

FIGURE 6: WATER QUALITY RATING -
PERCENTAGE OF TOTAL WATER SHED

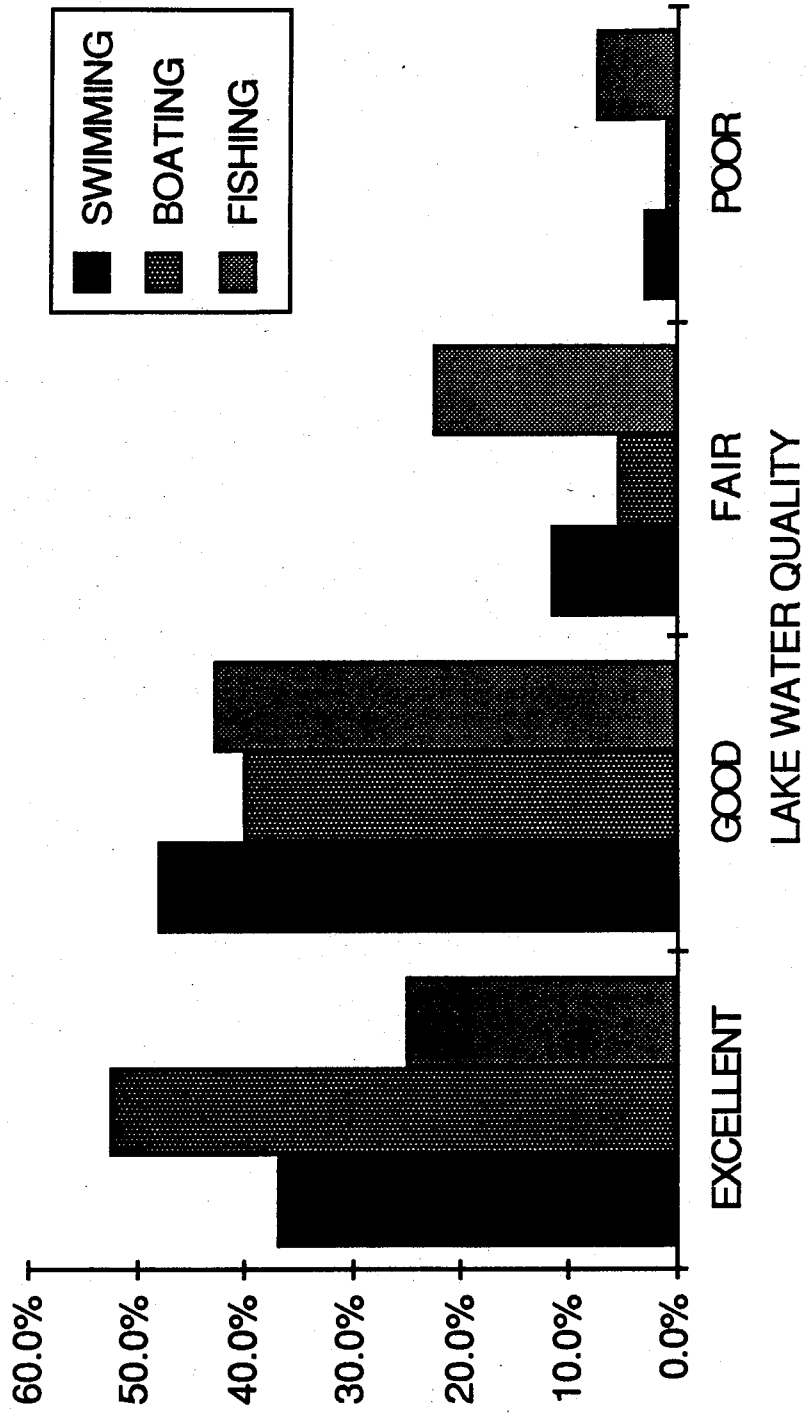


FIGURE 7: DETERIORATION IN LAKE
WATER QUALITY - PERCENTAGE OF
TOTAL WATERSHED

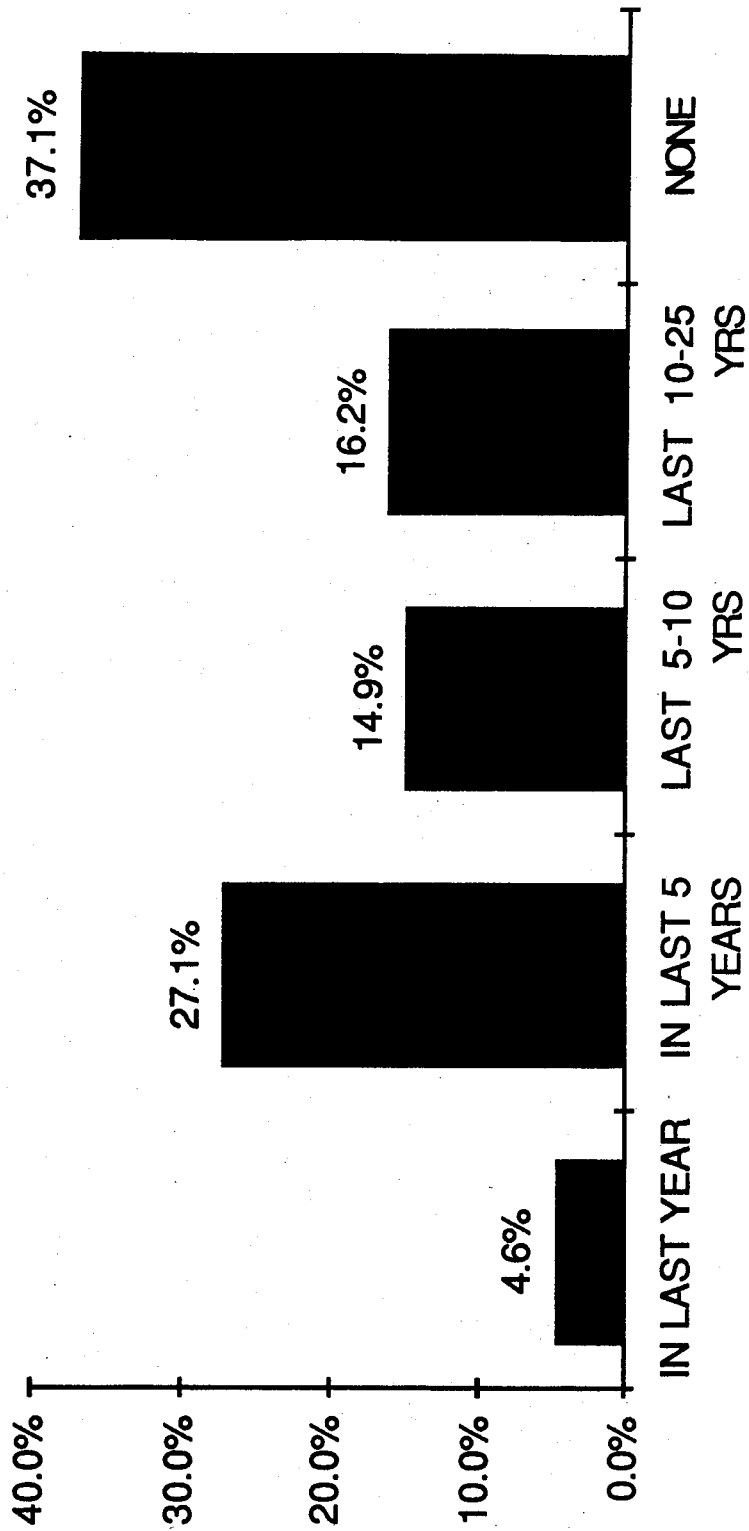


FIGURE 8: PERCEIVED DETERIORATION IN LAKE WATER QUALITY