

Understanding the Views of Residents to Guide the Creation of Every Acres Counts: The Newfound Watershed Master Plan *Findings from a Watershed Community Survey*



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Background and Project Goals

The following are the broad goals for the first community survey in the Newfound Watershed Master Plan project:

- Identify residents' values for the watershed and desires for the future
- Determine residents' present understanding of stewardship principles
- Ascertain correlates of environmentally responsible behavior
- Identify perceived barriers to and benefits of adopting environmentally responsible behaviors
- Discern residents' level of trust in information sources and vectors of delivery
- Provide other useful information on specific issues relevant to the development of the watershed master plan

Working Towards Project Goals

- To aid in achieving these goals the Center for the Environment at Plymouth State University worked with project team members and local communities to:
 - Administer a scientific survey and conduct analyses:
 - Develop a sample frame
 - Draw a random sample
 - Conduct statistical analyses using SPSS to achieve project goals

Research Methods

- A scientific random sample survey
 - Basic information about perceptions and attitudes is needed
 - Need to make the data as usable (representative) as possible
- Survey administered using a modified Total Design Method (Dillman 2006)
 - Customized letters & watershed specific questionnaires
 - Carefully worded appeals
 - Carefully timed, four stage mailing process
- Participation in the survey is confidential
- The information collected is anonymous

Research Methods

- The sample and response rates
 - 1,938 questionnaires sent, 794 completed and returned for an overall response rate of 41%
 - By community...

Table 1. Watershed Land Area and Population by Community - 2005 and Samples Drawn from Each Community.

Town	Acres in Watershed	% of Watershed Acres	Town Population	Population in Watershed	% of Watershed Population	Sampled Population
Alexandria	22,616	35.8	1,472	1,030	23	350
Bridgewater	5,297	8.4	1,029	597	13	70
Bristol	7,212	11.4	3,185	1,975	45	400
Danbury	859	1.4	1,179	2	0.05	100
Dorchester	16	0 (rounding)	382	0	0	0
Groton	11,369	18	496	248	6	230
Hebron	12,151	19.2	539	539	12	275
Orange	2,141	3.4	311	12	0.3	50
Plymouth	1,490	2.4	6,387	26	0.6	100
Lakefront						370
Total	63,151	100	14,980	4,429	100	1,945

Source: Newfound Lake Region Association; US Census; NH Office of Energy and Planning

Table 2. Sample Size and Response Rates from Each Community in the Watershed.

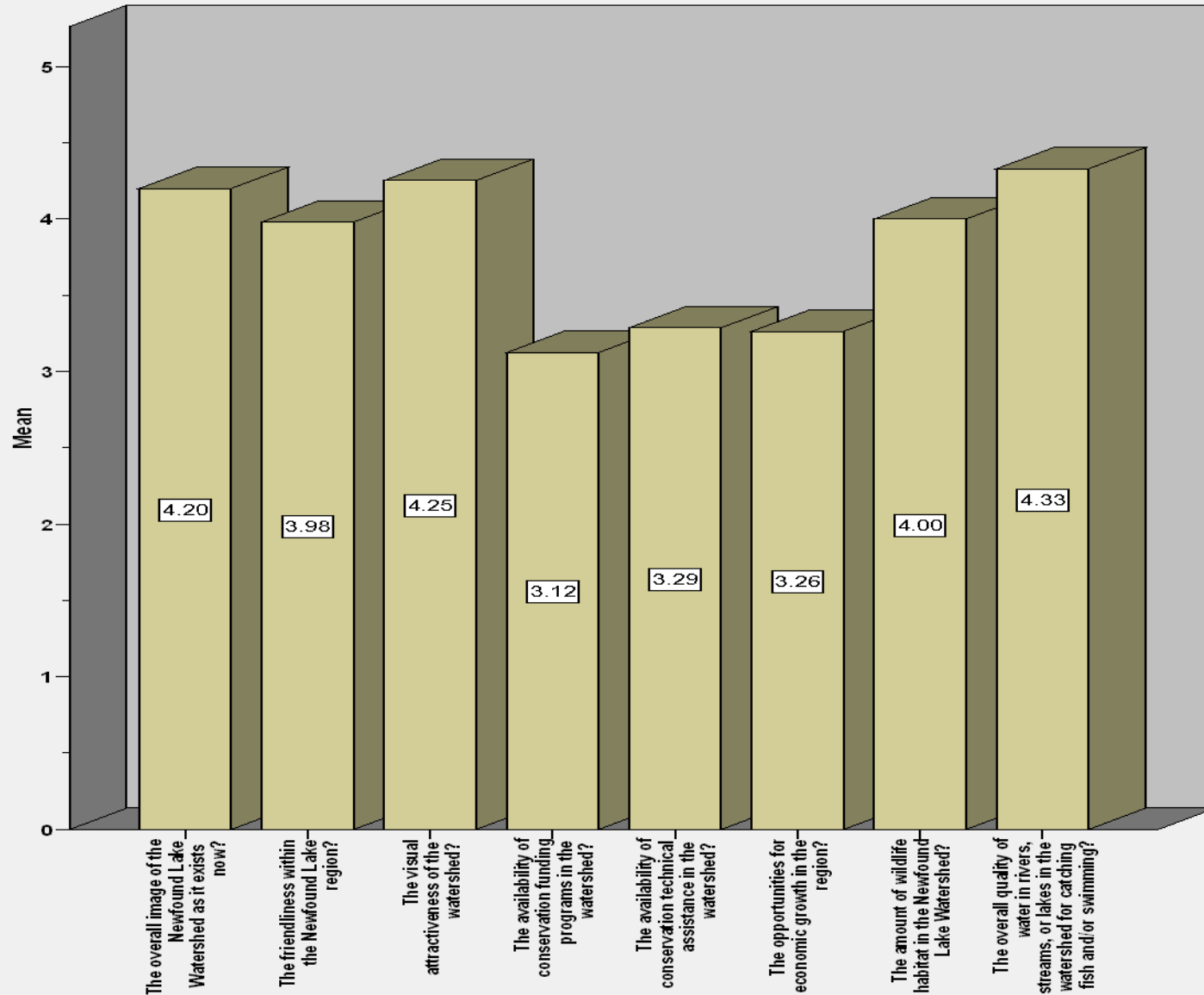
Town	Sampled Population	Number of Responses	Response Rates (%)	Lakefront by Town	Total	% of Valid Responses
Alexandria	350	123	35.14	6	129	16.25
Bridgewater	70	33	47.14	24	57	7.18
Bristol	400	162	40.50	75	237	29.85
Danbury	100	23	23.00		23	2.90
Groton	230	77	33.48		77	9.70
Hebron	275	156	56.73	72	228	28.72
Orange	50	14	28.00		14	1.76
Plymouth	100	18	18.00		18	2.27
Lakefront	370	177	47.84			
<i>Missing data</i>		11			11	1.39
<i>Undeliverable</i>	7					
Total	1,938	794	41	177	794	100

