



STATE OF NEW YORK  
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M.D.  
*Commissioner*

**OFFICE OF PUBLIC HEALTH**

Linda A. Randolph, M.D., M.P.H.  
*Director*

William F. Leavy  
*Executive Deputy Director*

August 2, 1988

Mr. William A. Weber  
Supervisor  
Town of Pulteney  
Box A  
Pulteney, New York 14874

Dear Mr. Weber:

Thank you for your kind letter regarding the services provided by this Department to your town. Unfortunately, present budgetary constraints make it impossible to add staff to our Hornell District Office. We have made special arrangements to cover that office with staff from our Rochester Regional Office.

You may wish to consider formation of a county health Department. If this is done, the county could provide a greater level of service in the environmental health area. Recent changes in the Public Health Law have added to the financial incentives available to the county if it forms a county health department. Please feel free to contact Mr. Thomas Walker of the Department's Rochester Regional Office, Bevier Building, 42 South Washington Street, Rochester, New York 14608; phone: (716) 423-8069 for additional information concerning formation of a county health department.

Sincerely,

A handwritten signature in cursive script, appearing to read 'L. Hetling'.

Leo J. Hetling, P.E., Ph.D.  
Director  
Division of Environmental Protection

cc: Mr. Walker, Rochester Regional Office  
Mr. Bills, Hornell District Office

May 21, 1988 Watershed Protection District  
Rob Swartz

Senator Kuhl

- + Lake George Commission
- + Doaks - holdy that legislation and would prefer incorporating into WPD, consistent state.
- + Develop consensus for WPD at this workshop
- + Financing mechanism for WPD.

Don Davidson -

Situation committee + support of Kuhl's views.

David Albe

- + Southern Cayuga Lake Commission
  - 5 municipalities + 1 village
  - Intermunicipal agreement
- + Commission - view need, support of a broader sewerage, water
- + Small watershed protection district
  - Geographically different needs / financial support
  - In this serious need, separate out + provide consider a contract arrangement.
- + Powers - review by State Comptroller: needed, <sup>oppose to,</sup> pay for, spending authority. Charge fees to special tax district via benefit; Zones (streams + banks) might have higher tax rate.

5/19

Callie - cont. Consider extension of watershed sewer district regulatory authority.

- Build on perimeter committee is possible; mix & match is possible; docks could be a part.
- Septic tanks - <sup>town or county level</sup> authority of a sewer district is extensive. Inspection, regular pumping (exception based technical need).
- operates control districts
- Section 263 a County Law
- Erosion control

Otesgo - using County Watershed District contracts with farmers

fertility mgmt - make \$ for farmers.

- Consider overlay districts: may be acceptable
- land use regulation: has to be authority of town/village
- view in context of Finger Lakes Region.
- what to do, similar, who involved, reasonable

Geo Horton - Saratoga Lake Authority

2000 mi<sup>2</sup> watershed  
~~subwatershed~~

- 4000 A. 3 towns + 1 city
- Erosion miltip invasion 1983-84
- In '79, excessive weed growth point source regulated. [Clean Lakes Act]
- study - Lake Regmt Dist, water level regulation for weed mgmt. drainage basins.

5/19

Geo History - cont.

- concern for nutrient runoff & loading of lake.
- '84-'86 County over saw input of program,
- county studied WPD

several lake (~1300 parcels) - resulted  
in major improvement to water quality.

Municipalities, under contract agreement  
for continued funding of studies, etc.

→ Cuba Lake has special legislation for WPD

Milfoil has cyclical growth/decline.

- WPD has 5 commissioners, 1 from each  
municipality + 1 at large from County.

John Henry

- Watershed Survey review

How can water resources help.

'DISTRICT'

clearing house  
powers / teeth  
representatives

Draft WPD document

1 rep from each town/village

1 " KLA

~~data~~

Technical assistance on land use regs.

→ Rob Swainy - developing manual of best input practices.

WPD provide land use regulations guidelines.

WPD have "interested party" status on  
various SEQR, etc.

TAXES VS. FEE

'APPOINTMENT'  
Keuka Lake Watershed District

Dear :

As you are aware, interest has been expressed in investigating the suitability of a watershed -type district as a method of approaching a number of problems facing Keuka Lake and the communities in its watershed. This task will be more readily accomplished and the end result more useful with active participation from each of the towns within the watershed. We would therefore like to invite you or your representative to participate in this process. Our next meeting will be held at location , on date      at time . Please do not hesitate to contact me at 536-7328 if you have any questions. I look forward to seeing you on the     th.

July 19, H'port School  
→ I will school - 20 people  
→ advise John Herring of room #

A G E N D A  
D I S T R I C T I N G   C O M M I T T E E  
J U N E 21, 1988

1. Introductions
  
2. Representation from towns
  - a) those with lake frontage on Keuka Lake
  - b) those with lake frontage on Waneta and Lamoka Lakes
  - c) those without frontage but in Keuka watershed
  - d) county representation
  
3. Letter to town supervisors requesting representation
  
4. Location of meetings - rotating, in each town, at ends of lake, other?
  
5. Schedule of meetings
  
6. Short presentation by Herring on districting

6/21/88 WPD Committee Mtg

Organization: Contin, towns

Pete's 3+4 District would include or  
be "watershed" protection.

After considerable discussion on various directions  
to was determined to hold "steering comm."  
mtg July 19 in H'port at HCS if room  
can be reserved (Helen will check out).

To John H.

A suggestion, having some ~~model~~ special district  
models available for discussion.

No consensus on what the problems are or  
the objectives P. D. is needed for.