BY GROUPS WITH AND WITHOUT LAKE FRONTAGE

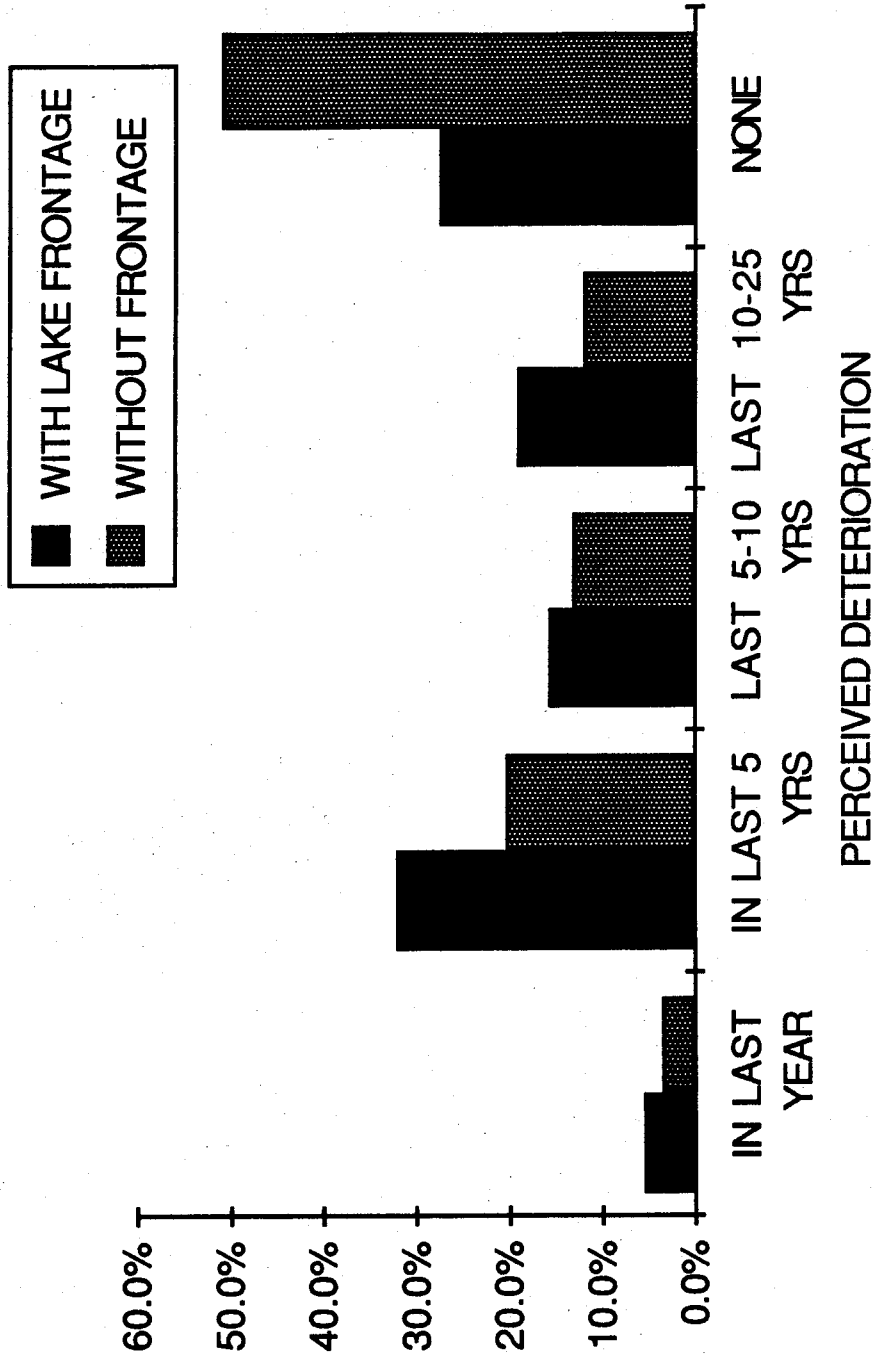


FIGURE 11: PERCEIVED SERIOUSNESS OF WEED PROBLEM -
PERCENTAGE OF TOTAL WATERSHED

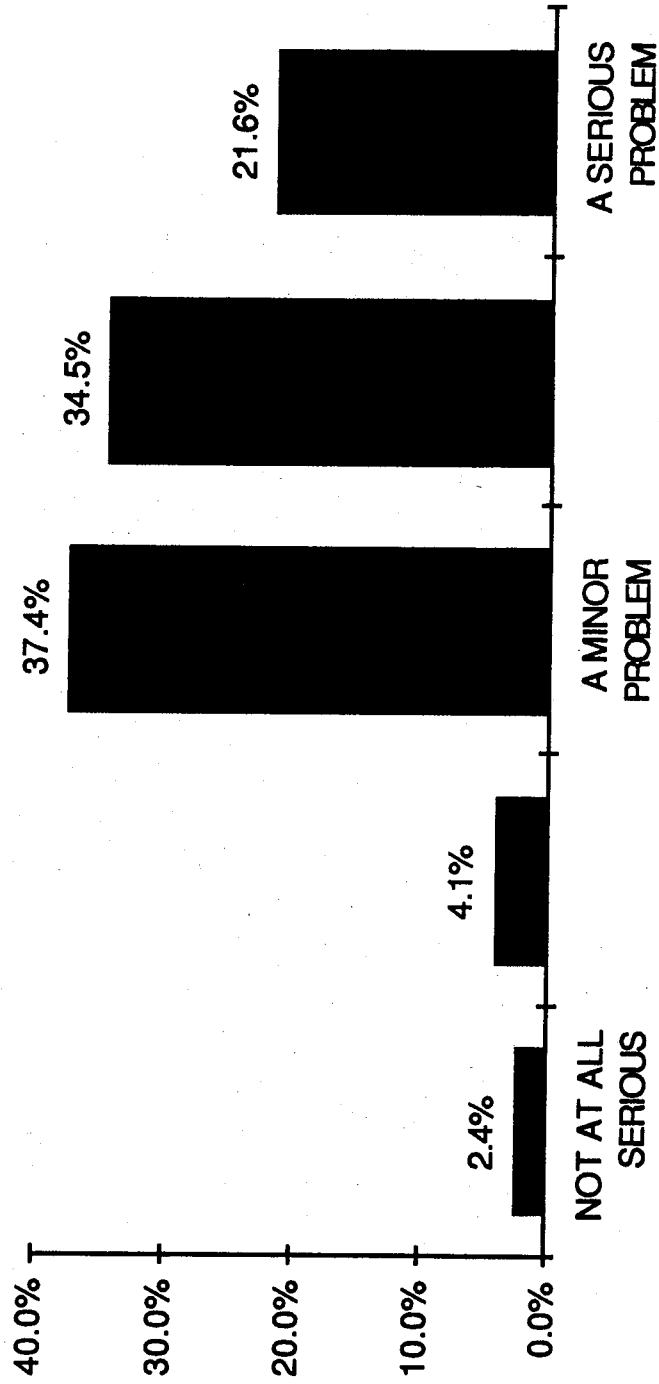


FIGURE 12: PERCEIVED SERIOUSNESS OF WEED PROBLEM - GROUPS
WITH AND WITHOUT LAKE FRONTAGE

