Lake Julia Aquatic Plant Management Plan - Public Questionnaire

Prepared by Lake Julia Lake Association
Technical assistance by White Water Associates, Inc.

June 2009

Note: This public questionnaire was sent out as a four-page document with the first page being explanatory material (see text below). Here the original questionnaire is expanded to provide the analysis (primarily in bar graph form) of responses from 28 respondents.

We are writing to inform you about an important Lake Julia planning process that could have important outcomes for Lake Julia and how you use and enjoy the lake. Please assist us in the process by completing this questionnaire and conveying your ideas about Lake Julia. Return the survey by November 14, 2009.

Since 2002, the Lake Julia Lake Association has devoted considerable effort to understanding the Lake Julia ecosystem. Over the course of that work, two aquatic plant surveys have provided substantial information on aquatic plant presence and distribution in the lake. Lake Julia currently has a healthy and diverse community of native aquatic plants and does not harbor any aquatic invasive plant species.

An aquatic plant bed is often termed a "weed bed." In fact, many aquatic species have "weed" as part of their names. Duckweed, pondweed, musky weed, and waterweed are just a few examples. This usage is not meant to be derogatory, but unfortunately "weed" also connotes an unwanted plant, often one that exhibits rampant growth. Such is not the case for the vast majority of native plants in aquatic ecosystems.

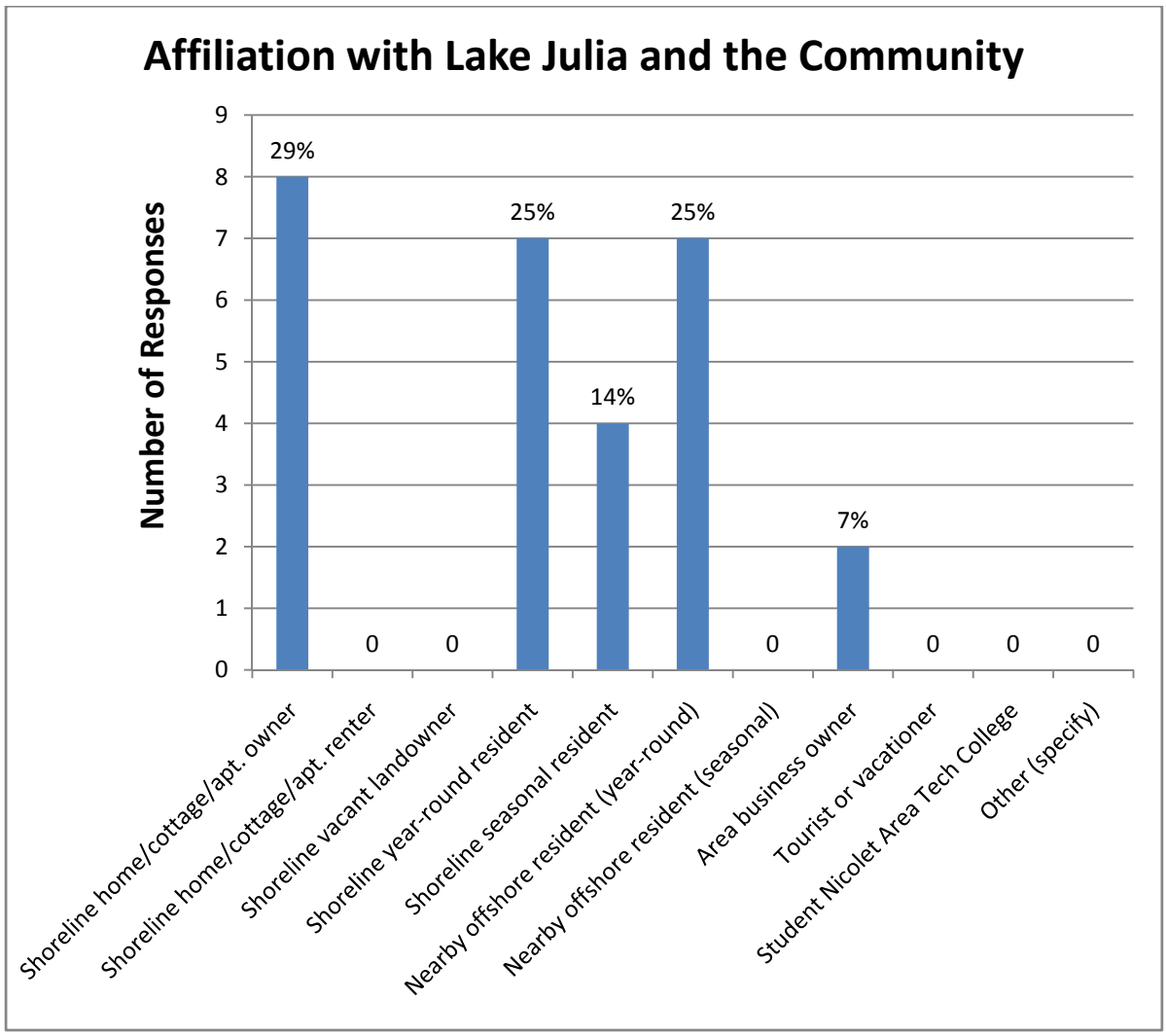
Aquatic plants are a vital part of a lake ecosystem. They provide habitat for fish and other animals, filter runoff from the uplands, stabilize the shoreline against erosion, offer spawning areas for fish, produce oxygen, absorb nutrients (making them less available for nuisance algae), provide food for many animals, and make it difficult for aquatic invasive plant species to become established.

In lakes that receive an overabundance of nutrients (particularly from excessive fertilizers or leaking septic tanks), plant growth can become too lush, or dominated by only a few species. This process of accelerated lake plant growth (often caused by human influences) can give aquatic plants a bad name. Non-native plant species (aquatic invasive species) can be transported on boat motors or dumped from home aquariums and establish in a lake. Sometimes, they may come to dominate a lake and exclude other native species.

The Lake Julia Lake Association wants to maintain the high quality condition present in Lake Julia. It wants to establish the foundation to conduct plant management should the need arise in the future (for example if an aquatic invasive plant species is detected in Lake Julia). An Aquatic Plant Management Plan is required by the WDNR prior to any plant management and the Lake Julia Lake Association is in the process of creating such a plan.

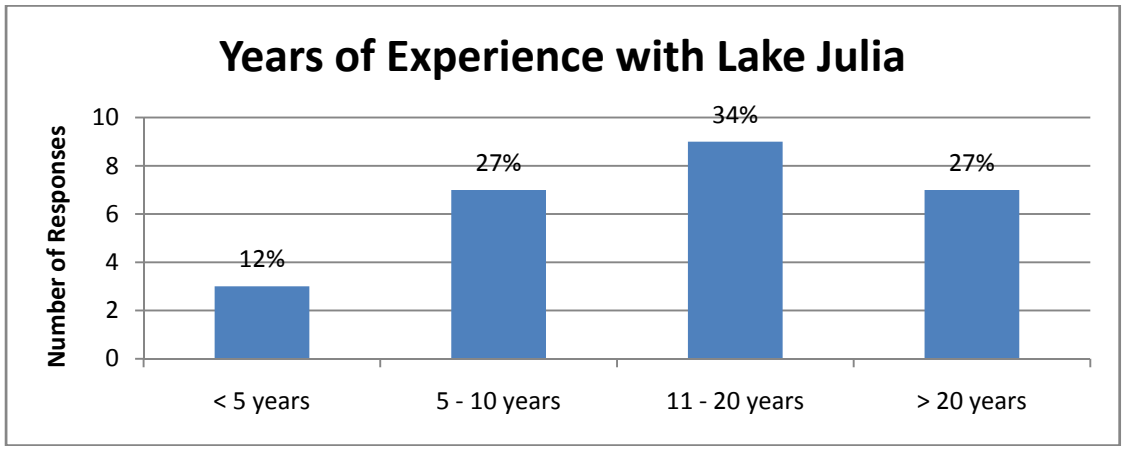
1. Please circle the response(s) that describes your affiliation with Lake Julia and the community.

A. Shoreline home/cottage/apartment owner
B. Shoreline home/cottage/apartment renter
C. Shoreline vacant landowner
D. Shoreline year-round resident
E. Shoreline seasonal resident
F. Nearby offshore resident (year-round)
G. Nearby offshore resident (seasonal)
H. Area business owner
I. Tourist or vacationer
J. Student Nicolet Area Tech College
K. Other (specify)_____



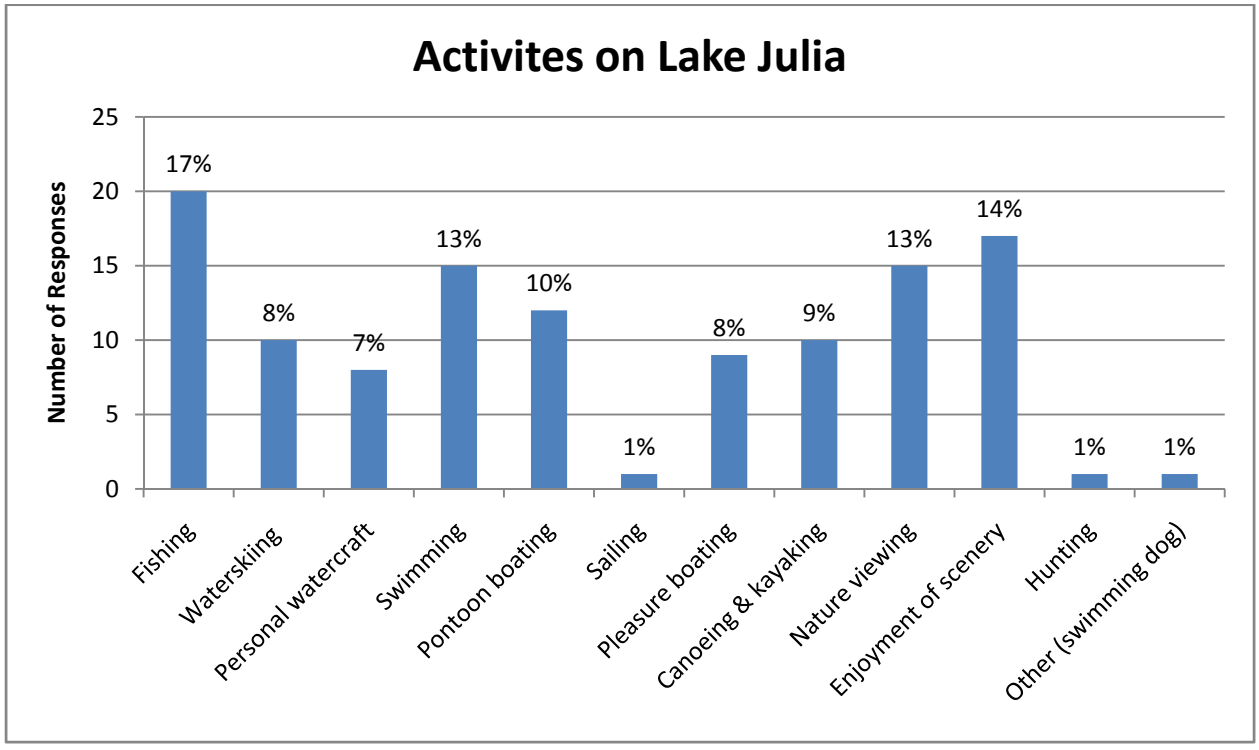
2. How many years of experience do you have with Lake Julia?