How to work with the report:

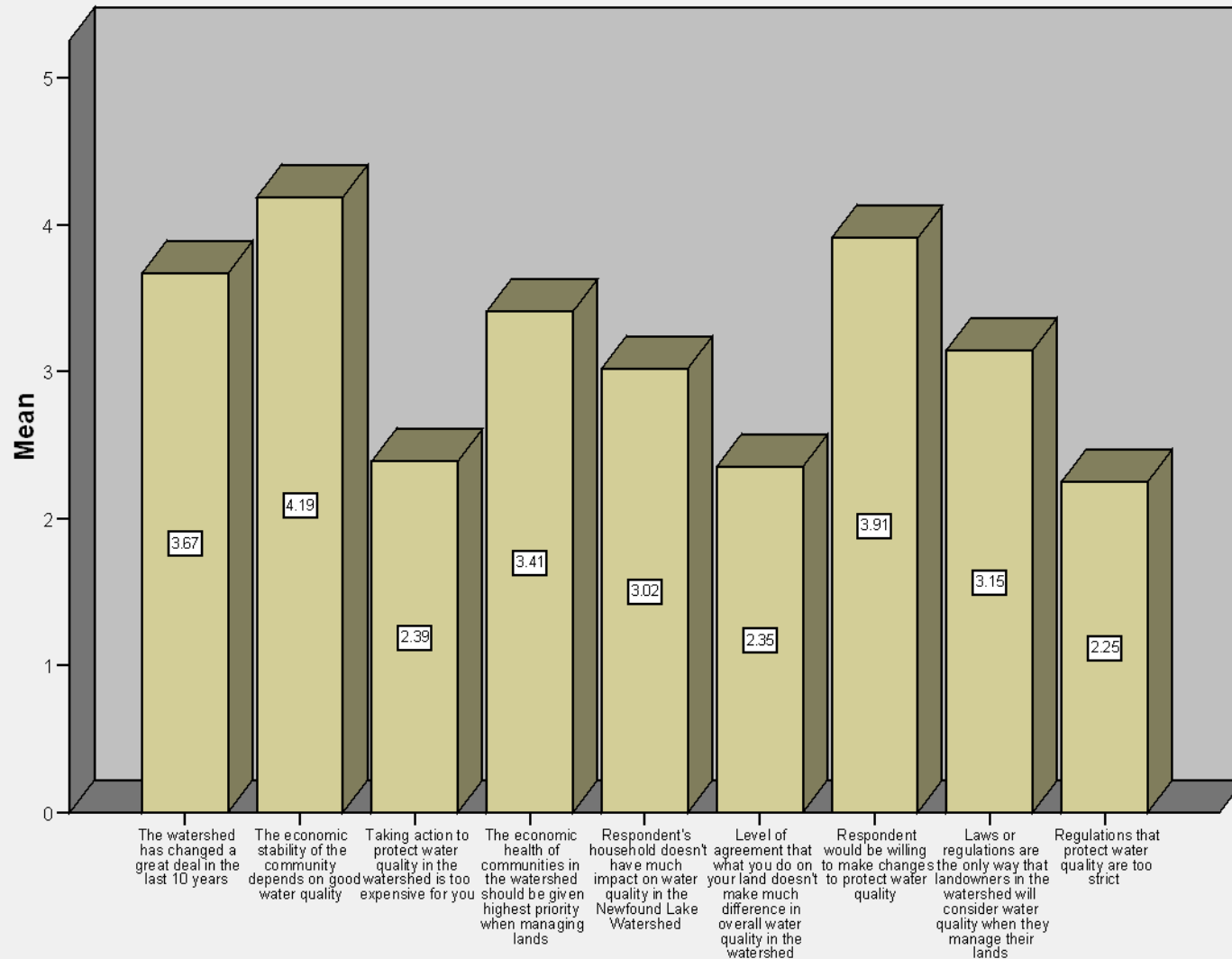
Types of analyses and using the findings