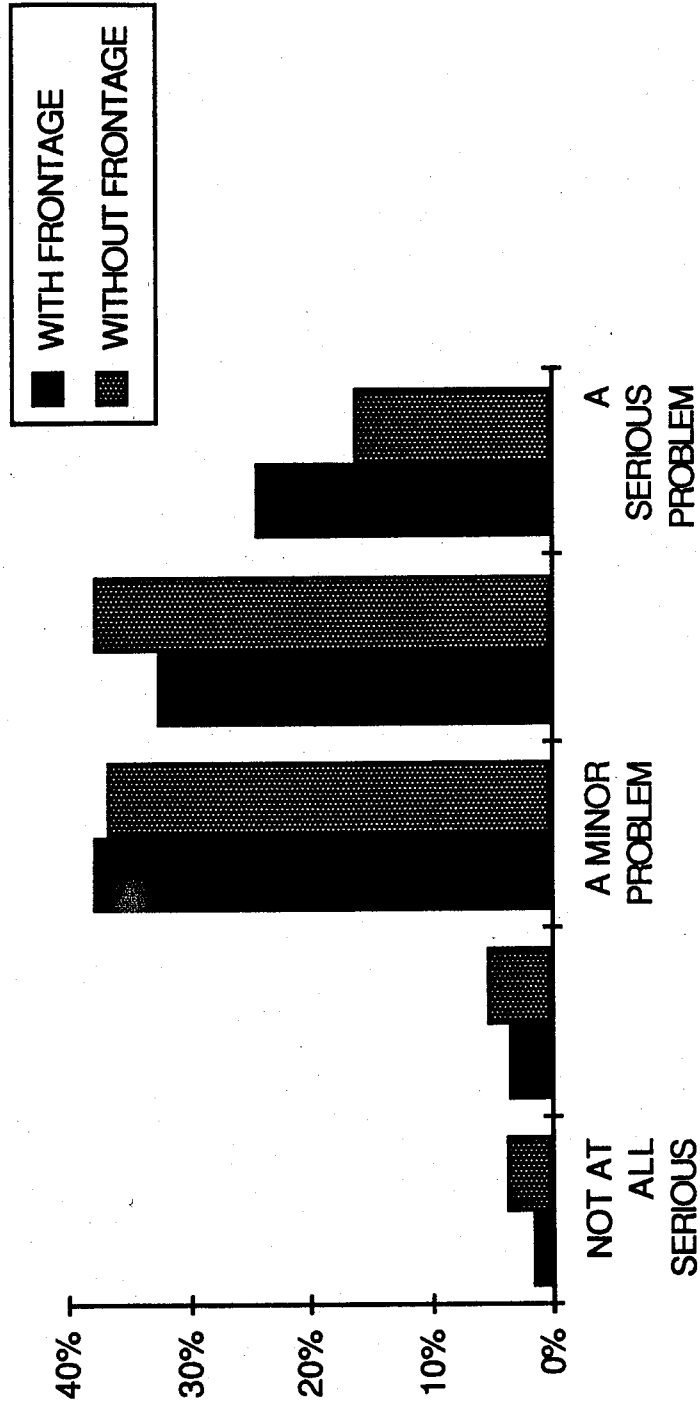


FIGURE 13: ATTITUDE TO SPECIFIC REGULATIONS FOR HOUSEHOLDS TO CONTROL NUTRIENT LOADING TO THE LAKE

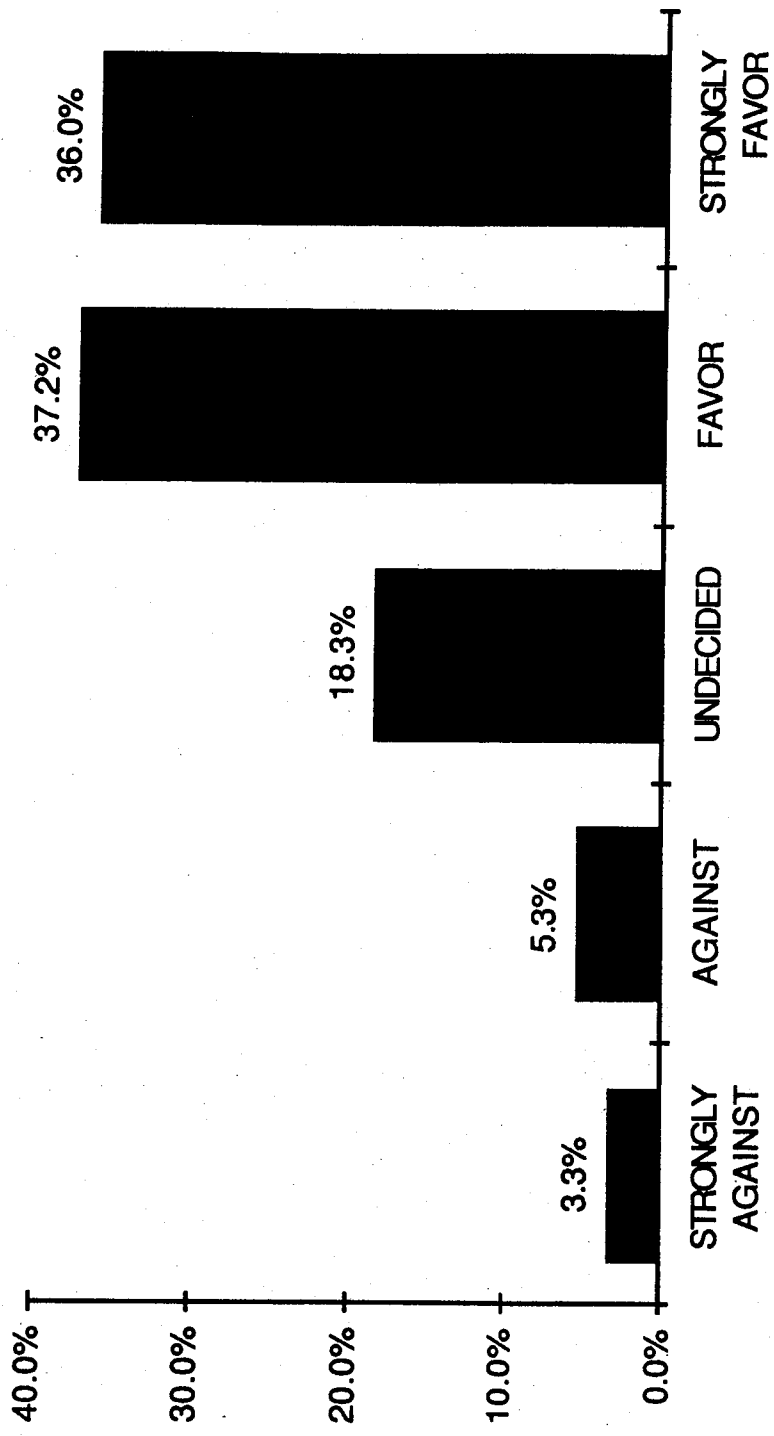


FIGURE 14: ATTITUDE TO SPECIFIC REGULATIONS FOR HOUSEHOLDS TO CONTROL NUTRIENT LOADING TO THE LAKE