A. Less than 5 B. 5-10 C. 11-20 D. Greater than 20



3. Please circle the activities that you do on Lake Julia. (Circle all that apply)

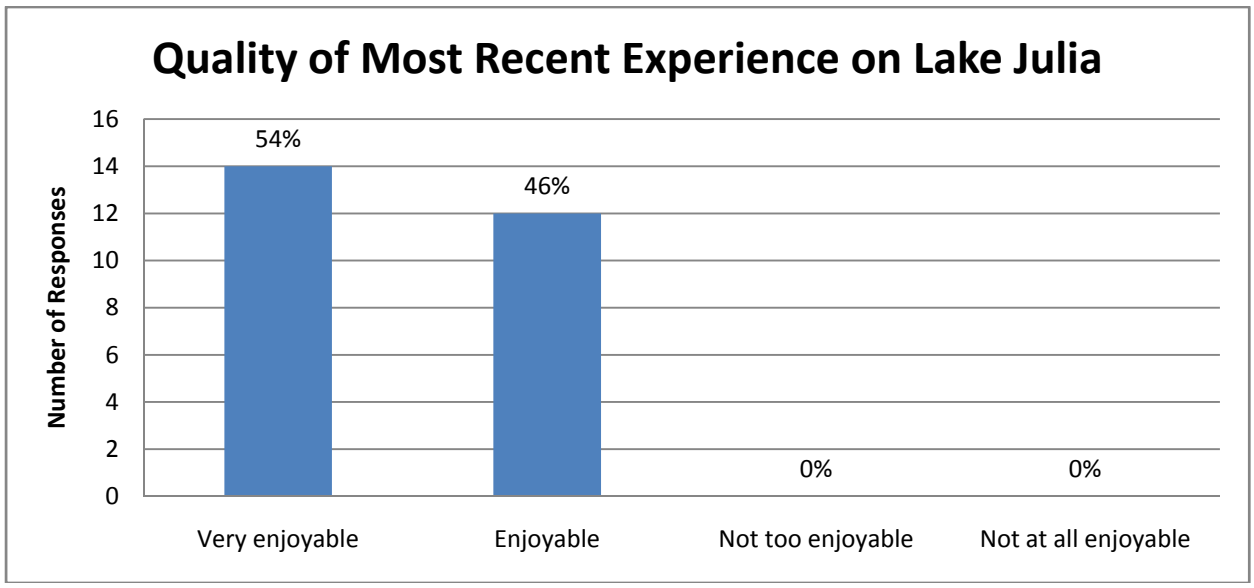
A. Fishing
B. Waterskiing
C. Personal watercraft
D. Swimming
E. Pontoon boating
F. Sailing
G. Pleasure boating
H. Canoeing & kayaking
I. Nature viewing
J. Enjoyment of scenery
K. Hunting
L. Other_____



4. From the question 3 list, write the letter of your most recent recreational activity on Lake Julia? ____

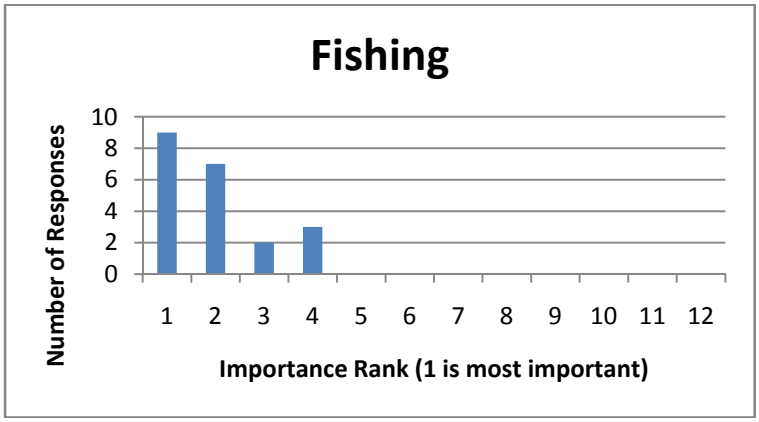
Overall, how would you rate that experience? (Please select only one)

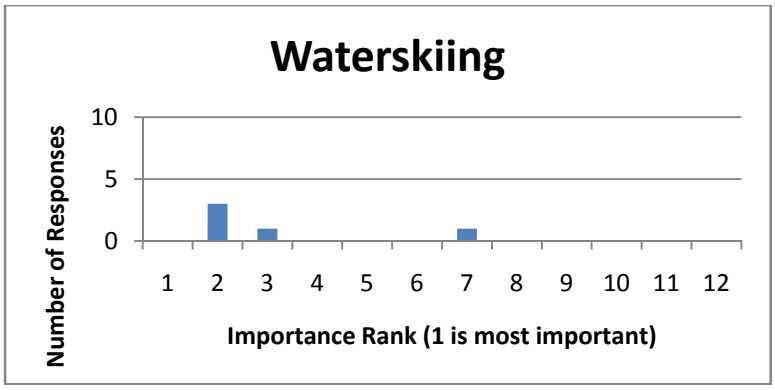
A. Very enjoyable B. Enjoyable C. Not too enjoyable D. Not at all enjoyable

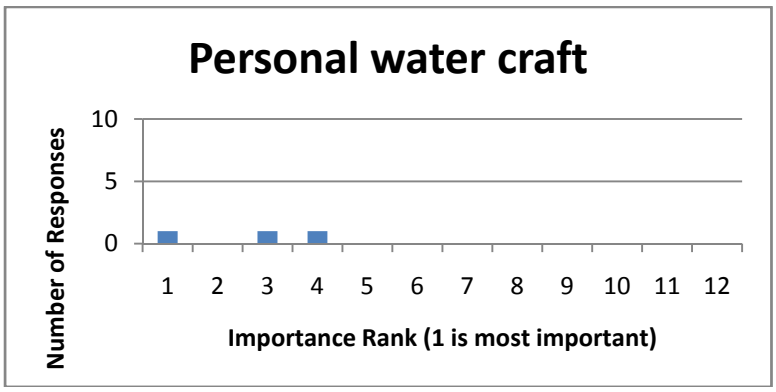


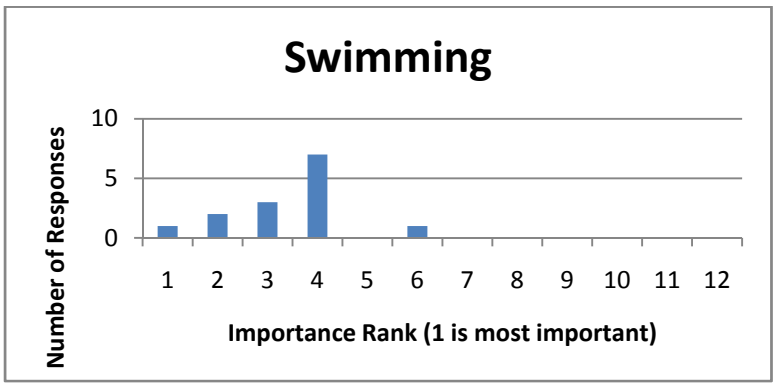
5. Please rank the four activities that are most important to you on Lake Julia. (Use "1" for the most important, "2" for your next choice and so on.)

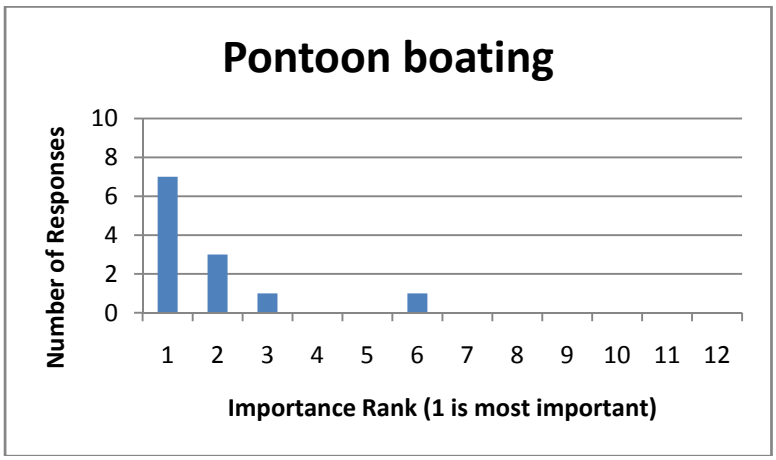
___Fishing
___Waterskiing
___Personal water craft
___Swimming
___Pontoon boating
___Sailing
___Pleasure boating
___Canoeing & kayaking
___Nature viewing
___Scenery
___Hunting
___Other (specify)_____

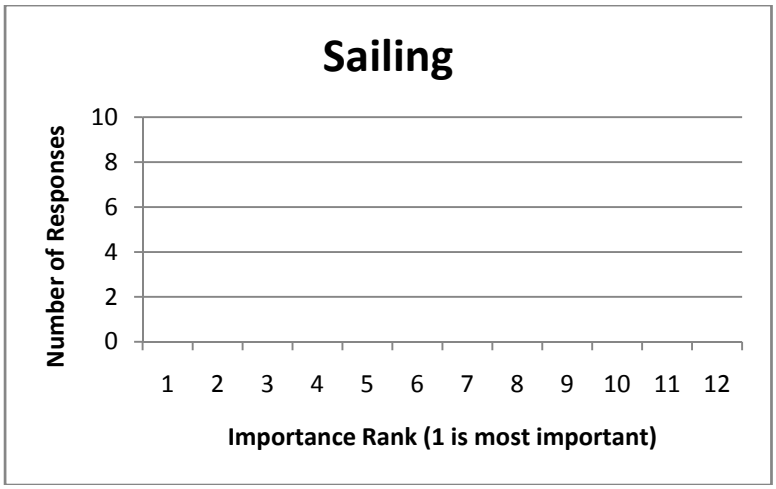


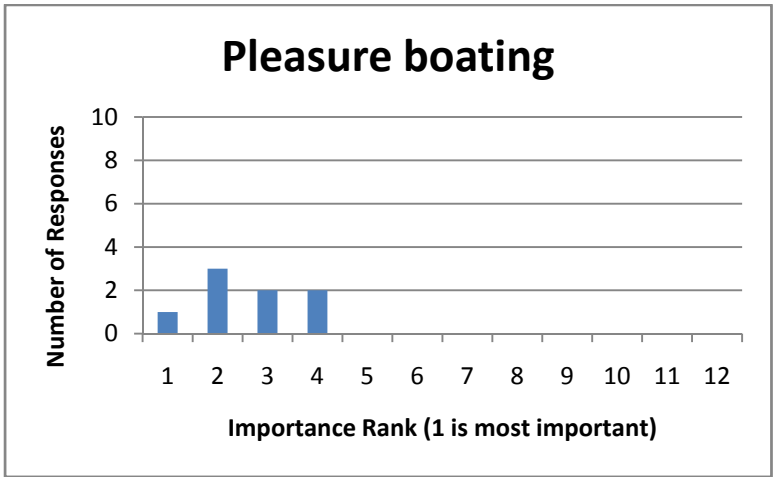

Waterskiing
Number of Responses
10
5
0
1 2 3 4 5 6 7 8 9 10 11 12
Importance Rank (1 is most important)

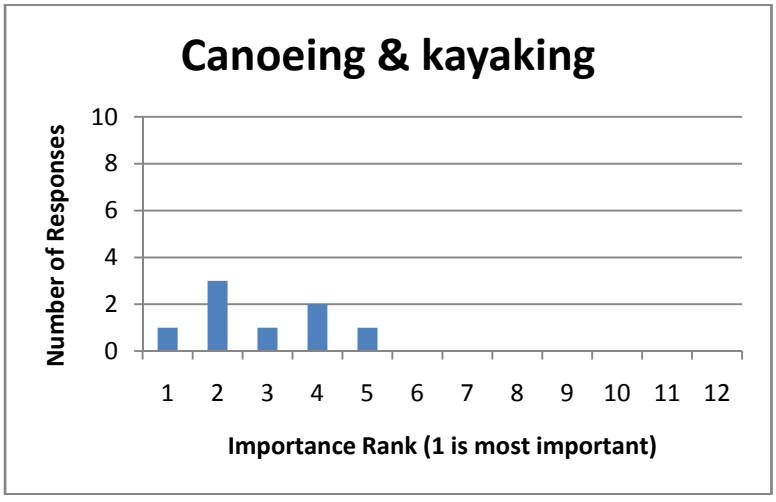

Personal water craft
Number of Responses
10
5
0
1 2 3 4 5 6 7 8 9 10 11 12
Importance Rank (1 is most important)