6/21/88 KEUKIA LAKE PRESERVATION DISTRICT



To: Districting Committee  
Minutes

Districting Committee Meeting

June 21, 1988

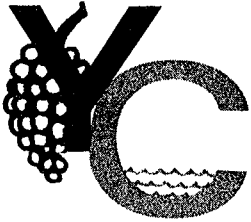
Present: John Andrews, Bob Canfield, Nancy Wolff, Doris McCauley, Jim McCauley, Glenn Bronson, Francis Covert, Peter Tierney, Bob Pinckney, Kayo Hull, Bill Weber, Les Travis, John Herring

Meeting began with introductions and proceeded to discussion of representation issue. After lengthy discussion, agreement was reached that a letter be sent to the town supervisors for all towns within the Keuka-Waneta-Lamoka Watershed as well as the Keuka Lakeshore Property Owners Association, the Villages of Penn Yan and Hammondsport, and the county legislatures and Soil and Water Conservation Districts for Schuyler, Steuben, and Yates counties. The letter will request formal representation from these bodies to the committee. A draft letter was circulated, amended by the addition of a map of the watershed, and approved. The discussion of representation focused on the relative merits and demerits in involving those areas less heavily affected by lake issues (those without lake frontage, towns with only a small area in the watershed, etc.). Including such areas allows for a more comprehensive approach, but also will greatly increase the difficulty of establishing a district. Agreement was reached that these communities should have the option to be involved and that they should therefore be included on the notification list.

Additional discussion covered such areas as the role of a special district (what issues should or should not be considered) and the role of the Soil and Water Conservation Districts (technical expertise, the administrative focus, other). It was felt these questions, while critical, should be addressed by the Committee when the towns are adequately represented.

Agreement was reached that meetings should be held in various locations around the watershed. Bob Canfield agreed to look into reserving a room at the Hammondsport Central School for the next meeting, to be held Tuesday, July 19, at 7:30 p.m.

Meeting adjourned at 9:15 p.m.



YATES COUNTY PLANNING AND DEVELOPMENT OFFICE

County Building Annex  
431 Liberty Street  
Penn Yan, New York 14527  
Phone (315) 536-7328

June 28, 1988

Mr. Robert Canfield  
9941 Keuka Hill Road  
Dundee, N.Y. 14837

Dear Mr. Canfield:

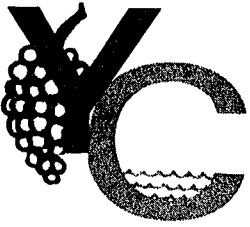
Enclosed is a copy of the minutes for the first meeting of the Keuka Lake Watershed Districting Committee. Please note that the next meeting is tentatively scheduled for Tuesday, July 19, at 7:30 p.m. in the Hammondsport Central School. I will see that notices are sent out when we receive confirmation that the school is available.

I look forward to seeing you at the next meeting. Your continued enthusiasm and dedication will allow us to reach our goal of a workable, efficient approach to managing our water resources.

Sincerely,

John H. Herring

JHH: ah



YATES COUNTY PLANNING AND DEVELOPMENT OFFICE

County Building Annex  
431 Liberty Street  
Penn Yan, New York 14527  
Phone (315) 536-7328

June 10, 1988

Robert Canfield  
9941 Keuka Hill Road  
Dundee, New York 14837

Dear Mr. Canfield:

Thank you for volunteering to serve on the Watershed Districting Committee of the Yates County Aquatic Vegetation program. I have scheduled the first meeting for Tuesday, June 21st, at 7:30 p.m., in the Yates County Building Auditorium. At that time we will begin discussion of the steps needed to form a district and what the Authority and responsibility of the district should be.

I look forward to seeing you on the 21st of June and initiating the districting process. If you will be unable to attend or wish further information, please call me at 536-7328.