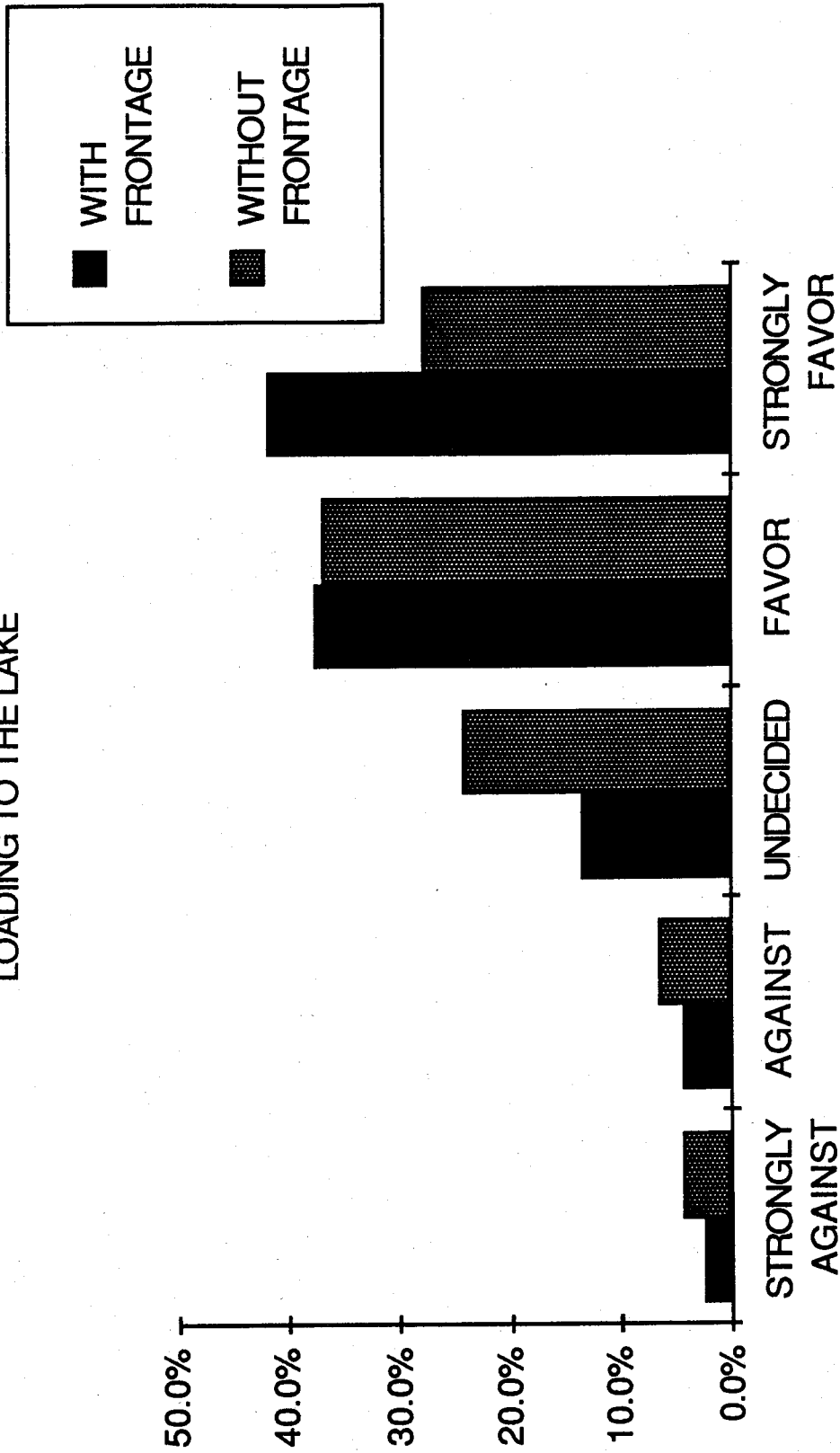


FIGURE 15: ATTITUDE TO PRESENT REGULATIONS FOR PROTECTING LAKE WATER QUALITY - PERCENT OF TOTAL WATERSHED

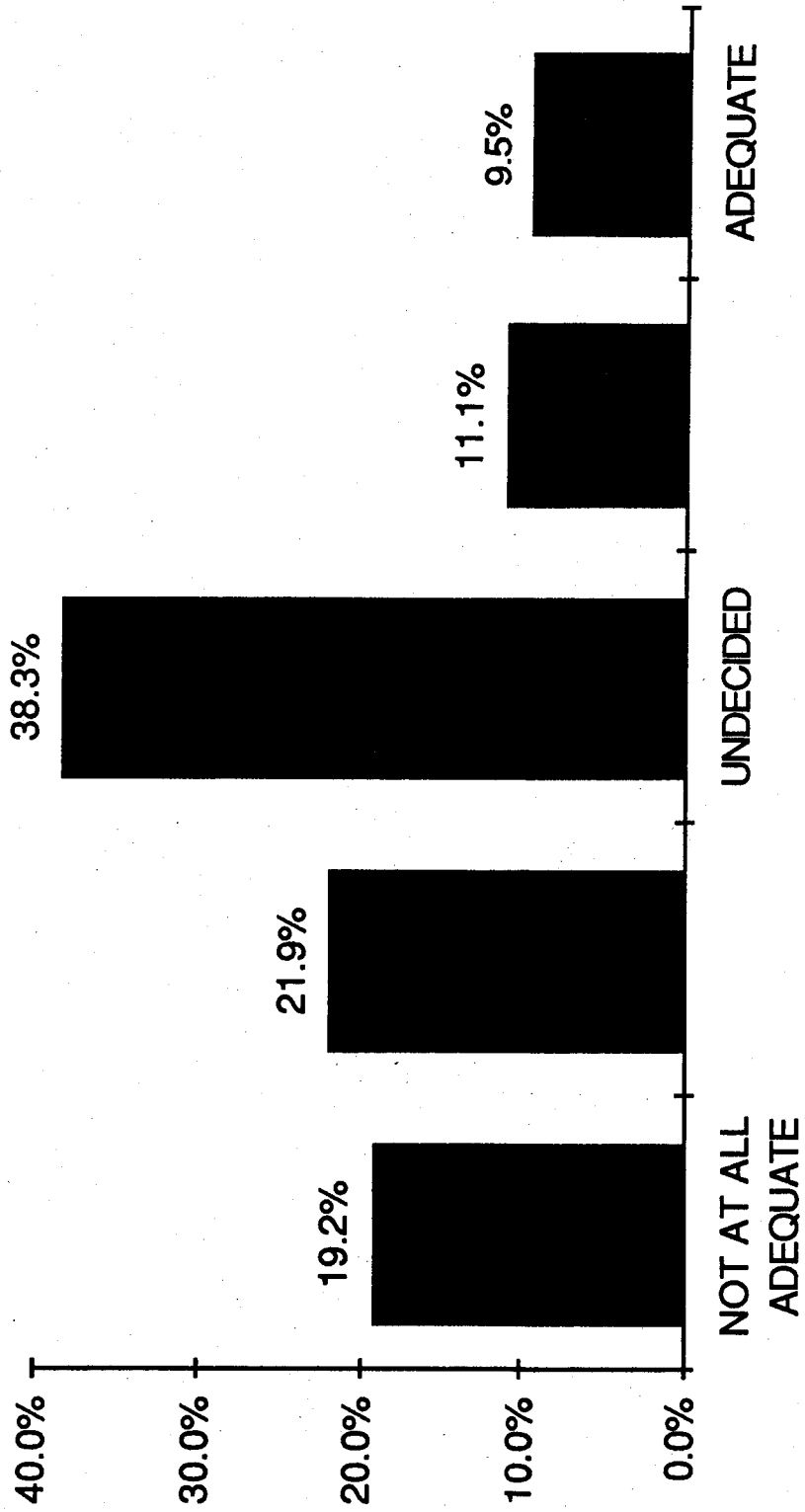


FIGURE 16: ATTITUDE TO PRESENT REGULATIONS FOR PROTECTING LAKE WATER QUALITY - GROUPS WITH AND WITHOUT LAKE FRONTAGE