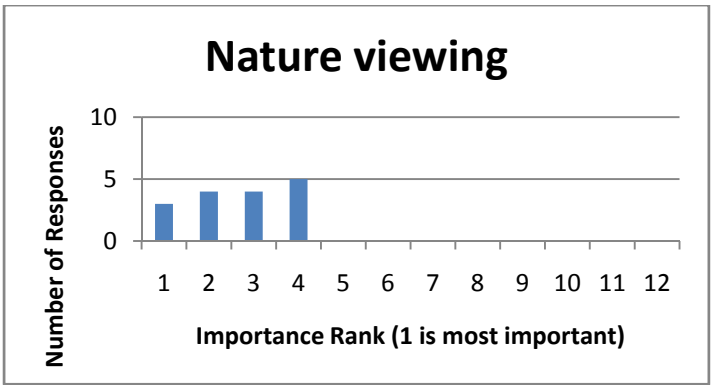

Swimming
Number of Responses
10
5
0
1 2 3 4 5 6 7 8 9 10 11 12
Importance Rank (1 is most important)

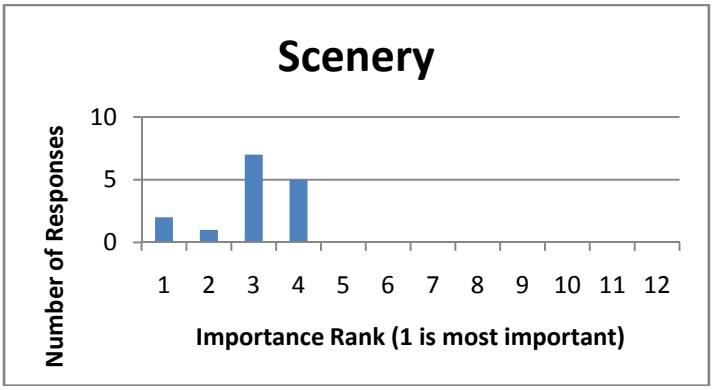

Pontoon boating
Number of Responses
10
8
6
4
2
0
1 2 3 4 5 6 7 8 9 10 11 12
Importance Rank (1 is most important)

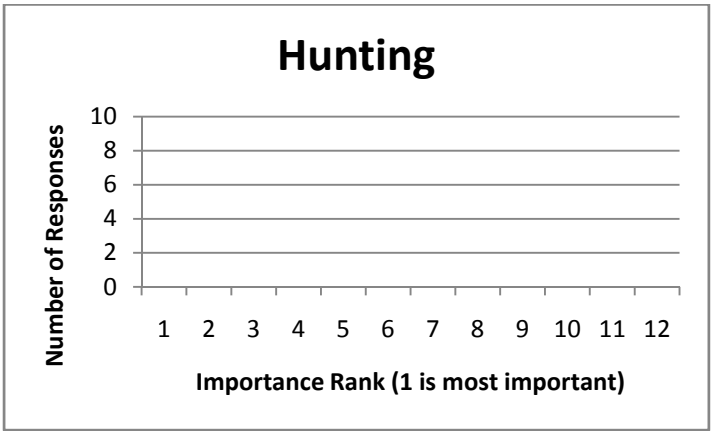

Sailing
Number of Responses
10
8
6
4
2
0
1 2 3 4 5 6 7 8 9 10 11 12
Importance Rank (1 is most important)

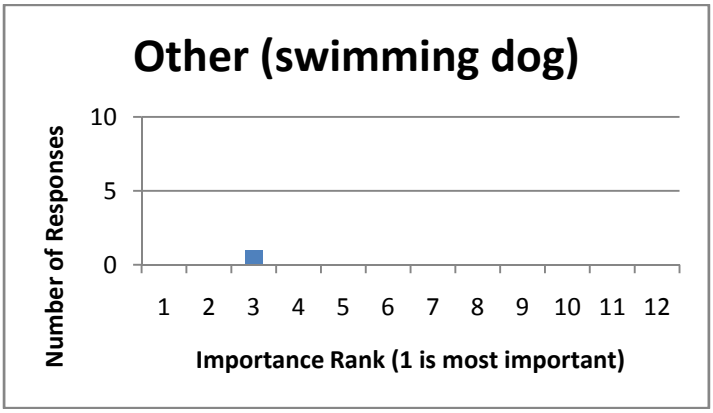

Pleasure boating
Number of Responses
10
8
6
4
2
0
1 2 3 4 5 6 7 8 9 10 11 12
Importance Rank (1 is most important)


Canoeing & kayaking
Number of Responses
10
8
6
4
2
0
1 2 3 4 5 6 7 8 9 10 11 12
Importance Rank (1 is most important)


Nature viewing
Number of Responses
10
5
0
1 2 3 4 5 6 7 8 9 10 11 12
Importance Rank (1 is most important)

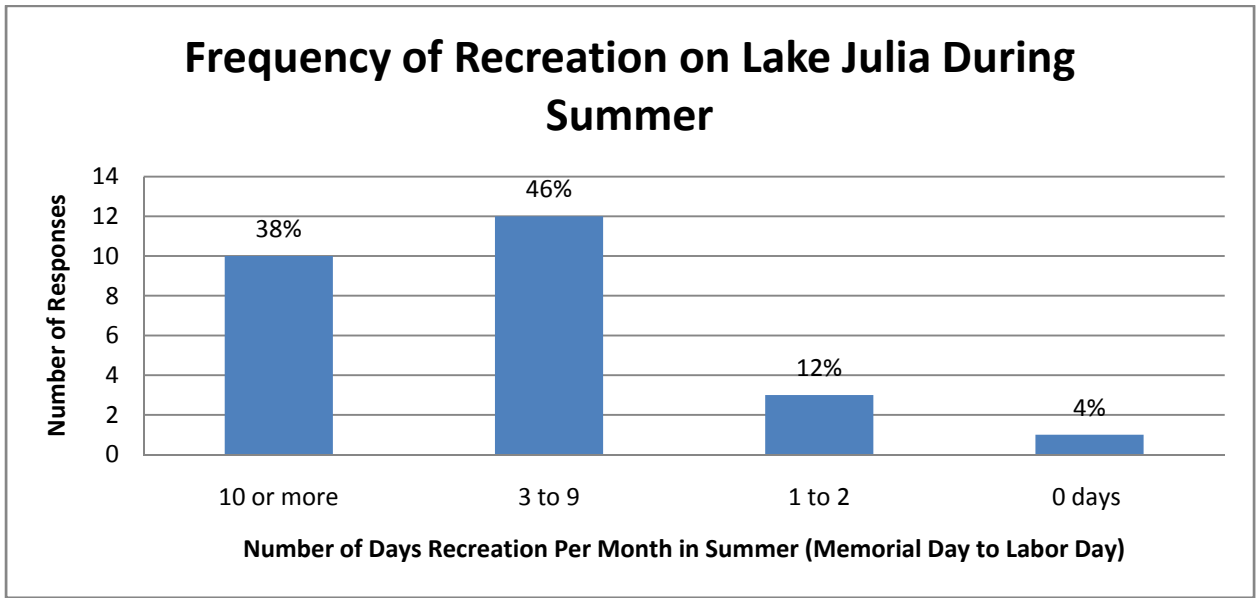

Scenery
Number of Responses
10
5
0
1 2 3 4 5 6 7 8 9 10 11 12
Importance Rank (1 is most important)


Hunting
Number of Responses
10
8
6
4
2
0
1 2 3 4 5 6 7 8 9 10 11 12
Importance Rank (1 is most important)


Other (swimming dog)
Number of Responses
10
5
0
1 2 3 4 5 6 7 8 9 10 11 12
Importance Rank (1 is most important)

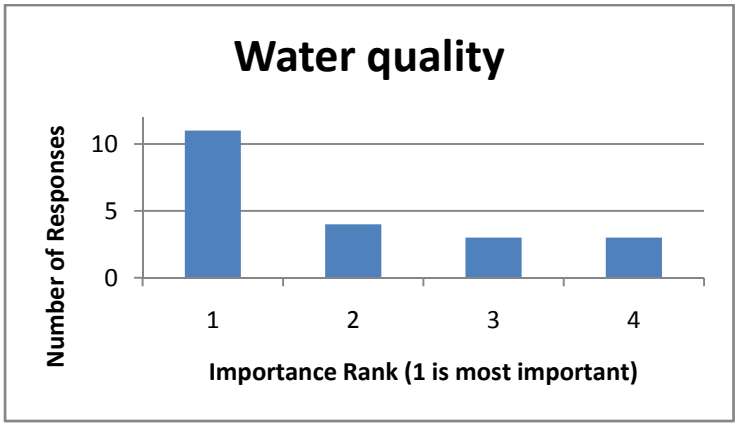
6. Please circle the statement that best describes how often you recreate on Lake Julia during the summer (between Memorial Day and Labor Day).

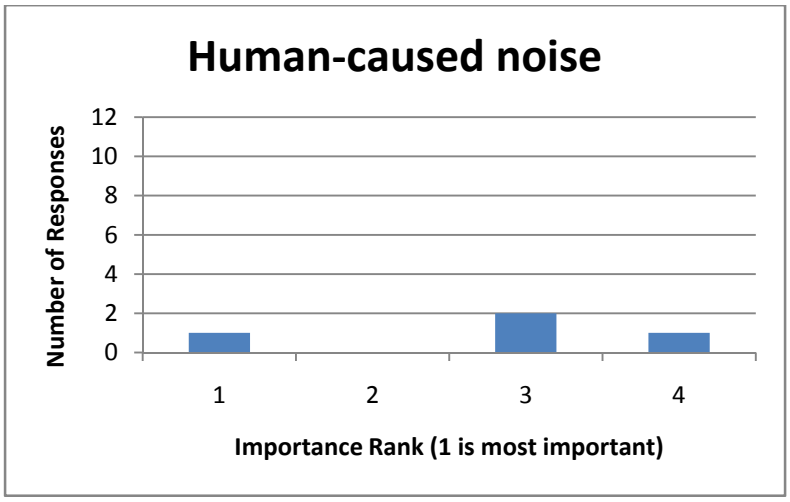
A. 10 or more days per month B. 3-9 days per month C. 1-2 days per month D. Never

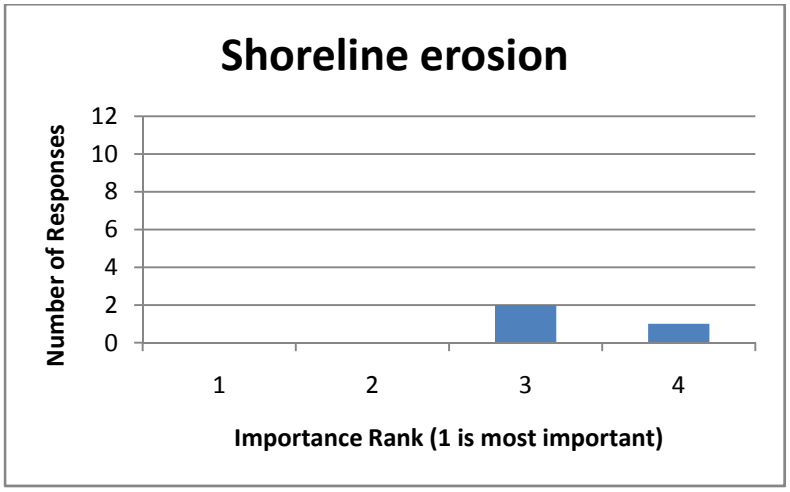


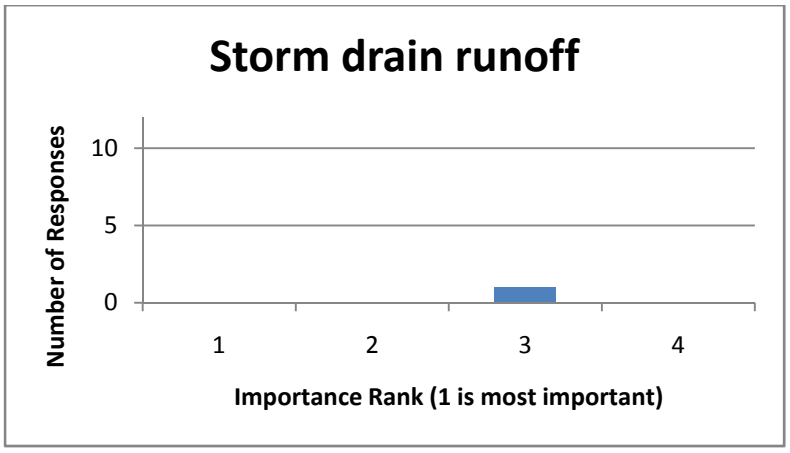
7. From the list below, please rank your top four (1, 2, 3, and 4) concerns for Lake Julia. Write a 1 for your primary (most important) concern.