Sincerely,

John H. Herring

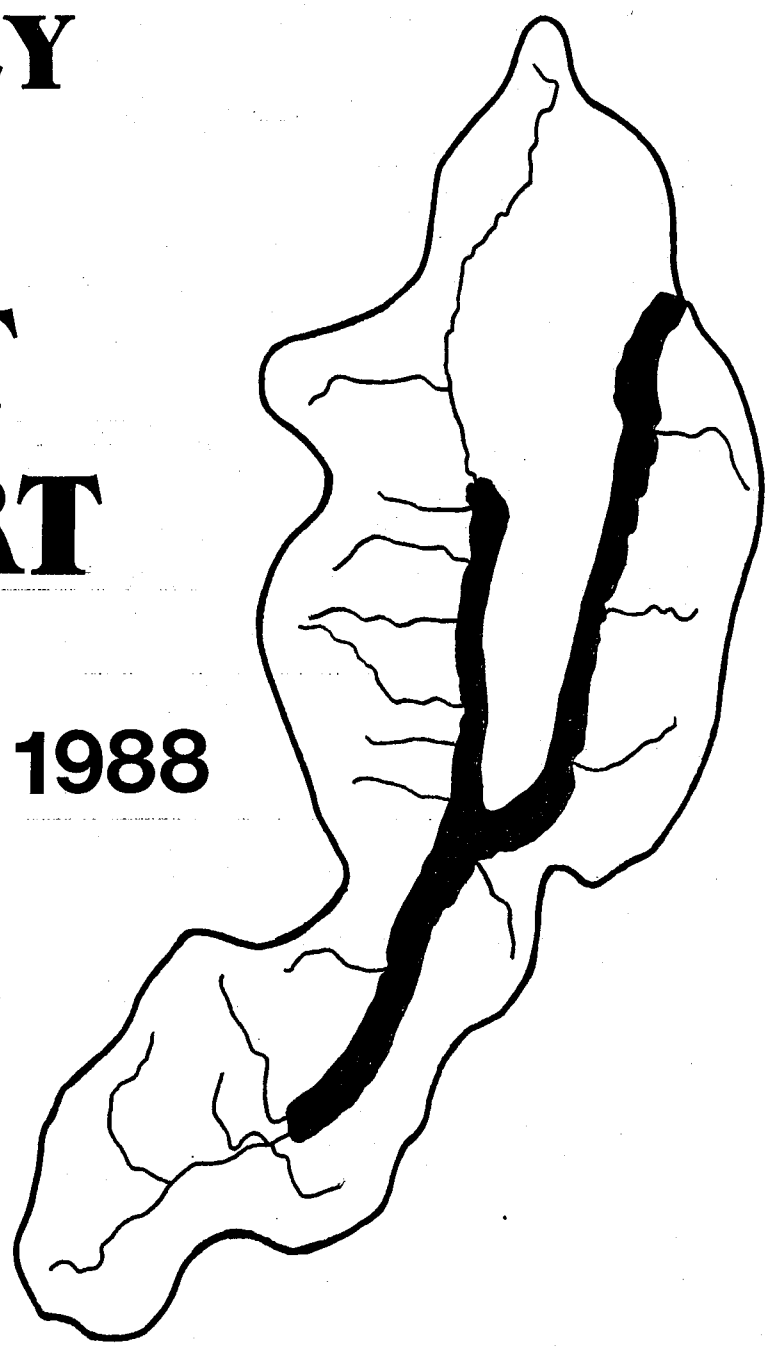
JHH:ah

~~Bruce  
FYI &  
return  
B.B. Caswell~~  
30 Jan 88

# KEUKA LAKE WATERSHED SURVEY

## DRAFT REPORT

January 1988



## INTRODUCTION

As part of its work towards dealing with the aquatic vegetation problem in Keuka Lake, the Yates County Aquatic Vegetation Committee in 1987 conducted a mail survey of one sixth (sample size of 1326) of the property owners in the watershed. A 70% response rate was attained (928 responses), representing property owners in the following towns: Jerusalem, Milo, Barrington, Pulteney, Urbana, Wayne, Wheeler, and Bath. The survey was designed to answer five basic questions:

1. What are the characteristics of property owners in the watershed?
2. What is their perception of water quality in Keuka Lake?
3. What is their perception of the present water quality protection program?
4. What are their attitudes to regulations for protecting lake water quality?
5. Who do they feel should pay the costs of water quality protection?

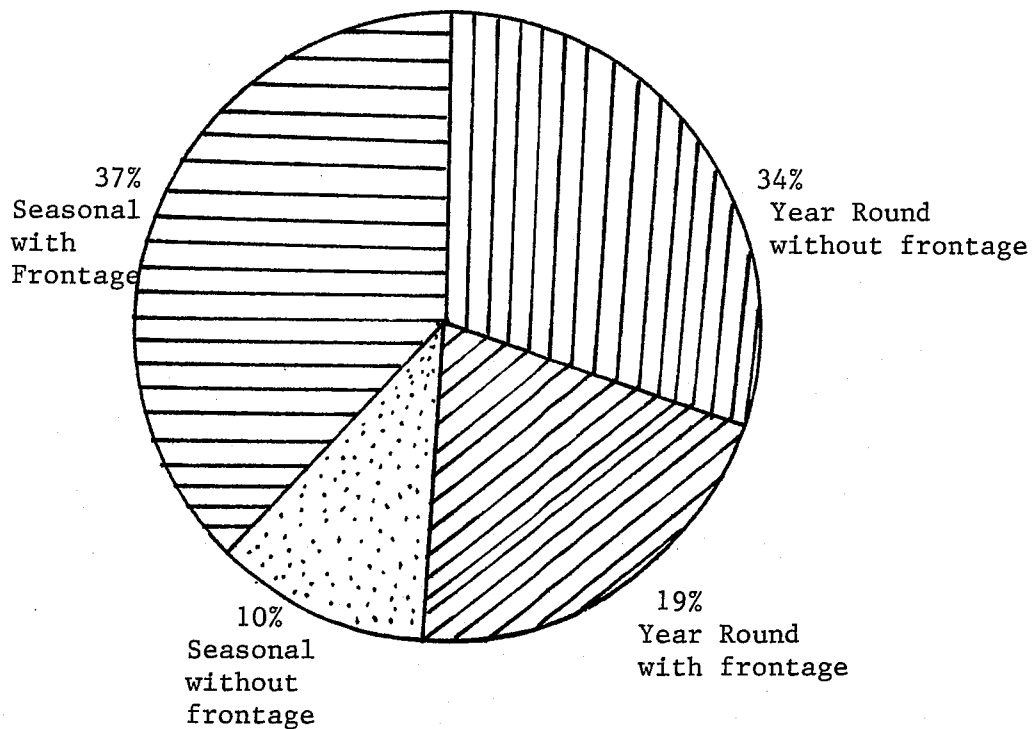
A variety of questions, mostly of the closed format type were used to obtain this information. In addition, a scaled question (Question 12) was designed to assess property owner attitudes to land use controls as a means of protecting lake water quality. A Likert scale, a commonly used tool in the Social Sciences for attitude measurement was developed.

## Data Analysis

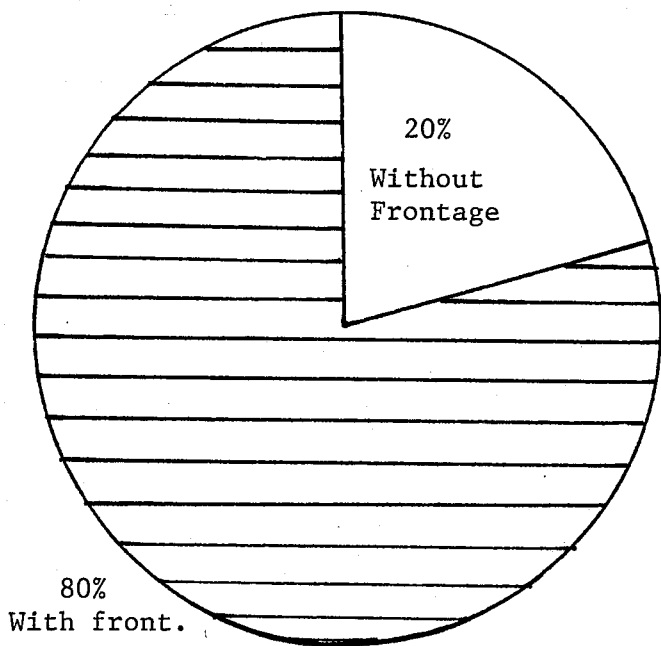
The data is presented here in a format designed to answer the five questions previously mentioned. Values are given first for the watershed as a whole, representing averages and frequencies for the entire set of respondents. Then the sample is broken down into a number of sub-groups to enable comparisons to be made:

1. (a) Those with lake frontage  
(b) Those without lake frontage
2. (a) Members of the Keuka Lakeshore Property Owners Association  
(b) Non-members
3. (a) Year round residents  
(b) Seasonal residents

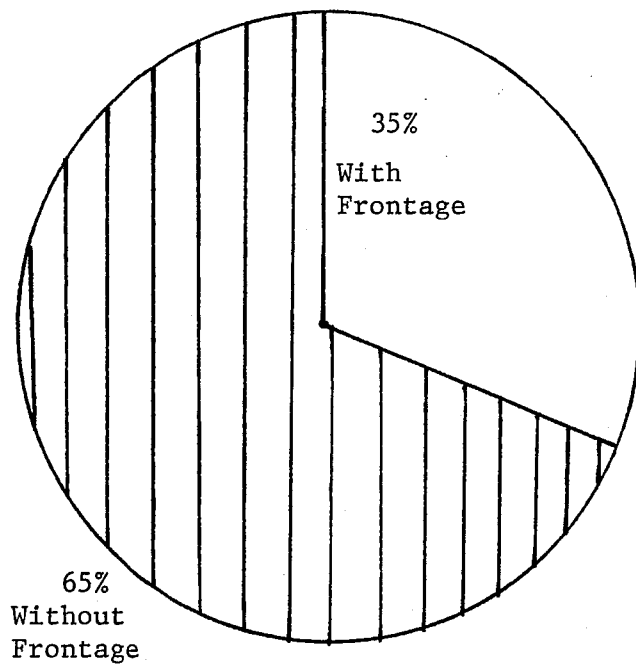
In many cases the values obtained in sub-groups 1 and 3 are similar, as 80% of seasonal residents have lakefront property.