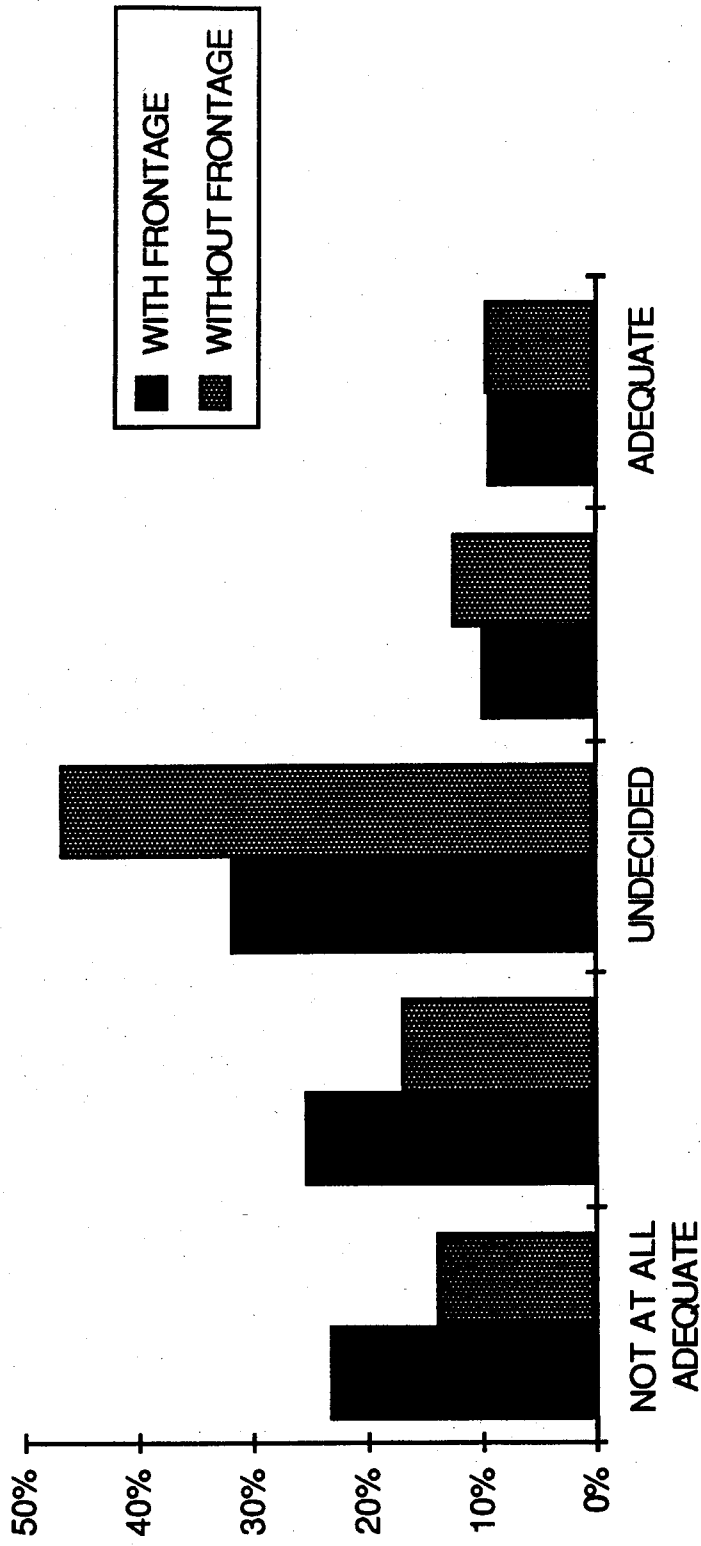


FIGURE 17 : ATTITUDE TO PRESENT REGULATIONS FOR PROTECTING LAKE WATER QUALITY - GROUPS WITH AND WITHOUT LAKE FRONTAGE

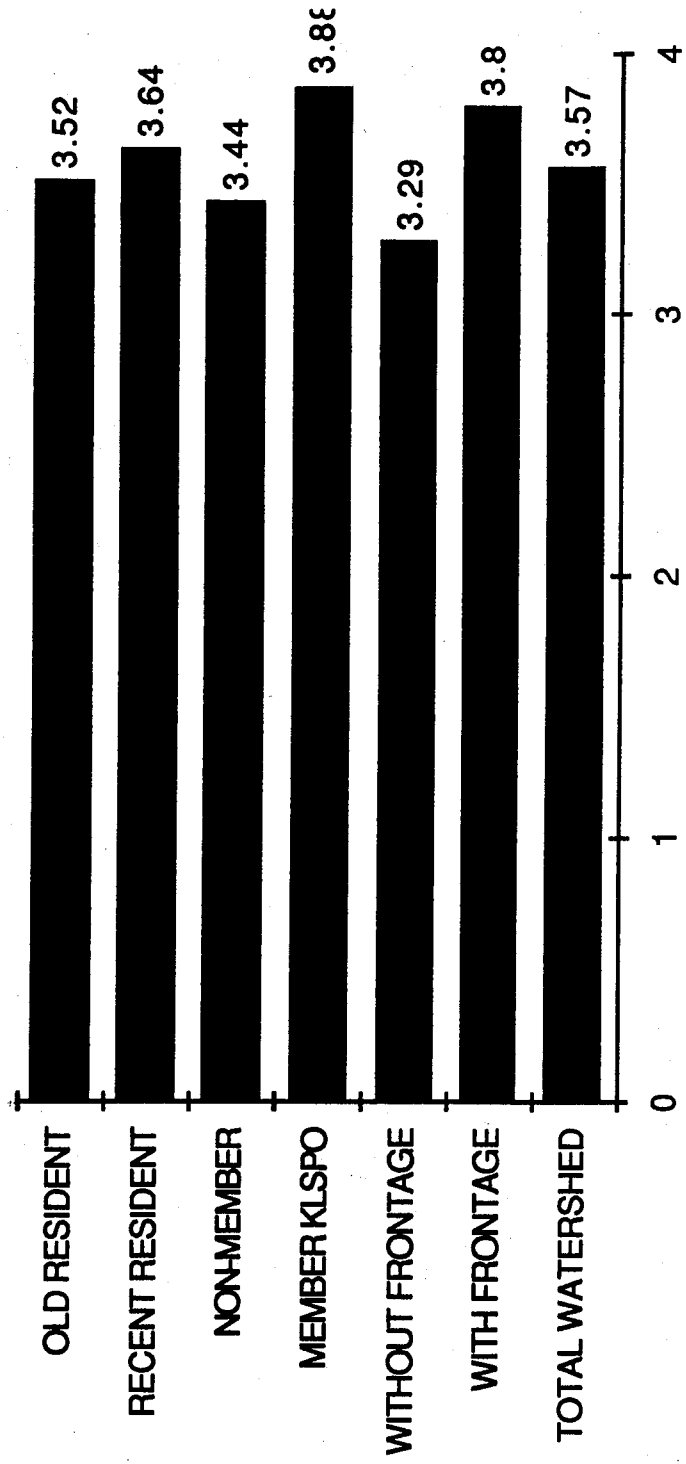
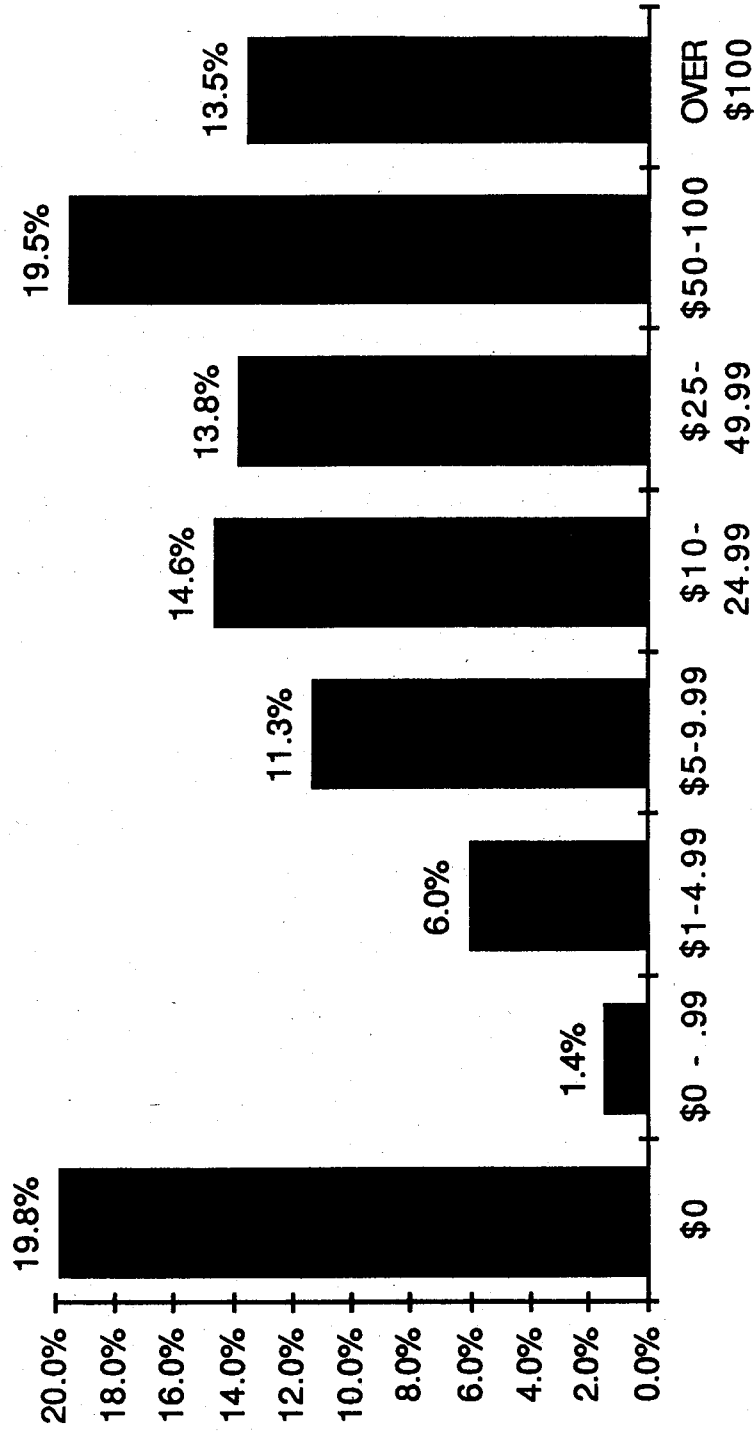