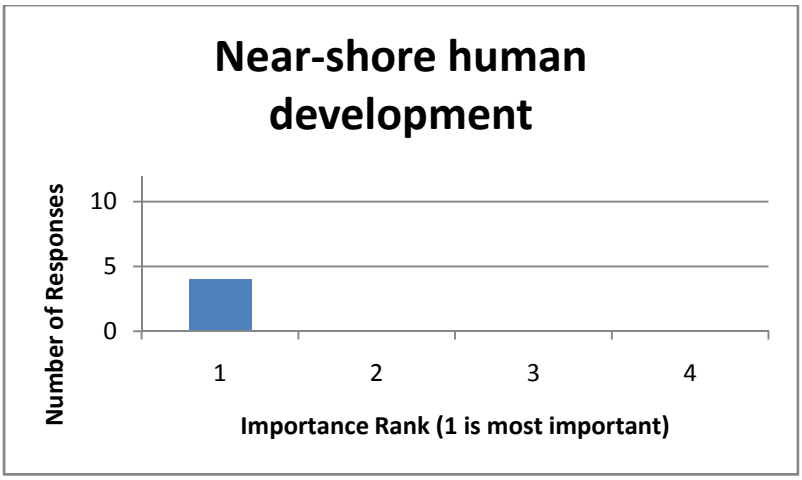
___ Water quality
___ Human-caused noise
___ Shoreline erosion
___ Storm drain runoff
___ Near-shore human development
___Boat traffic
___Boating safety
___Quality of fish habitat
___ Aquatic plant growth
___ Algae growth
___Aquatic Invasive Species (AIS) introduction
___ Human development on the greater watershed
___ Shoreline vegetation removal
___Other (explain_____)

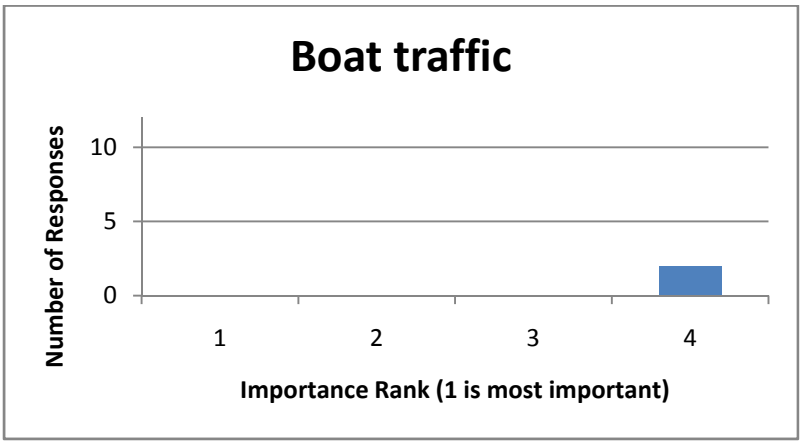


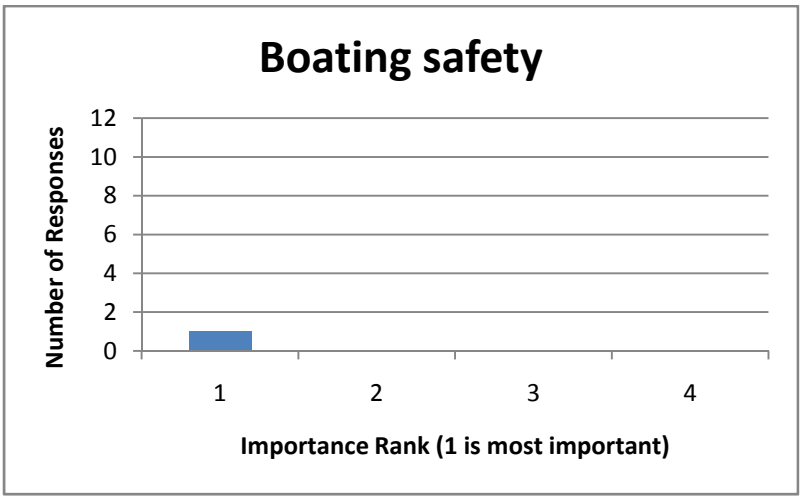

Human-caused noise
Number of Responses
12
10
8
6
4
2
0
1
2
3
4
Importance Rank (1 is most important)

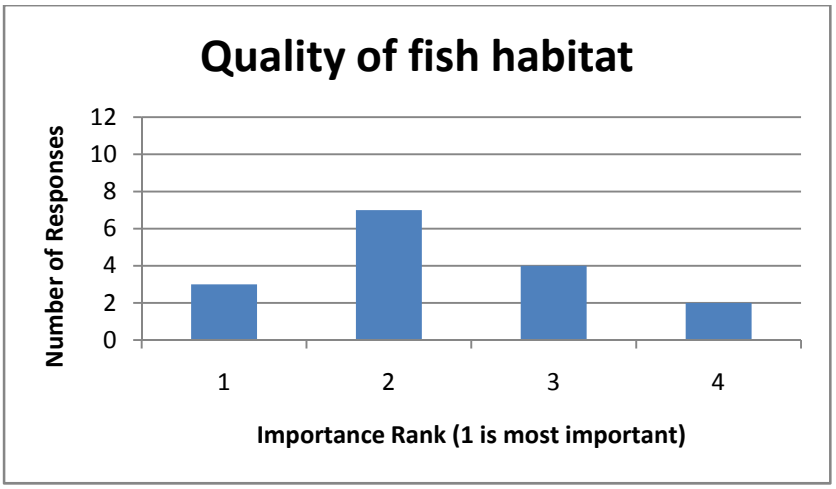

Shoreline erosion
Number of Responses
12
10
8
6
4
2
0
1
2
3
4
Importance Rank (1 is most important)

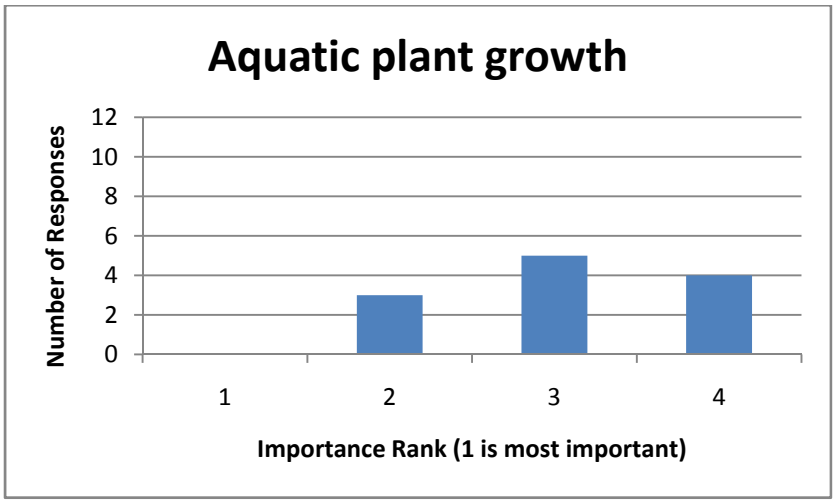

Storm drain runoff
Number of Responses
10
5
0
1
2
3
4
Importance Rank (1 is most important)

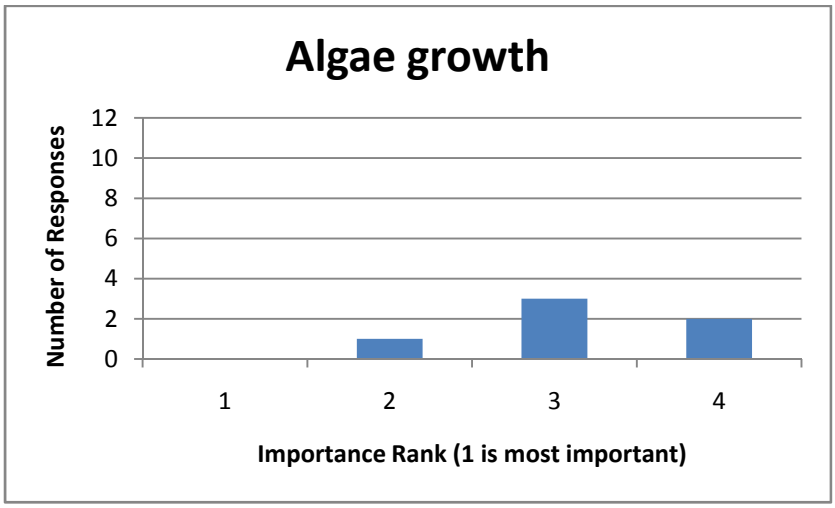

Near-shore human development
Number of Responses
10
5
0
1
2
3
4
Importance Rank (1 is most important)

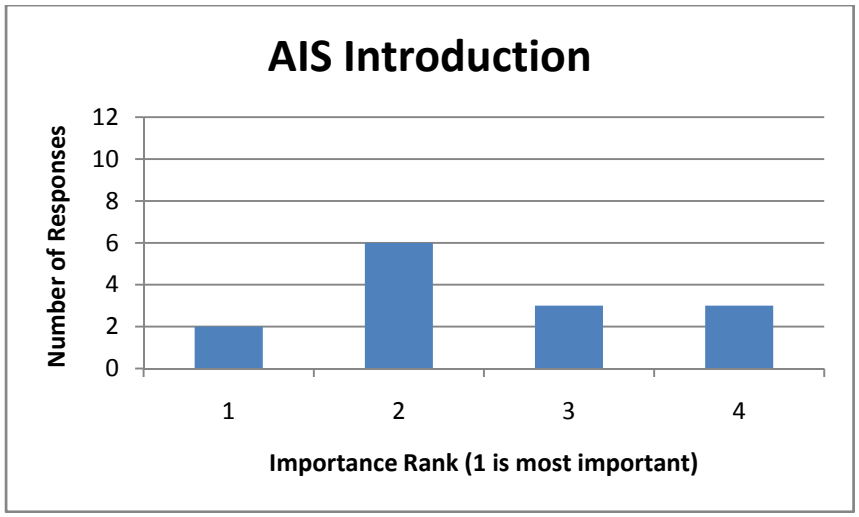

Boat traffic
Number of Responses
10
5
0
1
2
3
4
Importance Rank (1 is most important)

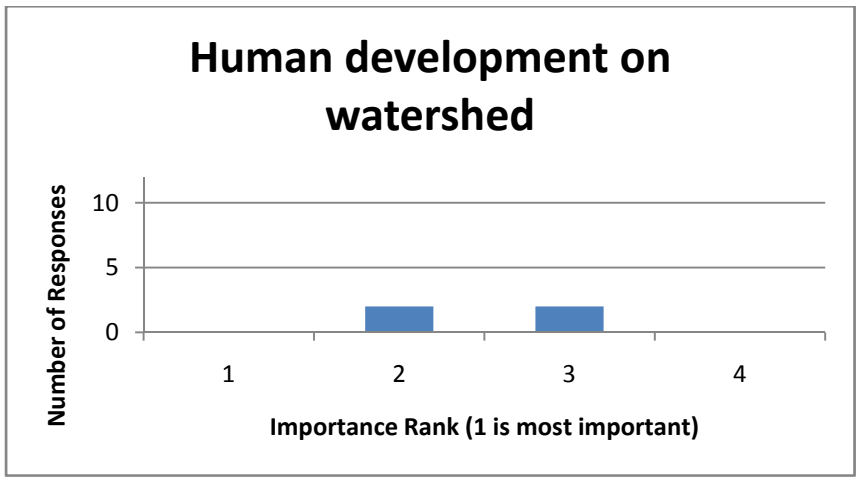

Boating safety
Number of Responses
12
10
8
6
4
2
0
1
2
3
4
Importance Rank (1 is most important)