(a) Percentage of Whole Watershed



(b) Seasonal Property owners



(c) Year Round Property owners

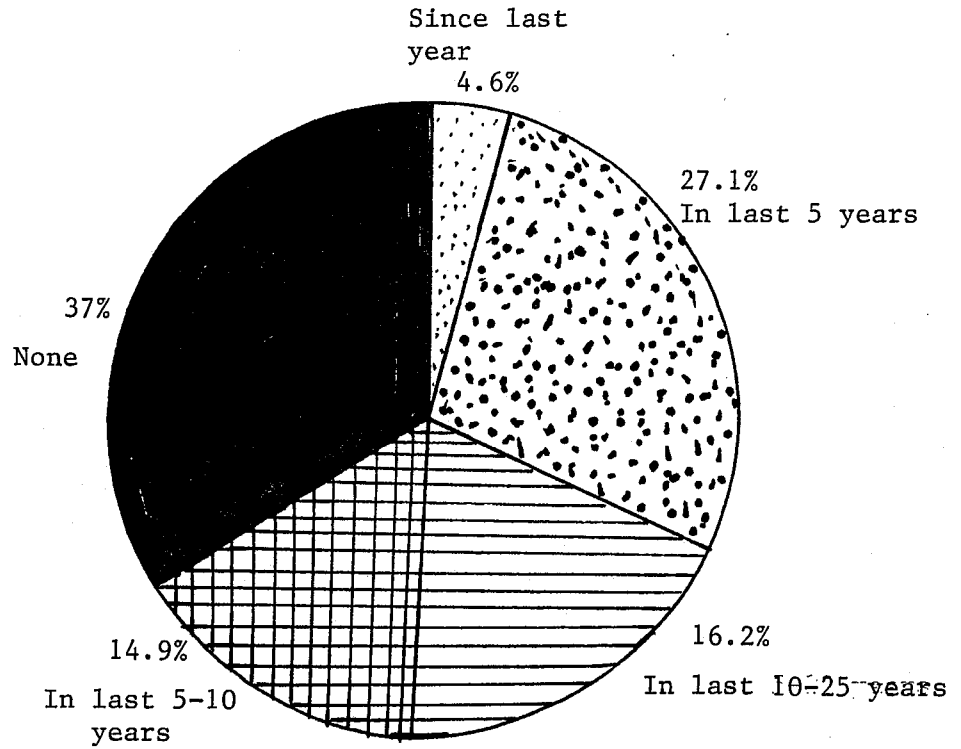


Figure 2: Deterioration in Water Quality

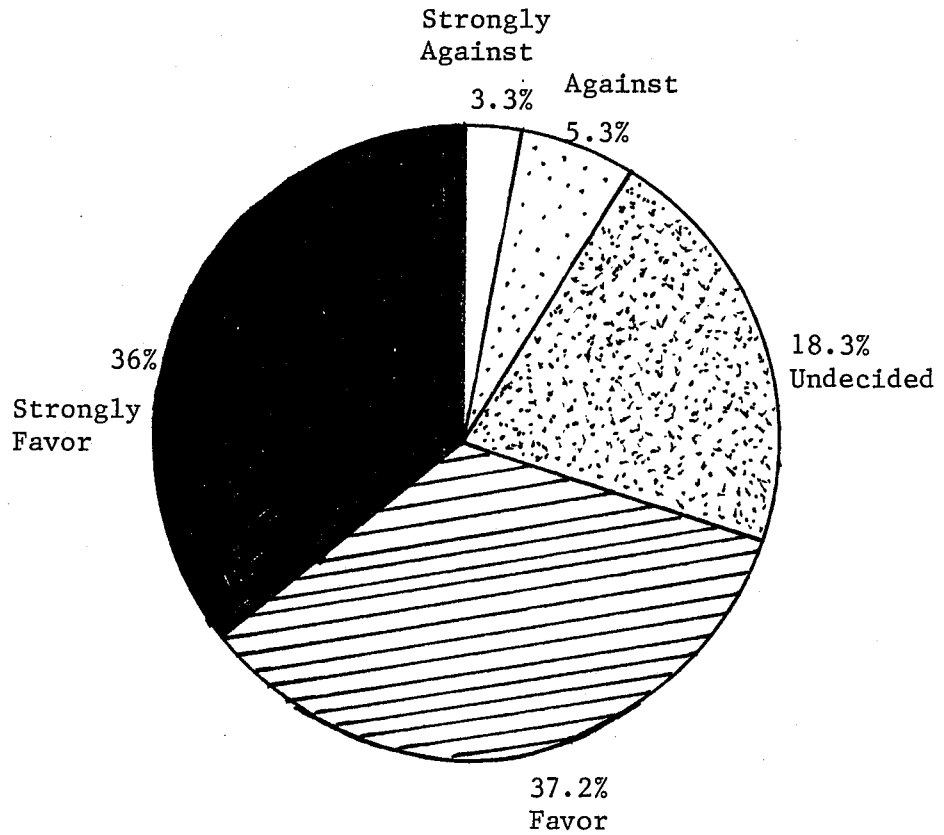


Figure 3: Attitude to Specific Regulations to protect lake water quality

Question 10 asked what kind of regulations would be most preferable in dealing with the problem of excessive nutrient loading to the lake. Least preferred was the use of chemicals to control aquatic vegetation. Most preferred were items (c) and (h), "Increased regulation of lakeshore septic systems" (mean score of 4.24) and "Stricter controls on development near the lake" (mean score of 3.96). Mechanical harvesting had a mean score of 3.5. One interesting point to note is that item (g), "Place a limit on number of year round residences on the lakeshore", was one of the least preferred methods suggesting that respondents do not want development to be restricted but they would like it to be better controlled.

Examination of the sub-groups reveals some differences. Limiting the number of year round residences (item g), is less favored by lakefront owners (2.0) than by non-frontage owners (2.2). On the other hand, lakefront owners are more in favor of stricter development controls (4.1) than those without frontage (3.8). Item (d), "Require all lakeshore properties to have holding tanks", was not favored by those with lake frontage (mean=2.6) but was favored by those without frontage (mean=3.8).

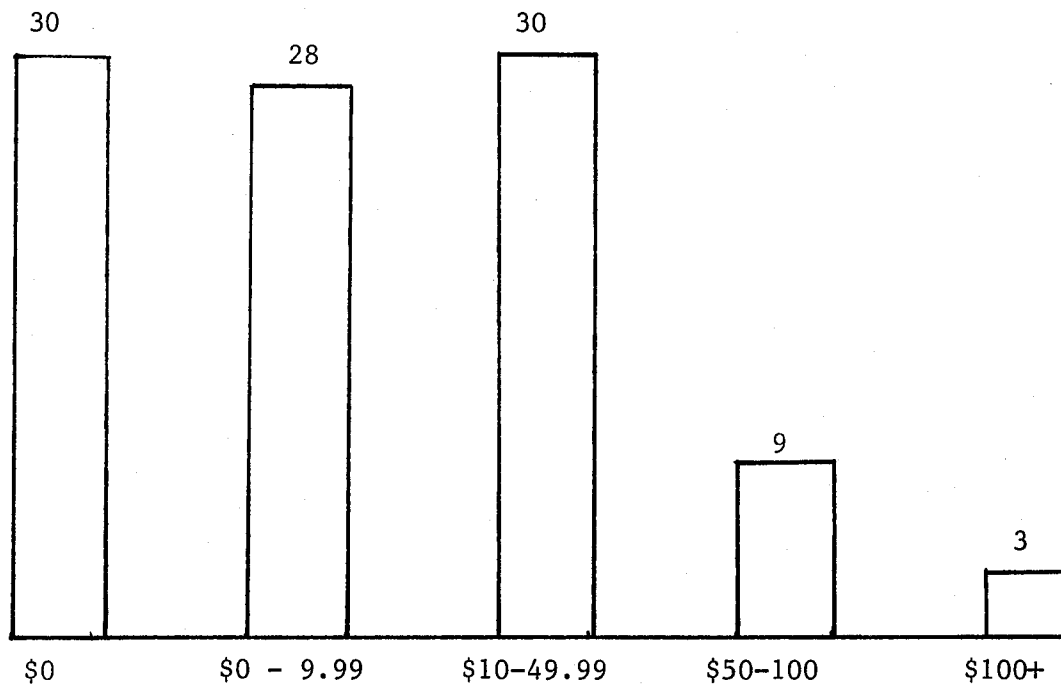
Question 16 discussed the suitability of government types for controlling land use in the watershed. Ratings reveal that for the watershed as a whole the least suitable was the Local(Town) type of government. The highest rating was achieved by the Watershed-wide District type which had a mean score of 3.9. Those with lake frontage gave this type a rating of 4.1 as compared to 3.7 given by those without frontage.

The final question in this section is Question 12, the Likert scale on attitude to land use regulations to protect water quality in Keuka Lake. This question consists of a series of 14 items which respondents scored individually on a 1 to 5 scale, where 1 represented strong disagreement with the item and 5 meant strong agreement with it. The items were written to assess whether respondents agreed or disagreed with land use regulations as a means for protecting lake water quality. Each respondent's scores for the 14 items were then summed and averaged to give a mean scale score between 1 and 5 on the attitude continuum. Two items, (a) and (d), were dropped from the final scale as analysis revealed that they did not correlate well with the other items. Indications are that the wording is ambiguous. Thus the final scale consists of 12 items. An Alpha of 0.9 was attained. This is a measure of reliability of the scale. The Alpha level is essentially a measure of internal consistency, assessing whether all the items are measuring the same thing. Alpha values run from 0 to 1, with an Alpha of 0.7 and above generally considered as acceptable.