FIGURE 18: WILLINGNESS-TO-PAY TO KEEP THE LAKE CLEAN. ANNUAL PAYMENT PER HOUSEHOLD - TOTAL WATERSHED AVERAGE



APPENDIX A: RESULTS FROM WATERSHED SURVEY - ALL RESPONDENTS

KEUKA LAKE WATERSHED SURVEY.

1. Does your property have lake frontage?

YES 53.7%
 NO 46.3%

If 'NO' then give approximate distance of your house from the lake:

Mean = 0.99 mile

2. What is your average length of residence per year in the Keuka Lake watershed (check one):

WEEKENDS ONLY.....	_____	}	46.7% SEASONAL
PART OF SUMMER ONLY.....	_____		
PART OF SUMMER PLUS SOME WEEKENDS..	_____		
WHOLE SUMMER.....	_____		
WHOLE SUMMER PLUS SOME WEEKENDS....	_____	}	53.3% YEAR ROUND
YEAR AROUND.....	_____		

3. What is the average number of people in residence?:

Mean = 3.02

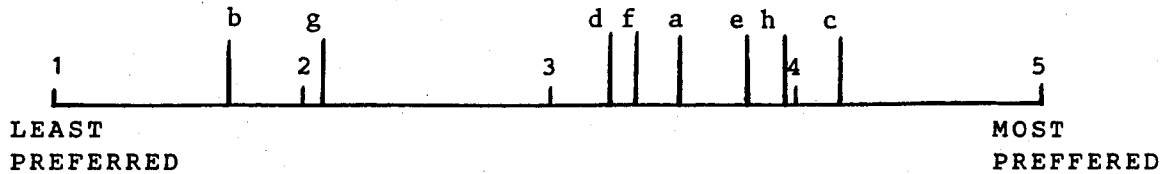
4. Are you a member of the Keuka Lakeshore Property Owners Association?

YES 29.9%
 NO 70.1%

5. How would you rate the water quality in Keuka Lake for:
 (Figures as % of total)

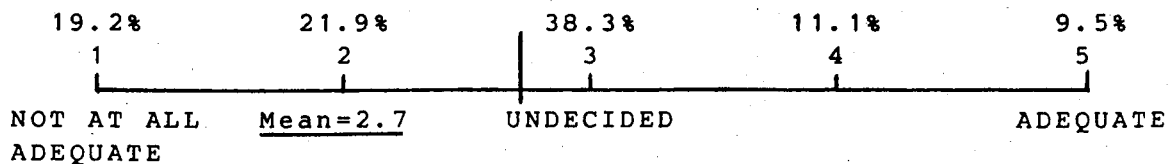
	EXCELLENT	GOOD	FAIR	POOR	NOT APPLICABLE
SWIMMING	36.8	48.0	11.5	2.9	0.8
BOATING	52.4	40.0	5.3	1.0	1.3
FISHING	25.1	42.9	22.5	7.2	2.3

10. If an excessive loading of nutrients to the lake from a variety of sources were discovered, what do you feel would be the best way to deal with the problem. Circle one number for each alternative:

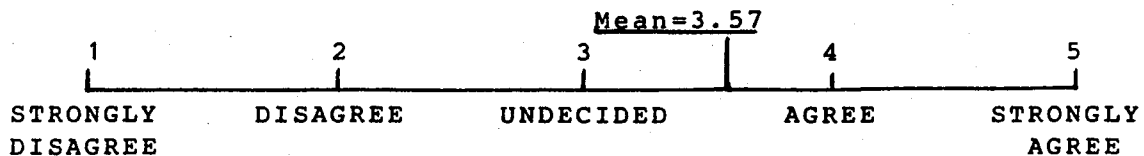


a. MECHANICAL HARVESTING OF WEEDS.....	1	2	3	3.5	4	5
b. USE WEED KILLING CHEMICALS.....	1	1.7	2	3	4	5
c. INCREASED REGULATION OF LAKESHORE PROPERTY SEPTIC SYSTEMS.....	1	2	3	4	4.2	5
d. REQUIRE ALL LAKESHORE PROPERTIES TO HAVE HOLDING TANKS FOR WASTE WATER.....	1	2	3	3.2	4	5
e. REQUIRE ALL FARMERS IN THE WATERSHED TO USE SOIL CONSERVATION METHODS.....	1	2	3	3.7	4	5
f. RESTRICT USE OF FERTILIZERS IN THE WATERSHED.....	1	2	3	3.3	4	5
g. PLACE LIMIT ON NUMBER OF YEAR ROUND RESIDENCES ON THE LAKESHORE.....	1	2	2.1	3	4	5
h. PLACE STRICTER CONTROLS ON DEVELOPMENT NEAR THE LAKE.....	1	2	3	3.9	4	5

11. Do you feel that present land use regulations are adequate to protect water quality in the 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.....	_____

13. Who do you feel should pay for the cost of keeping the lake clean? Circle one number for each line:

	1	2	3	4	5
	-----		-----		-----
SHOULD PAY NONE			SHOULD PAY SOME		SHOULD PAY ALL
FEDERAL GOVERNMENT.....	1	2	3	4	5
STATE GOVERNMENT.....	1	2	3	4	5
LOCAL GOVERNMENT.....	1	2	3	4	5
LAKE ASSOCIATION MEMBERS.....	1	2	3	4	5
LAKE USERS.....	1	2	3	4	5
LAKESHORE PROPERTY OWNERS.....	1	2	3	4	5
EVERYONE IN THE WATERSHED.....	1	2	3	4	5
THOSE WHO CAUSE THE POLLUTION..	1	2	3	4	5
FARMERS IN THE WATERSHED.....	1	2	3	4	5