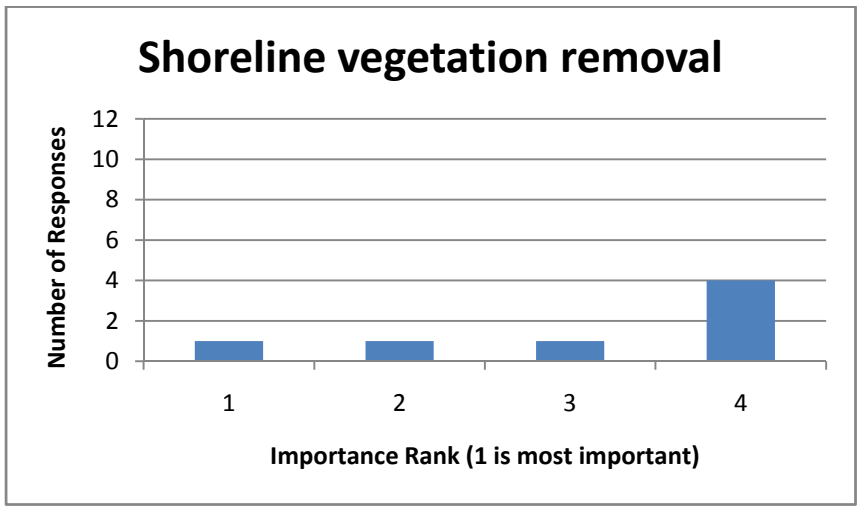

Quality of fish habitat
Number of Responses
12
10
8
6
4
2
0
1
2
3
4
Importance Rank (1 is most important)

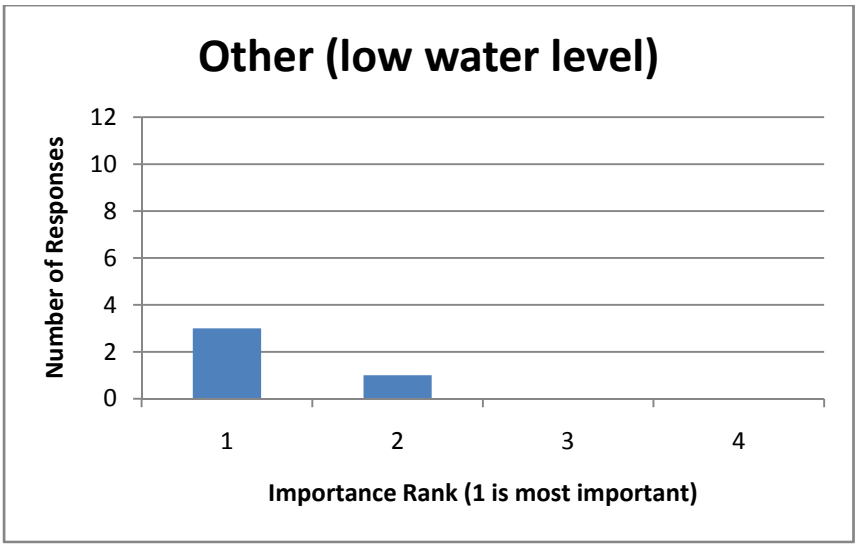

Aquatic plant growth
Number of Responses
12
10
8
6
4
2
0
1
2
3
4
Importance Rank (1 is most important)


Algae growth
Number of Responses
12
10
8
6
4
2
0
1
2
3
4
Importance Rank (1 is most important)


AIS Introduction
Number of Responses
12
10
8
6
4
2
0
1
2
3
4
Importance Rank (1 is most important)

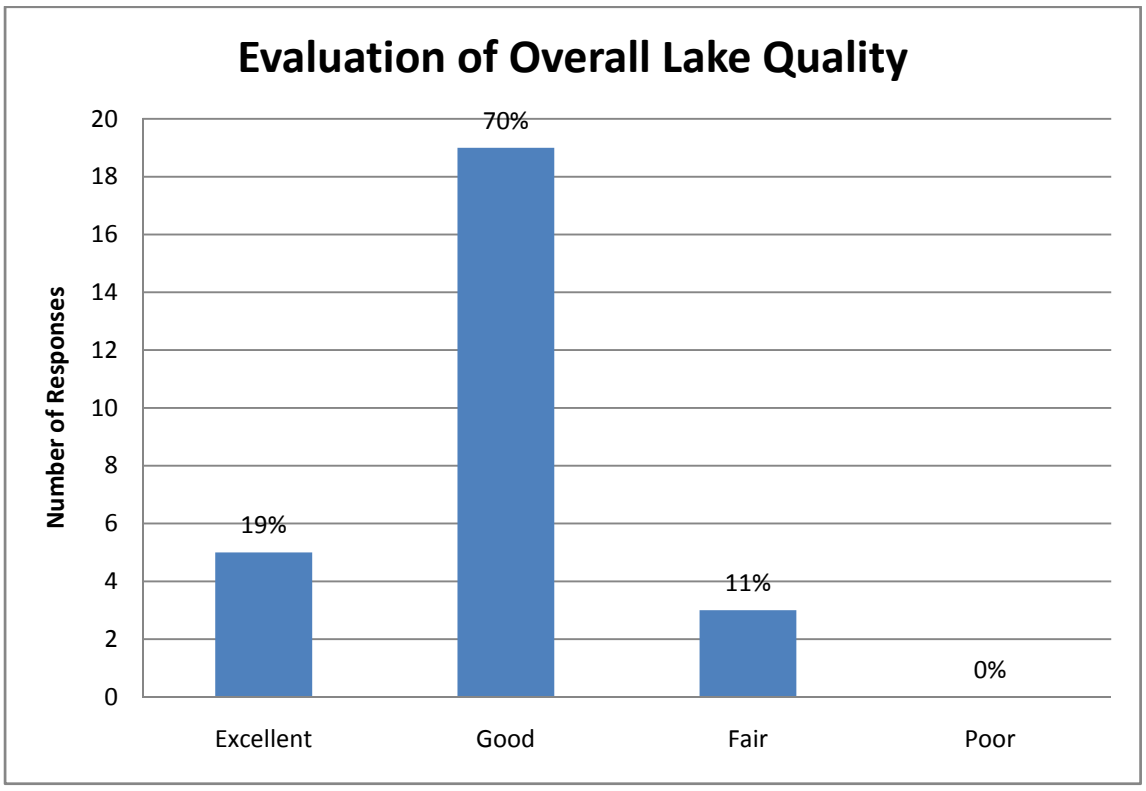

Human development on watershed
Number of Responses
10
5
0
1
2
3
4
Importance Rank (1 is most important)


Shoreline vegetation removal
Number of Responses
12
10
8
6
4
2
0
1
2
3
4
Importance Rank (1 is most important)



8. Considering the lake issues in question 7, please evaluate the overall lake quality. (Circle one)

A. Excellent B. Good C. Fair D. Poor



9. In the last 10 years, what changes have you seen in L. Julia's aquatic plants? (circle all that apply)

A. No dramatic changes – about the same as always.

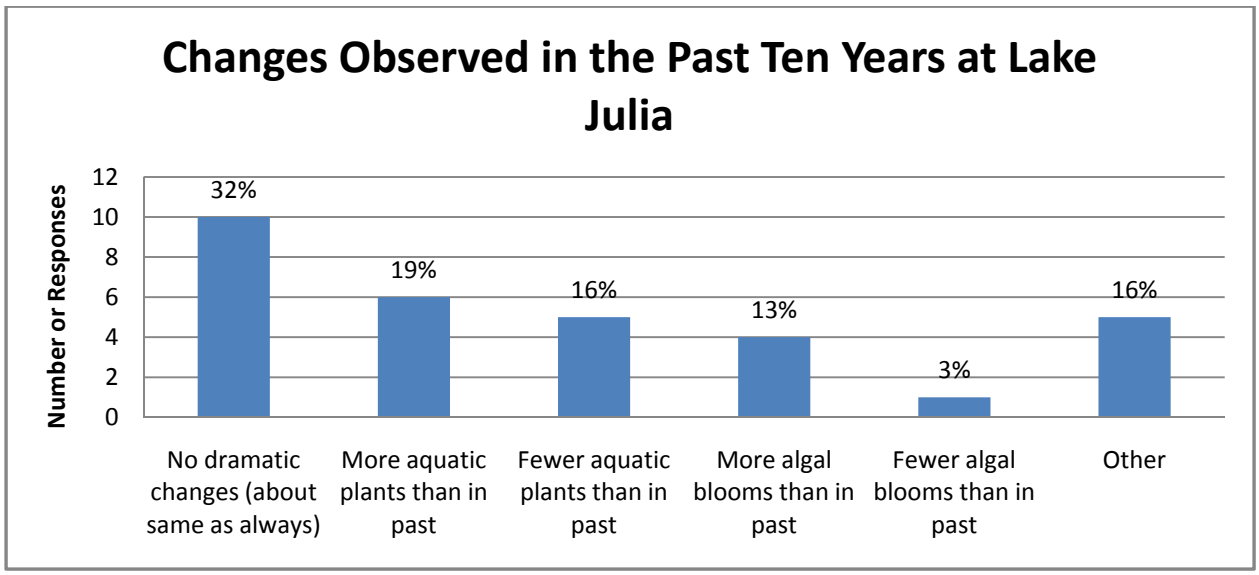
B. More aquatic plants than in the past.

C. Fewer aquatic plants than in the past.

D. More algal blooms than in the past.

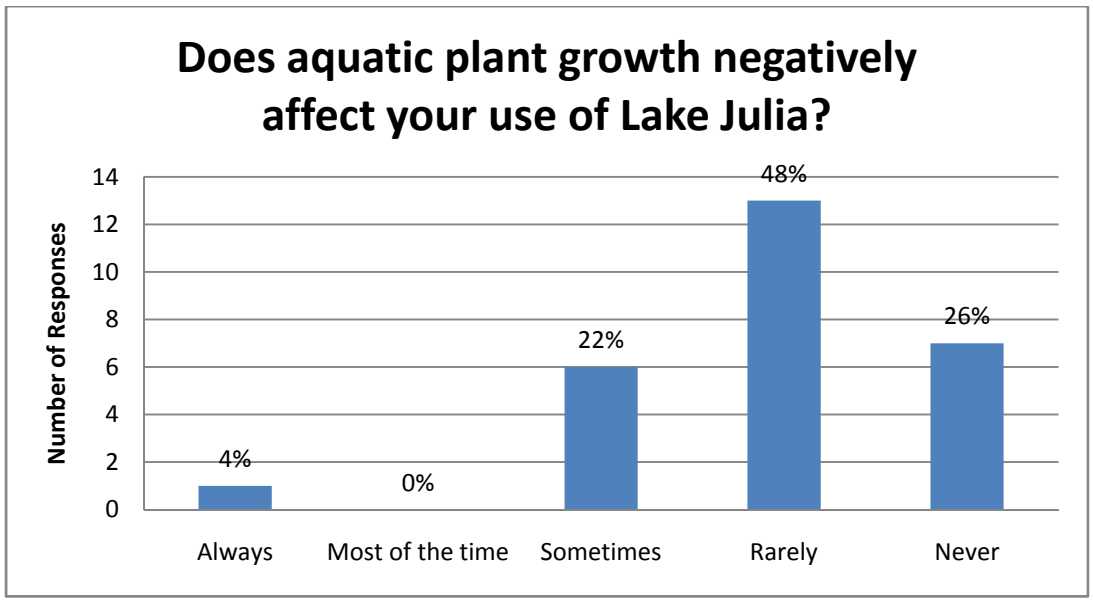
E. Fewer algal blooms than in the past.