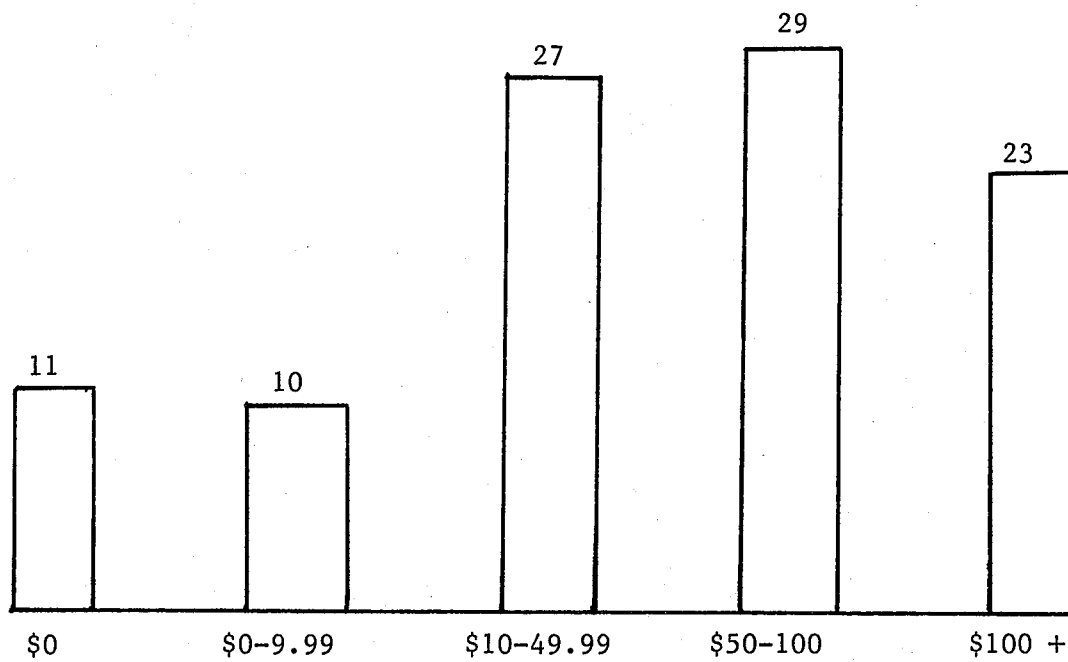
The mean score for the watershed as a whole is 3.57, indicating that respondents are generally favorable towards land use regulations. Examination of sub-groups did not show any



Figure 6: Willingness-to-pay for protecting lake water quality



(a) Property owners without lake frontage (in%)



(b) Property owners with frontage (in %)

6. Have you noticed any deterioration in lake water quality (check one or more):

SINCE LAST YEAR.....	4.6%
IN THE LAST 5 YEARS.....	27.1%
IN THE LAST 5 - 10 YEARS.....	14.9%
IN THE LAST 10 - 25 YEARS.....	16.2%
NONE WHATSOEVER.....	37.1%

7. Please describe any recent changes in lake water quality that have affected your use of the lake?

45.5% of respondents made a comment

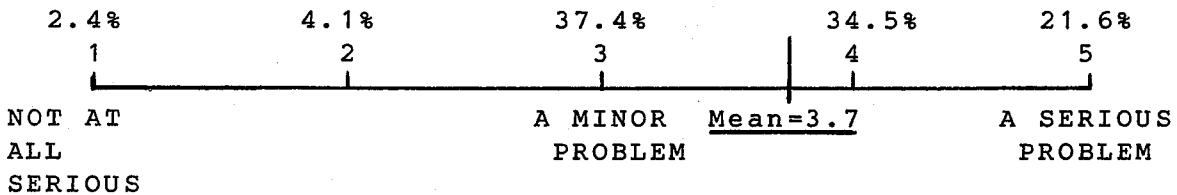
8. There has been some concern expressed over the existence of an aquatic weed problem in Keuka Lake. Do you believe that there is an aquatic weed problem in the lake?

YES 80.6%

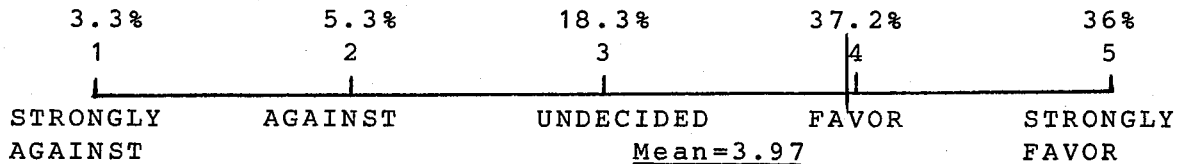
NO 19.4%

If you answered NO, go on to question 9.

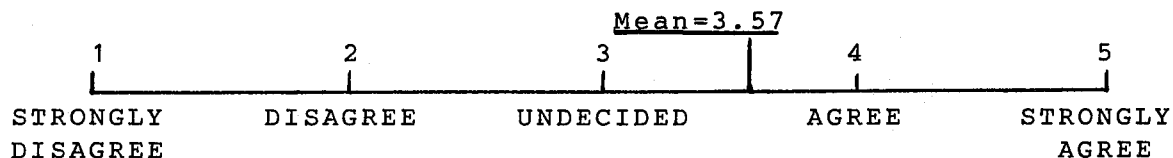
If you answered YES, how serious would you rate the aquatic weed problem (Please circle one number):



9. Would you be in favor of specific regulations (such as increased septic system inspections, restrictions on fertiliser use, regular septic tank pumping) for households in the watershed to control the nutrient loading to Keuka Lake(circle one number):

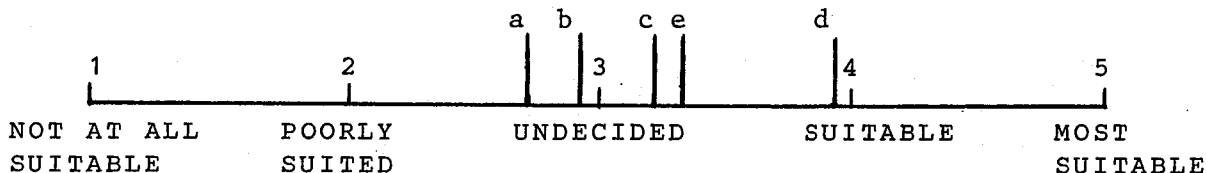


12. This question is designed to measure your attitude to land use regulations for protecting water quality in Keuka Lake. Indicate your attitude to the following statements by scoring them according to the scale indicated below.