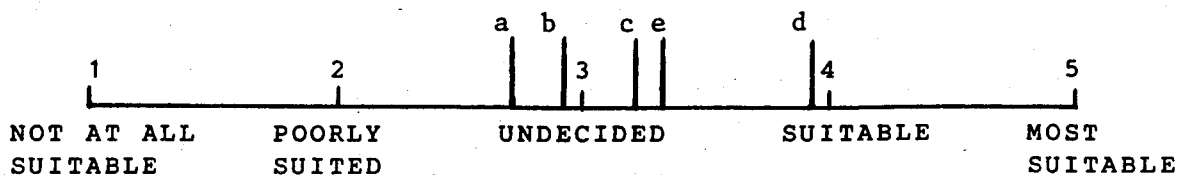
14. If you were asked to pay for keeping the lake clean, how much would you be prepared to pay per year? (check one).

NOTHING.....	19.8%
\$0 - .99.....	1.4%
\$1 - 4.99.....	6.0%
\$5 - 9.99.....	11.3%
\$10 - 24.99.....	14.6%
\$25 - 49.99.....	13.8%
\$50 - 100.....	19.5%
OVER \$100.....	13.5%

15. How much do you think that the value of property near the lake is affected by the water quality in Keuka Lake? (circle one number).

2.1%	10.3%	14.6%	31.0%	42.0%
1	2	3	4	5
-----		-----		-----
NONE	VERY LITTLE	SOMEWHAT	MUCH AFFECTED	VERY MUCH AFFECTED
Mean=4.0				

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?

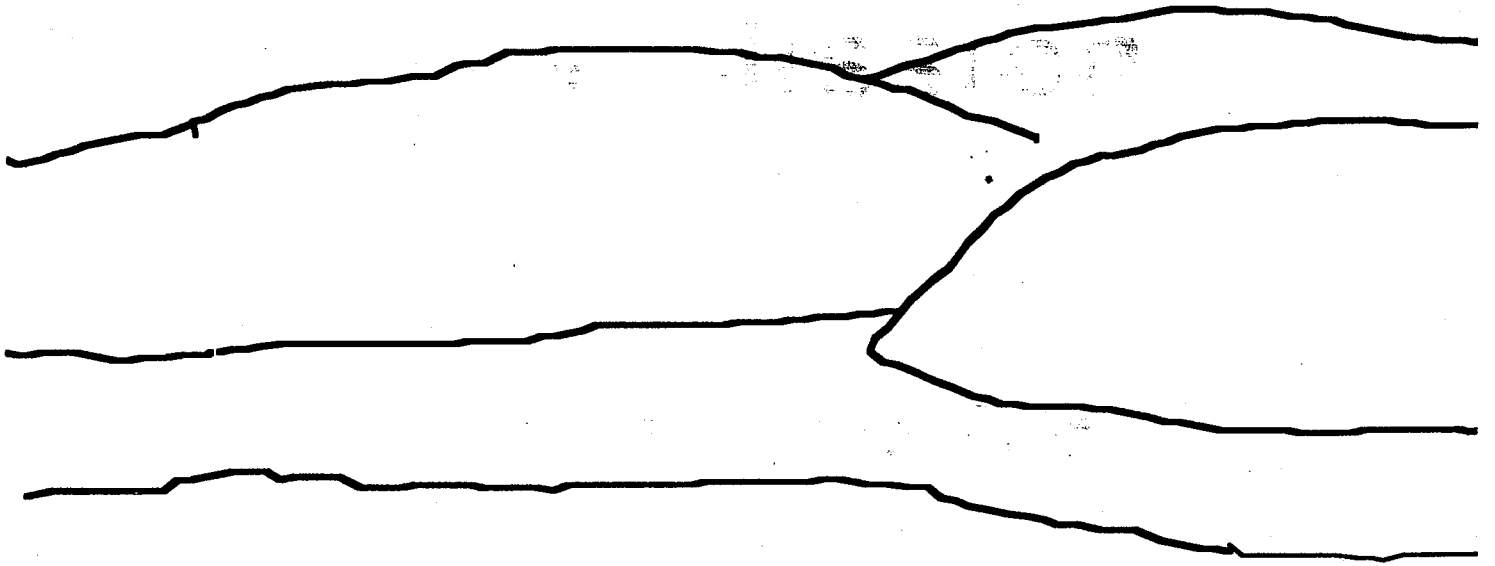
(0.1%) NEVER ATTENDED SCHOOL
(0.2%) 1-6 YEARS
(3.0%) 7-9 YEARS
(5.1%) 10-11 YEARS
(20.2%) HIGH SCHOOL GRADUATE
(19.4%) SOME COLLEGE
(23.5%) COLLEGE GRADUATE
(28.5%) SOME GRADUATE SCHOOL

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

***"Listen
to the
Lake"***



Keuka Lake Association

Keuka Lake Watershed Project Presentation Outline

- I. What is the Keuka Lake Association?
- II. Purpose/Mission of the Keuka Lake Association
- III. Keuka Lake Watershed Facts
 - A. Water Quality
 - B. Economics
 - C. Public Health/Safety
- IV. What is the Keuka Lake Association Doing?
 - A. Keuka Lake Watershed Project
 - 1. Purpose/Mission
 - 2. Project Status
- V. Supporting Groups and Individuals
- VI. Town/Village Watershed Advisory Committees
 - A. Purpose of TWAC's
 - B. Invitation to participate in TWAC

Appendix A-Glossary of Technical Terms

Appendix B-Organizations in the Keuka Lake Watershed

Appendix C-Keuka Lake Association Organization Chart

Appendix D-Keuka Lake Watershed Description

Appendix E-Applicable Watershed Laws and Regulations

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4	3	1989-New Mission/Name
5	5	KLA membership 1700
6	4	KLA Mission
7	separate	watershed map
8	6	Keuka lake Watershed Facts
9	8	Pollutants-nutrients/bacteria
10	nutrientflow	Phosphorus Cycle
11	lakeaging	Lake Aging/Eutrophication
12	nitrogencycle	Nitrogen Cycle
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**Keuka Lake
Association**

