below.					

Thank You for Providing This Valuable Information.

25. Which **one** of the following was the primary way you learned about the conference?

Personal communications with an individual

0

0

Newsletter

23

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