F. Other (describe: _____)



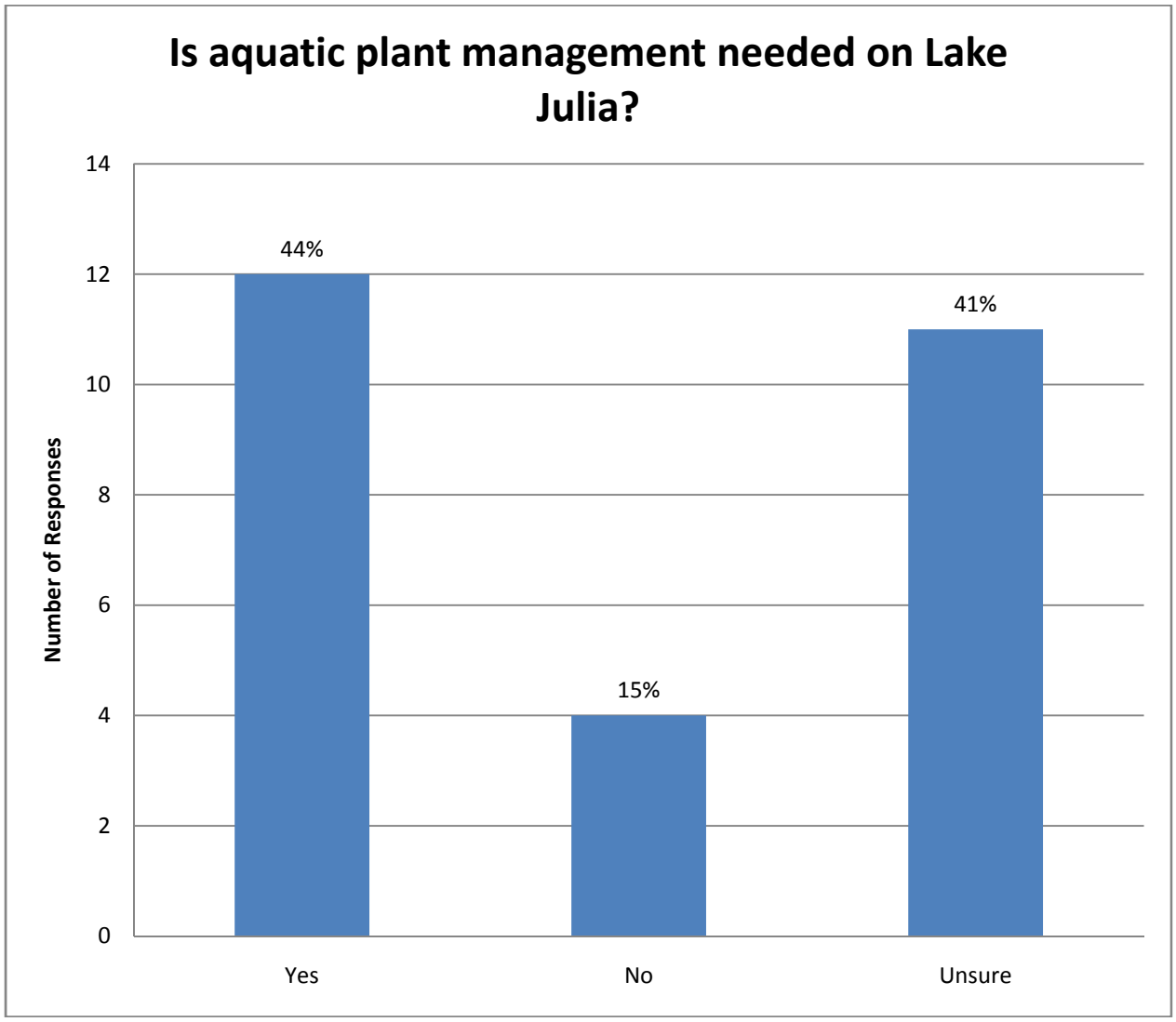
10. How often, if ever, does aquatic plant growth negatively affect your use of Lake Julia? (Circle one)

A. Always B. Most of the time C. Sometimes D. Rarely E. Never



11. Do you believe that aquatic plant management is needed on Lake Julia? (Please circle only one)

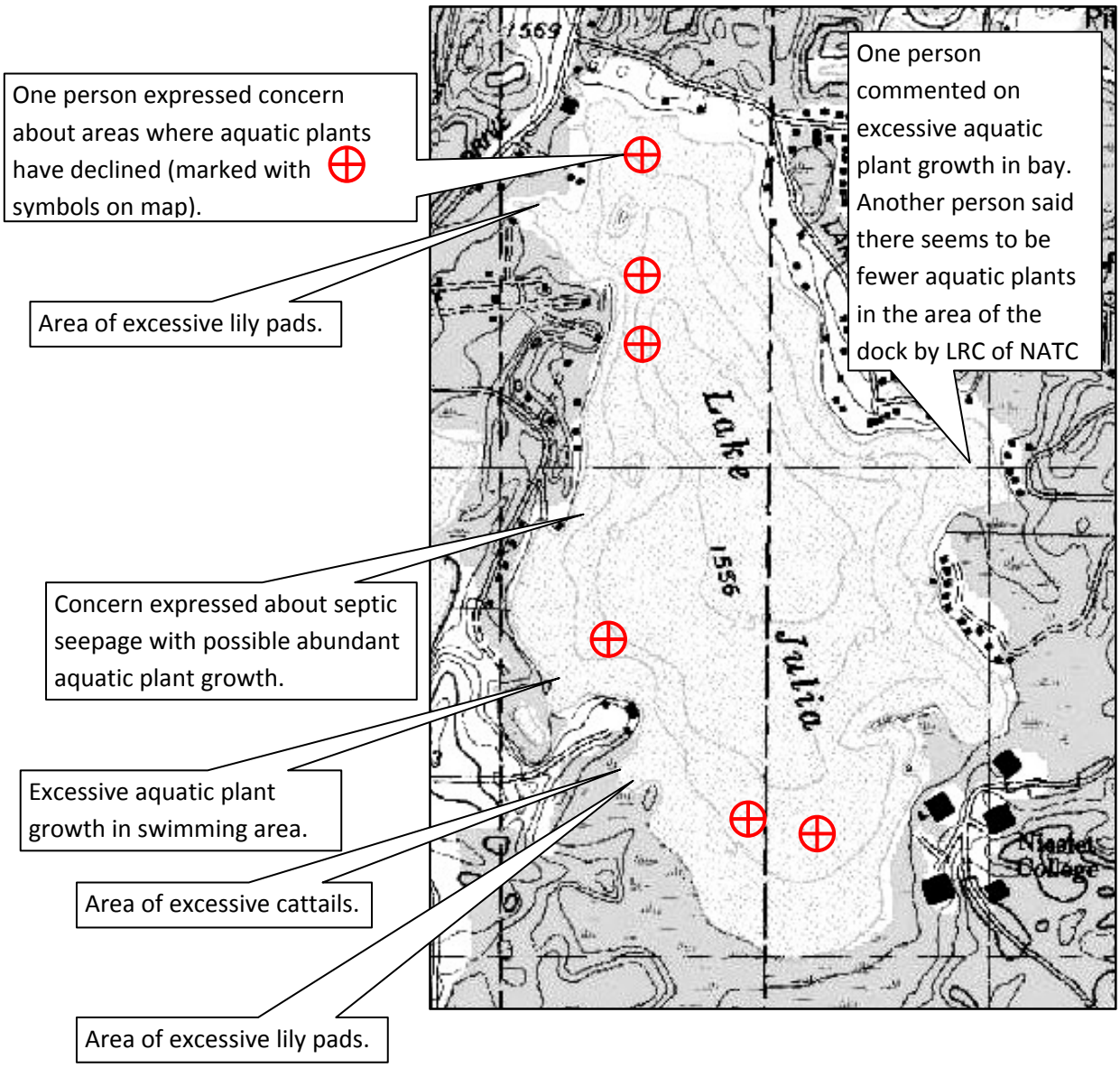
A. Yes B. No C. Unsure



12. If you answered "Yes" to question 11, please describe the problem on Lake Julia that you believe requires aquatic plant management. Label on the map (if appropriate) where you have observed plant problems.

(See map and annotations on following page)

Below is a map that summarizes comments from several survey respondents to Question 12.



13. Below are several methods used to manage Aquatic Invasive Species. Using the following scale, please indicate your level of support or opposition for each control method.