Established

1956

as

**Keuka Lake
Shoreline Property
Owners**

6
2

1989

New Mission

New Name

KLA

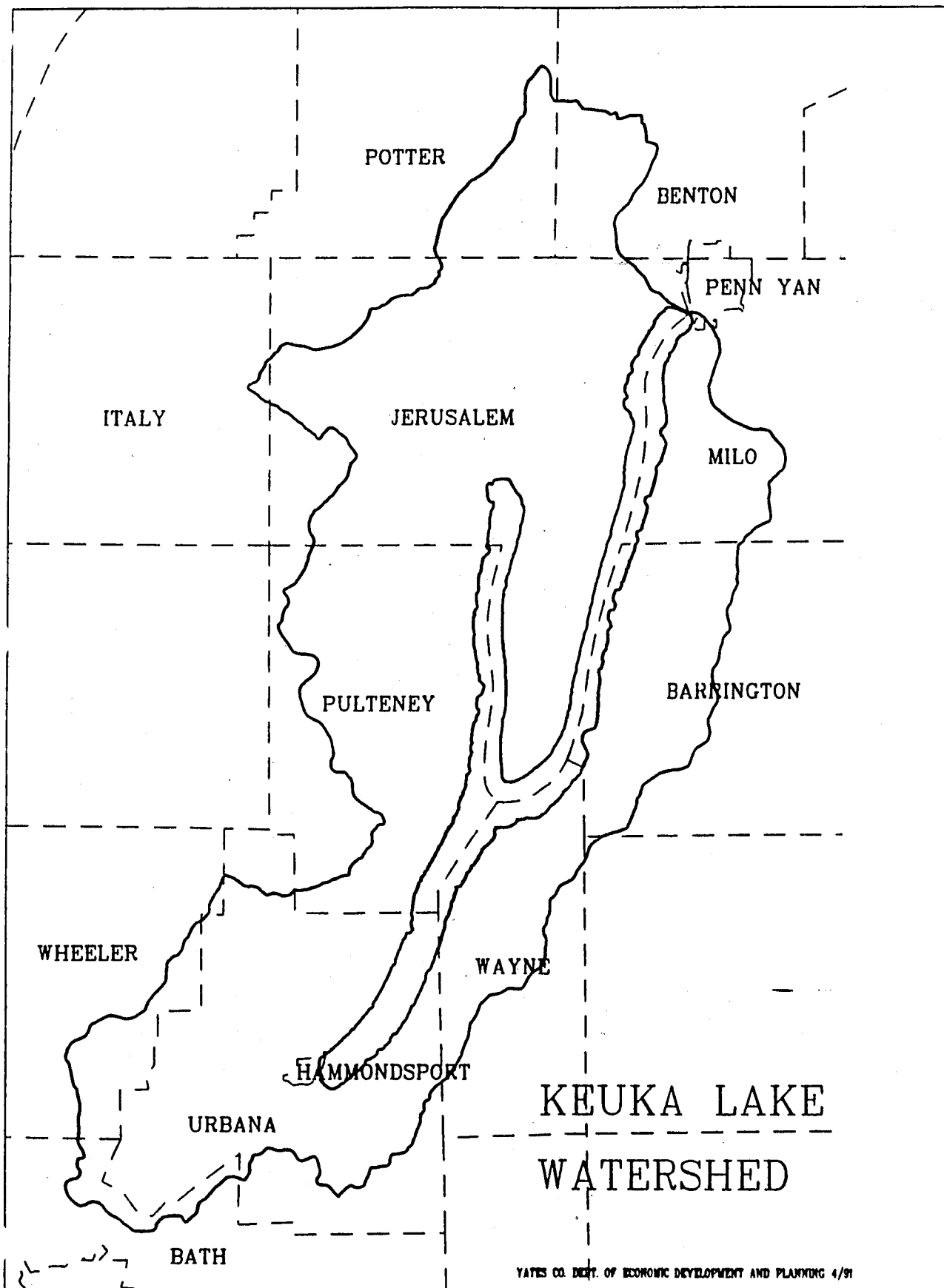
Membership

1,700

***"membership open to all those
interested in protecting Keuka
Lake and its watershed"***

Mission

**To protect and
improve
Keuka Lake and
it's
watershed.**



Keuka Lake Watershed Facts

Cooperating Organizations:

Alfred University, Cornell University, Community College of the Finger Lakes, Corning Community College, Department of Health, Department of Environmental Conservation, Steuben Soil and Water, Steuben County Planning, Steuben County-Cornell Cooperative Extension, Water Resources Institute, Yates County Soil and Water, Yates County Planning Yates County-Cornell Cooperative Extension

Pollutants

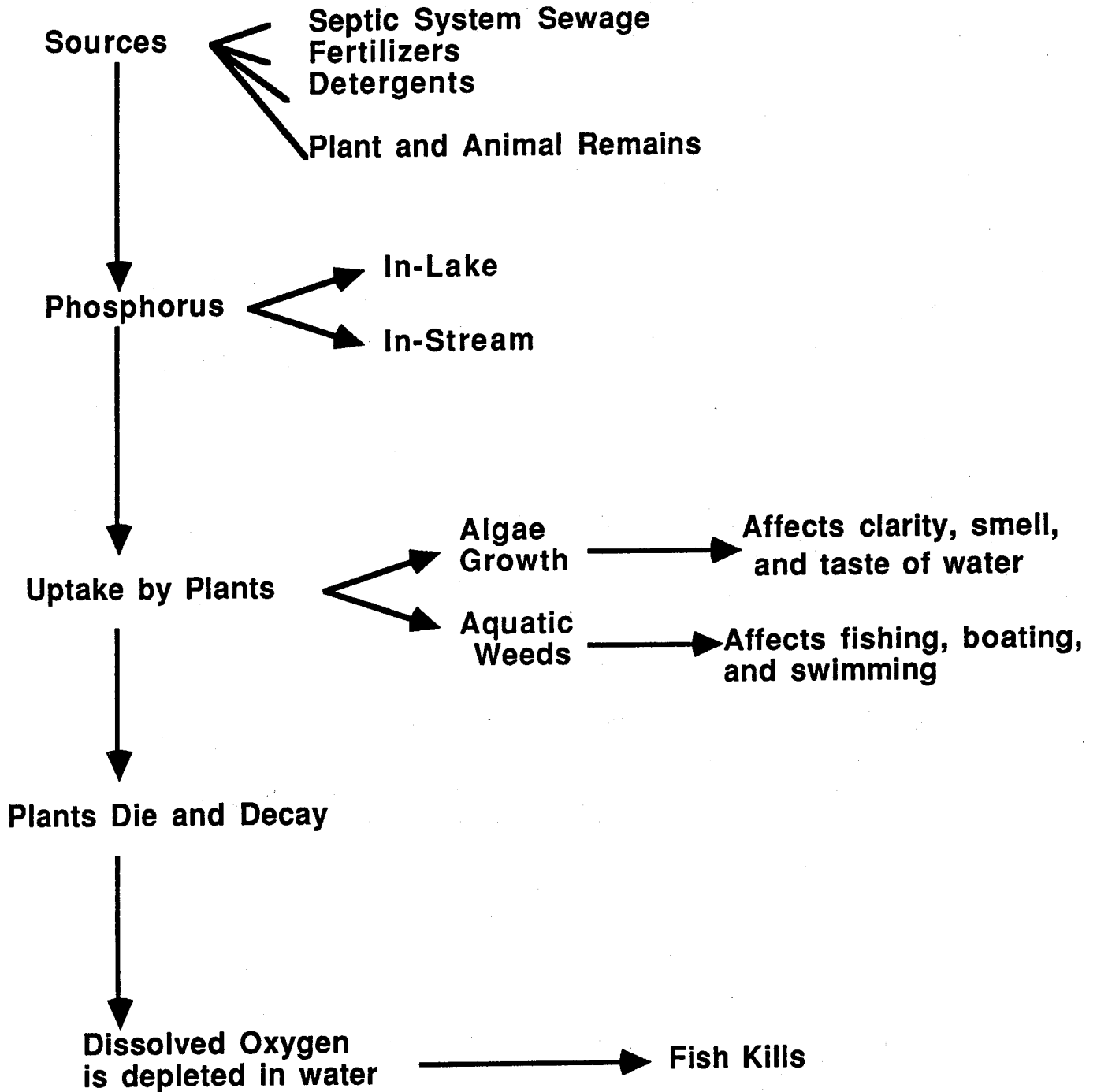
* **Nutrients**  Phosphorus
Nitrogen

* **Bacteria**  Human
Animal

* **Sediments** — Eroded
soil from unprotected fields, road and
stream banks and construction sites

* **Chemical**  Road Salt
Toxics
Petroleum
Household
Hazardous Wastes

Phosphorus Cycle — Lake Aging Process



***Phosphorus is the critical nutrient causing "Lake Aging" or eutrophication**

Lake Aging or Eutrophication