ITEM	SCORE
a. Land use regulation results in loss of individual freedom.....	<u>This item deleted</u>
b. If there are too many regulations controlling land use, it will not be worth living here.....	_____
c. Rural areas such as this do not need strict land use laws.....	_____
d. Regulation does not slow down the rate of development.....	<u>This item deleted</u>
e. Land use regulations destroy property rights.....	_____
f. It is up to the residents of each town to decide how they want to regulate land use.....	_____
g. Regulations controlling land use around the lakeshore are unnecessarily strict.....	_____
h. Watershed-wide regulations are worse than each town devising its own land use regulations.....	_____
i. The land use laws presently in existence are adequate to protect lake water quality.....	_____
j. Too many land use regulations will frighten people away from this area.....	_____
k. Land use regulations are more of a hindrance than an asset to an area such as this.....	_____
l. We do not need more land use controls as there are natural limits on what people can do on their land....	_____
m. The lake is so large that land use controls to protect water quality are not practicable.....	_____
n. I will not be able to sell my property if there are too many restrictions on it.....	_____

16. Please rate the following types of government for controlling land use in the Keuka Lake watershed? Circle one number corresponding to the scale, for each type of government.



(a) LOCAL (TOWN).....	1	2	3	4	5
(b) COUNTY.....	1	2	3	4	5
(c) STATE.....	1	2	3	4	5
(d) WATERSHED-WIDE DISTRICT.....	1	2	3	4	5
(e) REGIONAL (MULTI-COUNTY) DISTRICT.....	1	2	3	4	5

17. For how many years have you owned property in the Keuka Lake watershed?

Mean = 19.3 years  
 Range = 0 to 80 years

18. What is the highest year of school that you have completed?

- (0.1%) NEVER ATTENDED SCHOOL
- (0.2%) 1-6 YEARS
- (3.0%) 7-9 YEARS
- (5.1%) 10-11 YEARS
- (20.2%) HIGH SCHOOL GRADUATE
- (19.4%) SOME COLLEGE
- (23.5%) COLLEGE GRADUATE
- (28.5%) SOME GRADUATE SCHOOL

19. What was your approximate total household income, before taxes, in 1986?

- (5.3%) \$0 0 9,999
- (14.8%) \$10,000 - 19,999
- (19.6%) \$20,000 - 29,999
- (15.8%) \$30,000 - 39,999
- (11.6%) \$40,000 - 49,999
- (17.6%) \$50,000 - 75,000
- (15.2%) MORE THAN \$75,000

21.5% of respondents did not answer this question

INTRODUCTION

In the Summer of 1987, as part of its work towards dealing with the the aquatic vegetation problem in Keuka Lake, the Yates County Aquatic Vegetation Committee conducted a mail survey of the property owners in the Keuka Lake watershed. A 70% response rate was attained, representing property owners in the following towns: Jerusalem, Milo, Barrington, Pulteney, Urbana, Wayne, Wheeler, and Bath. The survey was designed to answer four basic questions:

1. What are the characteristics of property owners in the watershed?
2. What is the property owner's perception of water quality in Keuka Lake?
3. What are property owner attitudes to regulations for protecting lake water quality?
4. Who do property owners feel should pay the costs of water quality protection?

A variety of questions, mostly of the closed format type were used to obtain this information. In addition, a Likert scale (Question 12), was developed to assess property owner attitudes to land use regulations for protecting lake water quality.

METHODOLOGY

The survey instrument was a mail questionnaire consisting of 19 questions, all but one being of the closed format type. Many of the questions required respondents to rank their preferences on a 1 to 5 scale thus allowing comparisons within and between populations of respondents. A Likert scale was developed to measure property owners attitudes to land use regulations for protecting lake water quality. A Likert scale is,

"...a set of items, composed of approximately an equal number of favourable and unfavourable statements concerning the attitude object, is given to a group of subjects. They are asked to respond to each statement in terms of their own degree of agreement or disagreement. Typically they are instructed to select one of five responses: strongly agree, agree, undecided, disagree, or strongly disagree. the specific responses to the items are combined so that individuals with the most favourable attitudes will have the highest scores while individuals with the least favourable

## DATA ANALYSIS

The returned questionnaires were coded creating a matrix of 57 variables by 928 respondents and the data entered into a worksheet. The data were analysed on a mainframe computer using the Statistical Package for the Social Sciences (SPSS).

The data were analysed to answer the four questions mentioned above. First all respondents representing the entire watershed were analysed, then the sample was broken down into a number of sub-groups to enable comparisons to be made:

1. (a) Those with lake frontage  
(b) Those without lake frontage
2. (a) Members of the Keuka Lakeshore Property Owners Association  
(b) Non-members
3. (a) Recent residents (arrived in the last 15 years)  
(b) Long-term residents (lived in area for over 15 years)

The data were also divided into seasonal and year round residents but in many cases the values obtained were similar to those obtained for residents with and without lake frontage. This is not surprising as 80% of seasonal residents have lakefront property.