A. Definitely support B. Probably support C. Unsure D. Probably oppose E. Definitely oppose

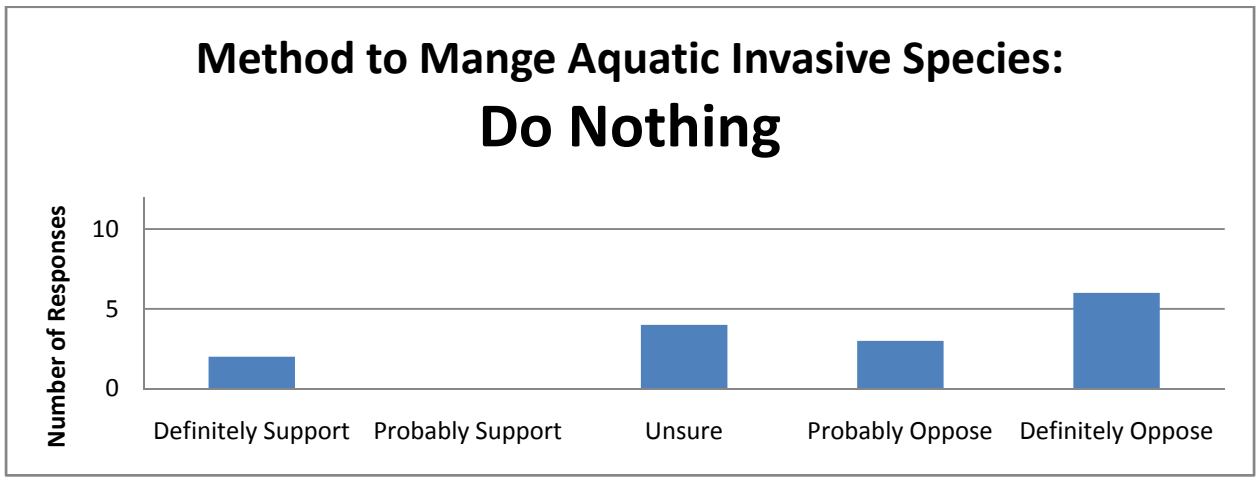
___Do nothing

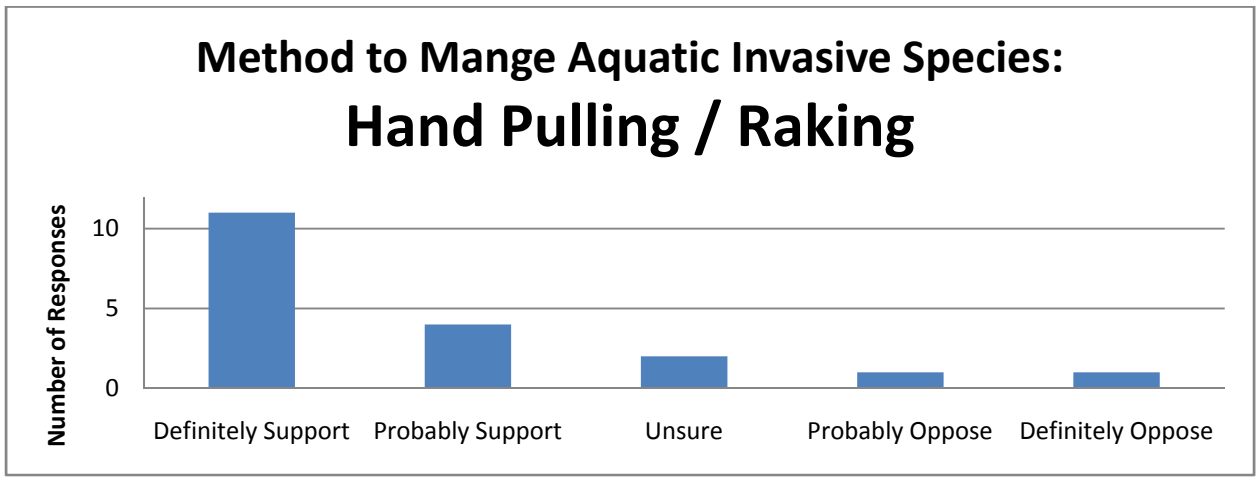
___Hand pulling and raking

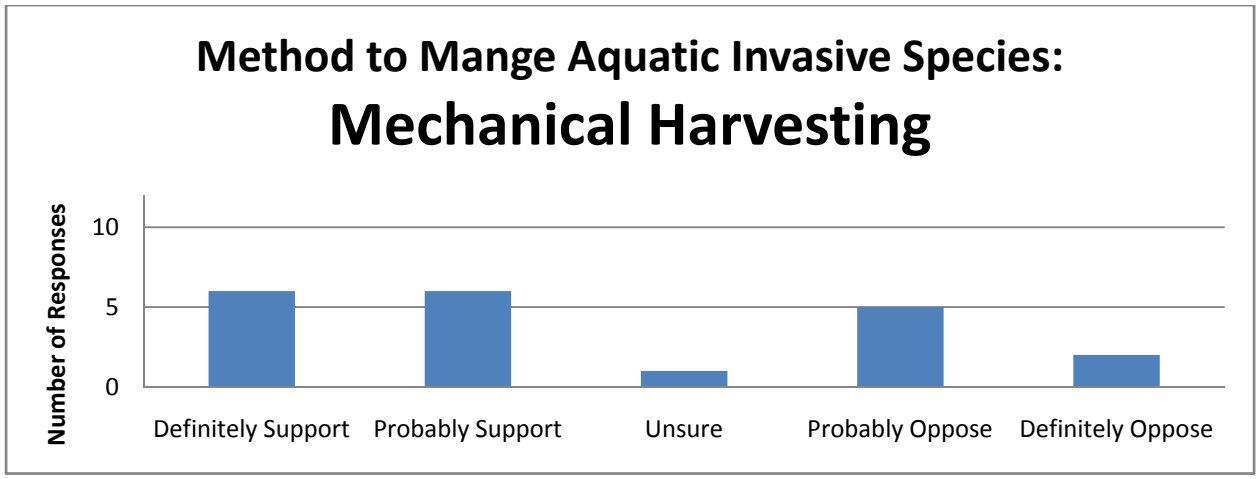
___Mechanical harvesting

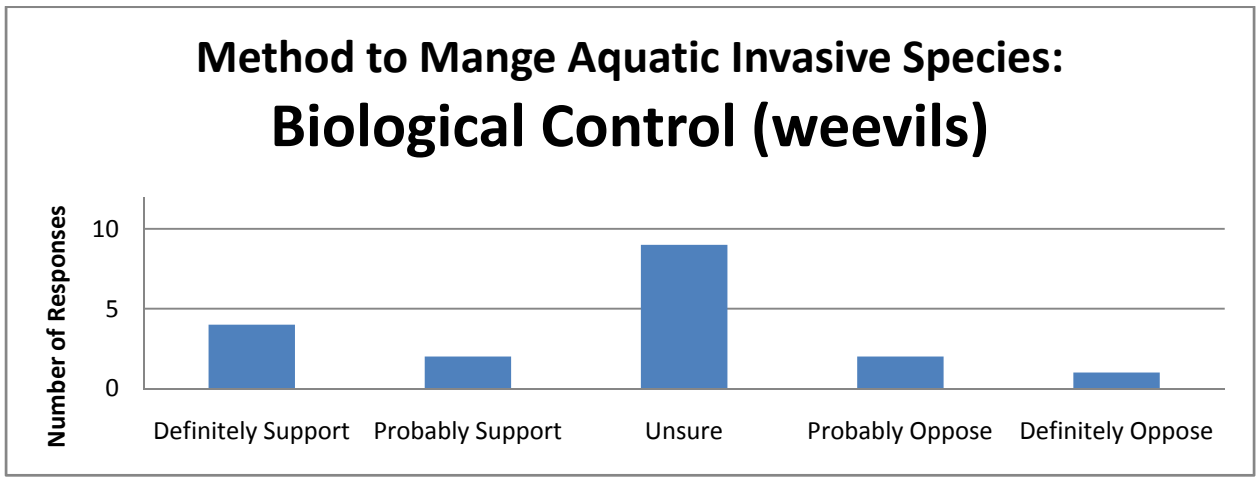
___Biological controls (weevils)

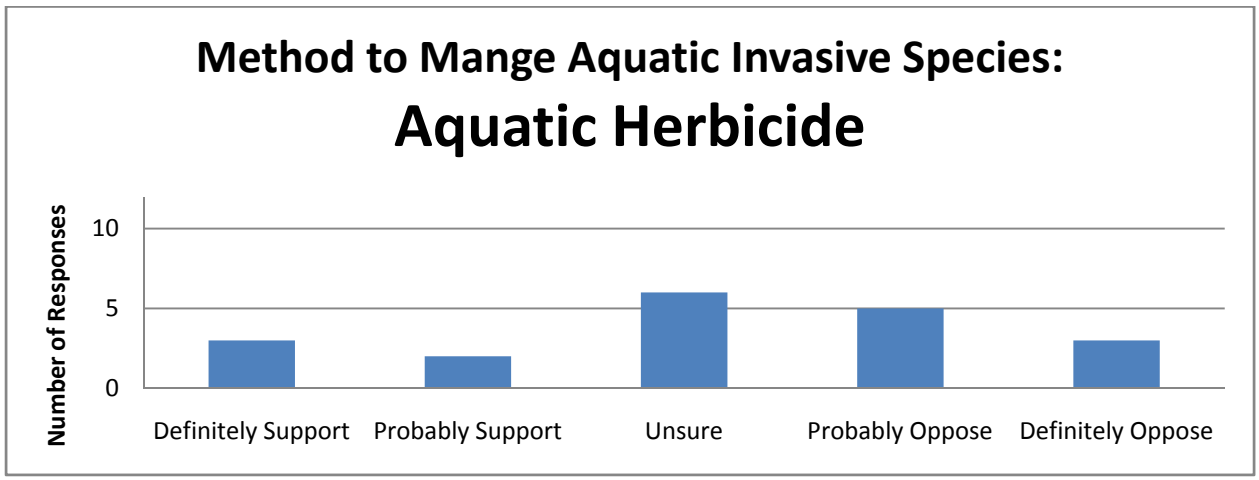
___Aquatic herbicides






Method to Mange Aquatic Invasive Species:
Mechanical Harvesting
Number of Responses
10
5
0
Definitely Support
Probably Support
Unsure
Probably Oppose
Definitely Oppose


Method to Mange Aquatic Invasive Species:
Biological Control (weevils)
Number of Responses
10
5
0
Definitely Support
Probably Support
Unsure
Probably Oppose
Definitely Oppose


Method to Mange Aquatic Invasive Species:
Aquatic Herbicide
Number of Responses
10
5
0
Definitely Support
Probably Support
Unsure
Probably Oppose
Definitely Oppose

14. The Aquatic Plant Management (APM) Plan can have several goals. We would like to know where you think the Plan should place its emphasis. Rank the following list of APM Plan goals ("1" being the most important and "6" being the least important).

___Monitor Lake Julia for changes in native plant composition and distribution.

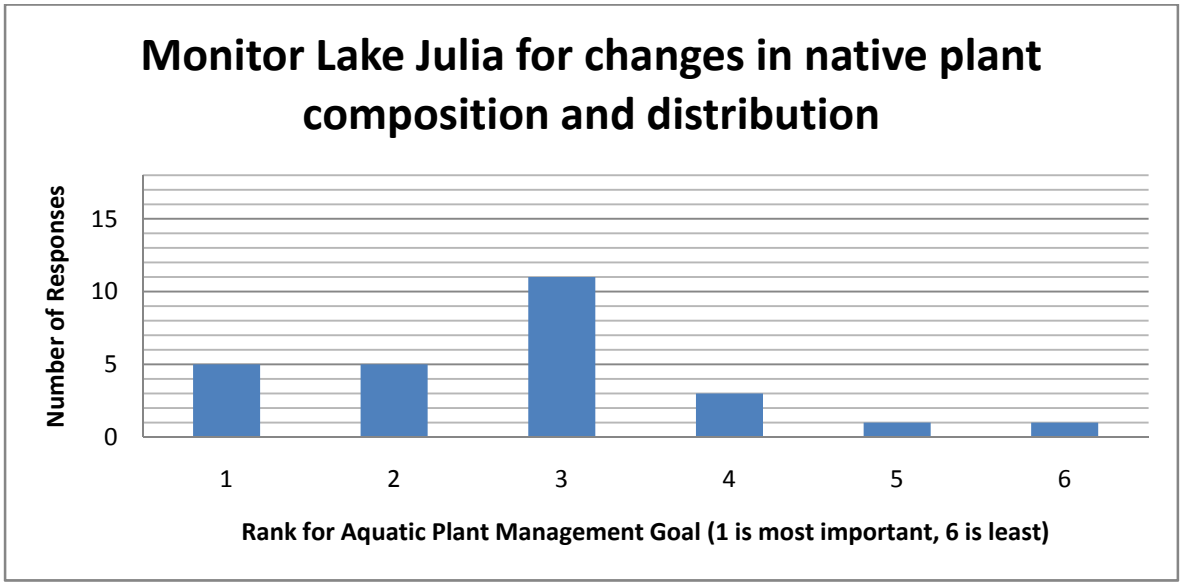
___Protect native plant species.

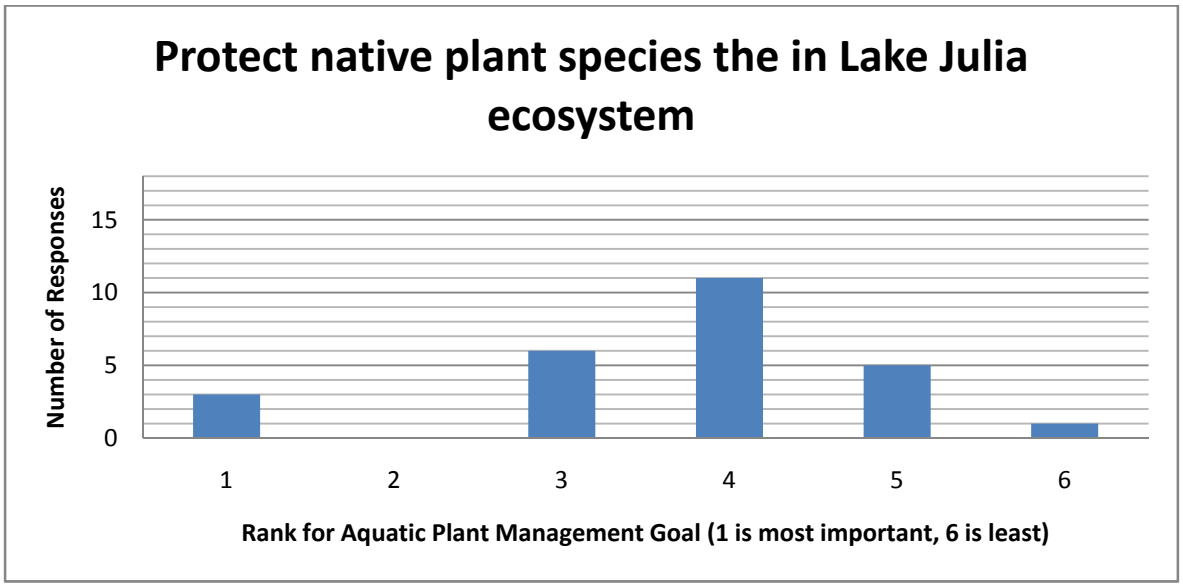
___Prevent the introduction of Aquatic Invasive Species.

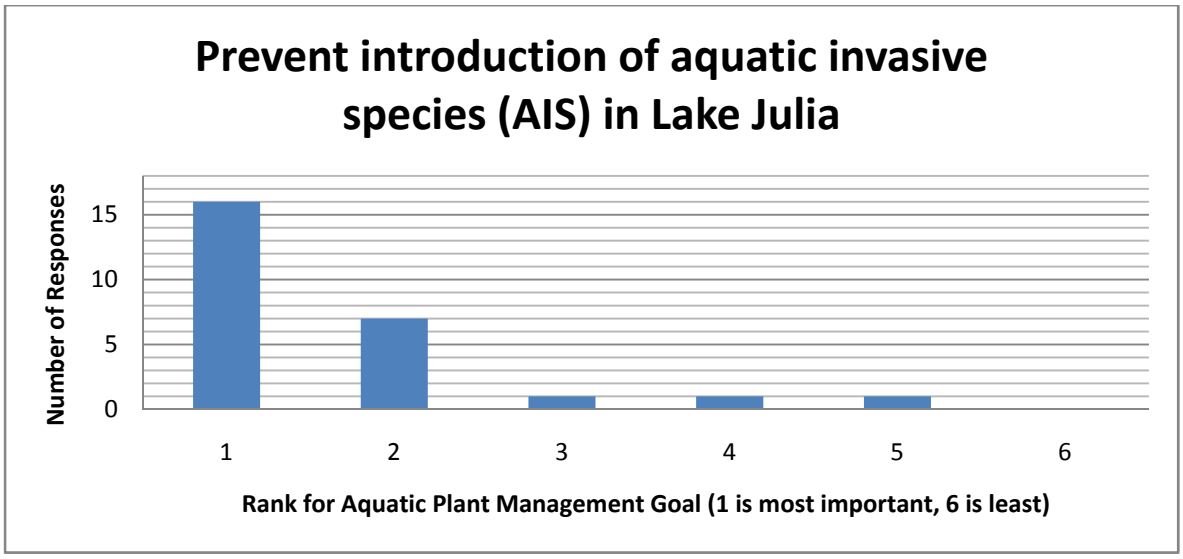
___Provide education to Lake Julia stakeholders regarding the plant community.

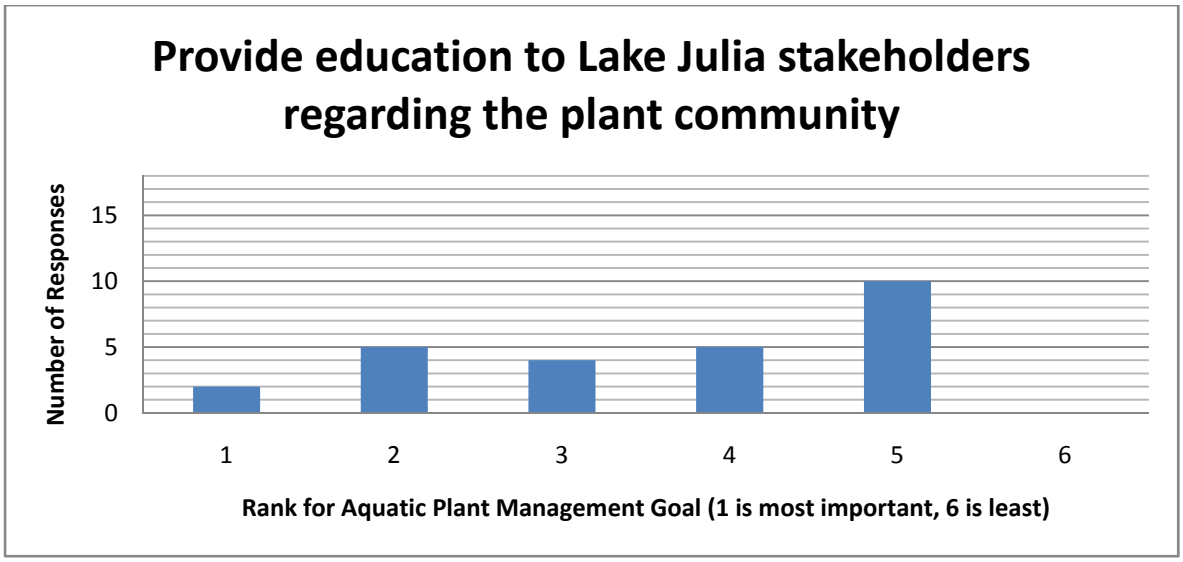
___Monitor recreational users to minimize introduction of Aquatic Invasive Species.

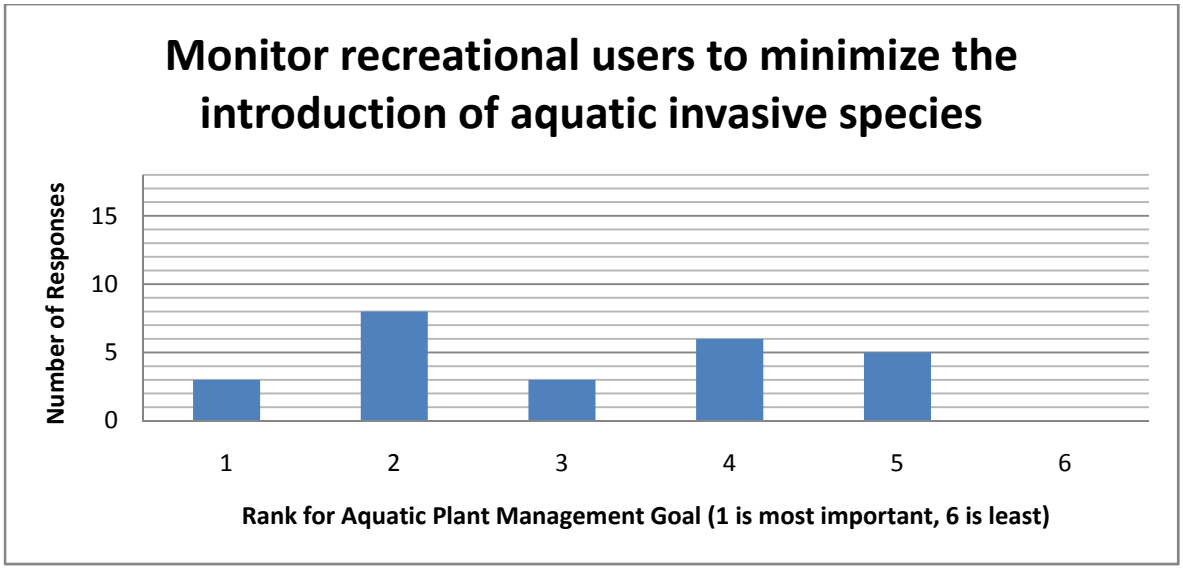
___Other_____

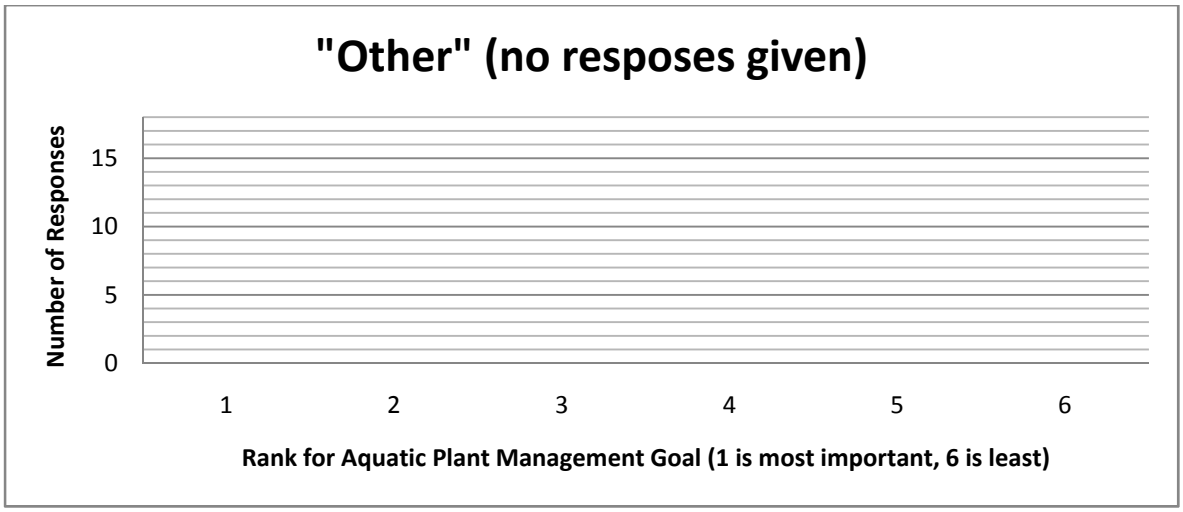





Prevent introduction of aquatic invasive species (AIS) in Lake Julia
Number of Responses
15
10
5
0
1
2
3
4
5
6
Rank for Aquatic Plant Management Goal (1 is most important, 6 is least)

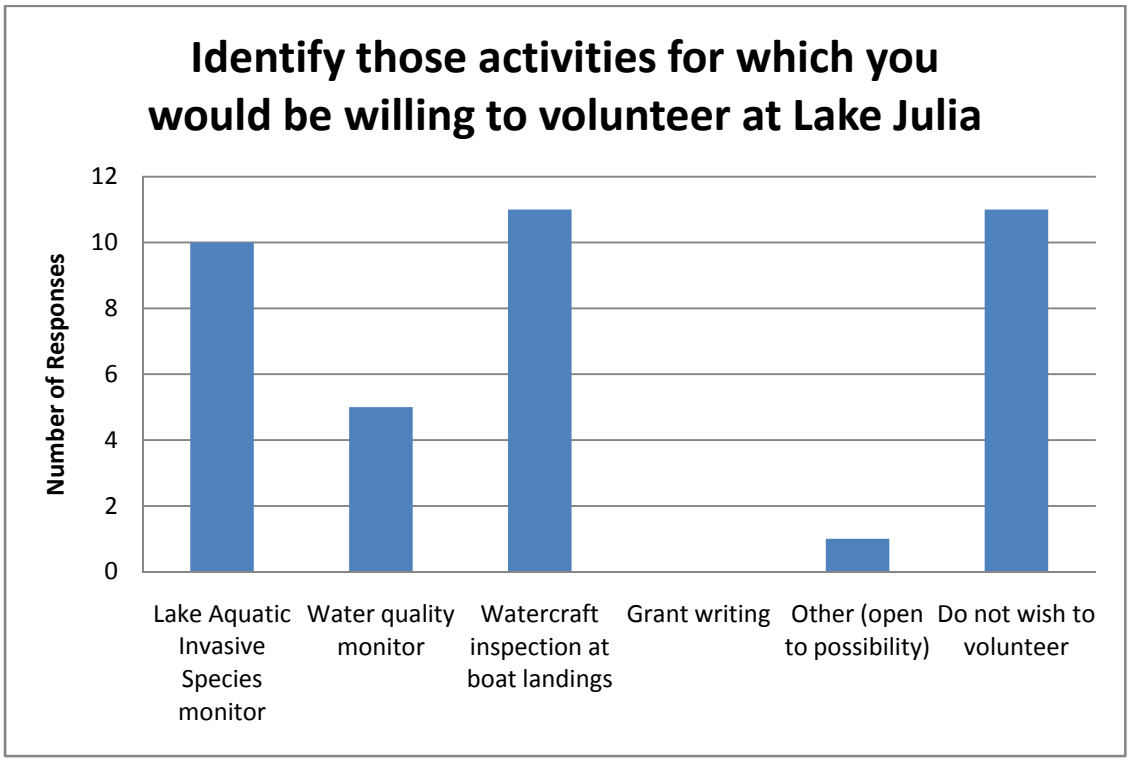

Provide education to Lake Julia stakeholders regarding the plant community
Number of Responses
15
10
5
0
1
2
3
4
5
6
Rank for Aquatic Plant Management Goal (1 is most important, 6 is least)


Monitor recreational users to minimize the introduction of aquatic invasive species
Number of Responses
15
10
5
0
1
2
3
4
5
6
Rank for Aquatic Plant Management Goal (1 is most important, 6 is least)



15. There are several opportunities for citizens to become actively involved in important roles during Aquatic Plant Management Plan implementation. From the list below, please identify which activities, if any, you would be interested in helping with. (Select all that apply)

A. Lake Aquatic Invasive Species monitor
B. Water quality monitor
C. Watercraft inspection at boat landings
D. Grant writing
E. Other (specify:_____)
F. Do not wish to volunteer



NOTE: If you checked any of the volunteer opportunities, please provide your contact information.

Name_____

Address_____

City _____ State_____ Zip Code_____

Phone_____ Email_____

14 of 28 respondents provided contact information

16. On a separate sheet, please include any additional comments and suggestions that you would like to see incorporated into the AQM Plan. Thank you for taking time to complete this questionnaire.

No additional comments were provided via separate sheet.

Return completed questionnaires to:

Must be received by November 14, 2009

Terry Rutlin
Nicolet Area Technical College
Box 518
Rhinelander, WI 54501