### 1. CHARACTERISTICS OF PROPERTY OWNERS.

Initial analysis looked at all respondents and thus represents frequencies and averages from the watershed as a whole. In general the population is well educated and has high average income. 71.4% of the population have had some college education and 28% have had some graduate school. The income question was the least well answered question, with over one fifth not answering. One fifth of respondents have incomes below \$20,000/year and one third have incomes above \$50,000/year.

Length of property ownership in the watershed ranged from zero to 80 years, with a mean of 19.3 years. Residents are evenly divided between those who have been here less, and those who have been here longer, than 15 years; 49.1% of respondents have lived in the watershed for over 15 years, and 50.9% have arrived in the last 15 years. Both old and new residents are divided almost equally between seasonal

Members tend to own lake frontage, which is to be expected in such an organisation, 96.1% of members have lake frontage whereas only 35.4% of non-members have frontage. Members also tend to be seasonal residents, almost twice as many as non-members, 68.9% of members are seasonal versus 35.9% for non-members.

### 3. Comparison: Length of Residence.

Recent residents (those who have arrived in the last 15 years) are evenly divided between those with lake frontage (49.6%) and those without (50.4%). A slightly higher proportion of older residents (those who have been in the watershed for over 15 years), have lake frontage (61%). Approximately half of both groups are seasonal though slightly more of the recent arrivals are in that category. Fewer of the recent arrivals are in the KLSP Association, 25.2% against 36.7% for older residents, but this may be due to the fact the a smaller percentage have lake frontage. The new arrivals also tend to have more education and higher incomes than the older residents.

## 2. PERCEPTION OF LAKE WATER QUALITY.

This section consisted of four questions (Questions 5, 6, 7, and 8) to investigate views on water quality and aquatic vegetation problems. Question 7 was open format requesting comments on changes in water quality that have affected use of the lake.

In general, respondents rated the water quality as high. 85% rated the quality as Good or Excellent for swimming. 92.4% rated the quality as Good or Excellent for boating and only slightly fewer, 68%, gave the same ratings for fishing. The majority of respondents appeared to indulge in all three activities as no more than 5% marked any one category as "Not Applicable". Question 6 asked about deterioration in lake water quality. 37.1% said they had not seen any deterioration. Of those who noted deterioration, the largest number 27.1% noted it had occurred in the last 5 years. Overall respondents rated water quality in the lake fairly high. See Figures 6 and 7.

When asked about aquatic vegetation however (Question 8), 80.6% said that there was a weed problem and of these, one fifth rated aquatic weeds as a serious problem and over half (56%) rated it as more than a minor problem.

### 3. Comparison: Recent Arrivals v. established residents

There are few differences between these groups on rating the lake for swimming, boating, and fishing. If anything the more recent arrivals rate the lake slightly higher. Slightly fewer of the new residents see a deterioration in lake water quality, 39.4% said that there had been no deterioration compared to 35.2% of old residents. Of those who saw deterioration, a higher percentage of new residents see the decline in quality as more recent. For example 8.2% of new residents see a deterioration in the past year compared to 1.4% of old residents. Almost 23% of old residents have seen a decline in the last 10 to 25 years. This would indicate that any deterioration in water quality has been ongoing for some time and is not just a recent phenomenon.

Large percentages of both groups rated said there was a weed problem and that it was serious.

### 3. ATTITUDES TO REGULATIONS TO PROTECT LAKE WATER QUALITY

This section consists of five questions (Questions 9,10,11,12, and 16) asking about a variety of issues from attitudes to regulations, to the best ways of dealing with protection.

Question 9 asked respondents whether they would be in favour of specific regulations for households to control the nutrient loading to the lake. 73.2% of total respondents said they would favor or strongly favor such regulations. The mean response for the watershed as a whole was 3.97, indicating that overall, people would be in favor of such regulation.

Question 10 addressed the issue of dealing with excessive nutrient loadings to the lake. In the watershed as a whole the most preferred method was "Increased Regulation of Lakeshore Property Septic Systems", which received an average score of 4.2. The second most preferred method was "Place Stricter Controls on Development Near the Lake", (average score of 3.9) and least preferred was the use of weed killing chemicals, with an average score of 1.7. "Mechanical Harvesting of Weeds" received a score of 3.5.

Question 11 asked about adequacy of present regulations to protect the lake water quality. Figure 5 shows that 41% of the sample feel the regulations are inadequate, with



(ave.= 2.9). The Likert Scale showed that those with frontage have a more favorable attitude to land use regulations for water quality protection than those without frontage. The mean scores were 3.8 and 3.3 respectively.

Both groups favor the watershed-wide district as most suited to dealing with the problem.

## 2. Comparison: Member of KLSPO Assoc. v Non-member

These two groups show similar characteristics to the previous two. Members tend to be more in favor of specific regulations (Quest. 9) and find the present regulations as less than adequate. For both groups regulating lakeshore septic systems is the most preferred method of dealing with the problem and "Place Stricter Controls on Development near the Lake" is also rated high (4.2 and 3.8 for members and non-members respectively). Members have a higher Likert score (3.9) than non-members (3.4), but both favor the watershed-wide district for controlling land use.

## 3. Comparison: Length of Residence

In general newer residents tend to be more in favor of specific regulations (Quest.9) to control nutrients and find the present regulations less than adequate, than older residents. Both groups favor increased regulation of lakeshore septic systems however. Recent residents have a slightly more favorable attitude to land use regulations for protecting lake water quality with a Likert score of 3.6, as opposed to a score of 3.5 for old residents, not a large difference. And both groups had average scores of 3.9 for the the watershed-wide districts.

## 4. PAYING THE COSTS OF WATER QUALITY PROTECTION.

Three questions were of a monetary nature. Question 13 asked who should pay for the cost of keeping the lake clean. This question did not reveal any strong preferences among the sample. For each item a large proportion of respondents marked 3 on the scale, indicating that this group should pay "some of the costs" of keeping the lake clean. However the "All Polluters Pay" category received the highest average score, 3.9, suggesting that respondents