Section 1: The overview of findings

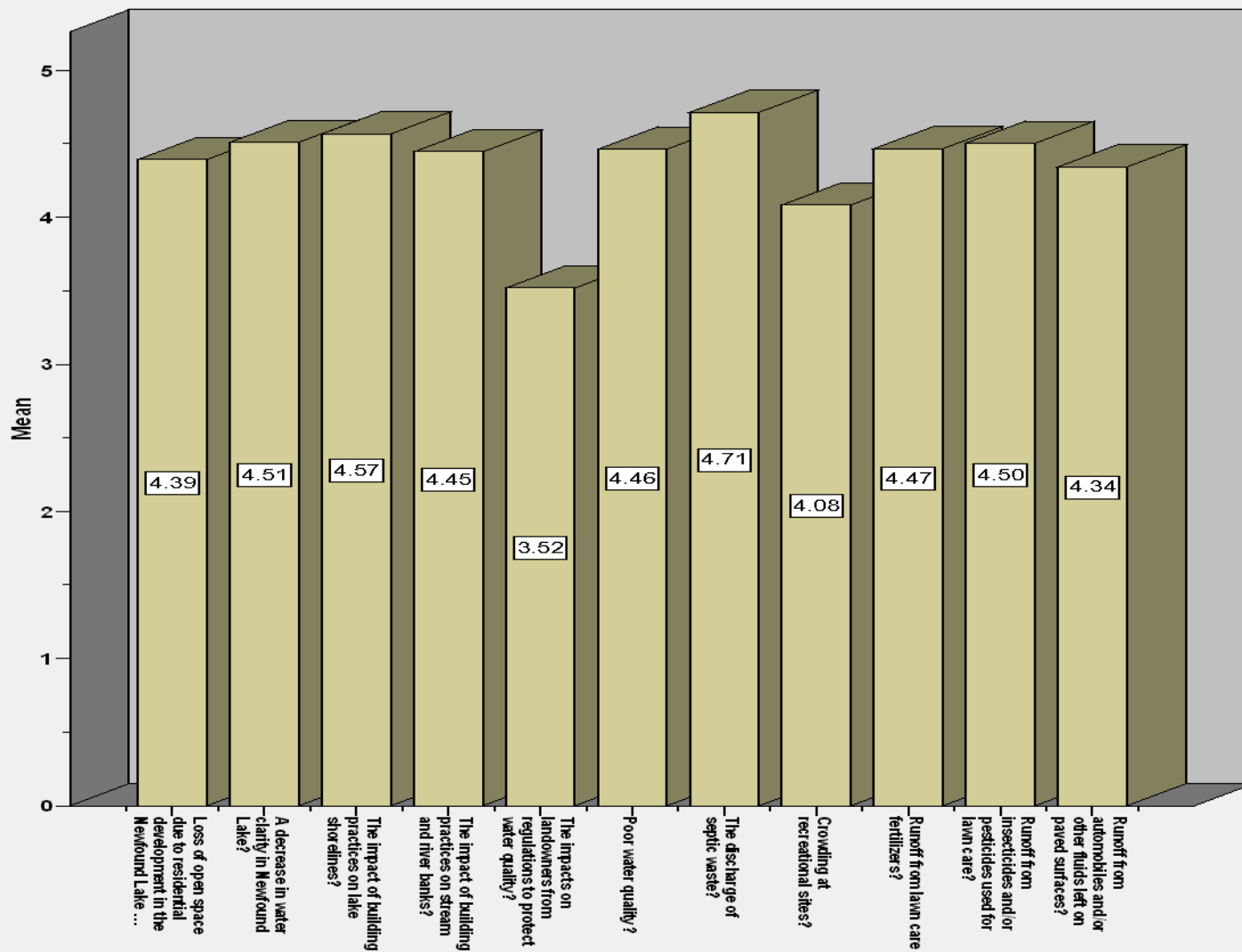
Rating about Newfoundland Watershed Aspects (1=Bad,2=Poor,3=Fair,4=Good,5=Excellent)



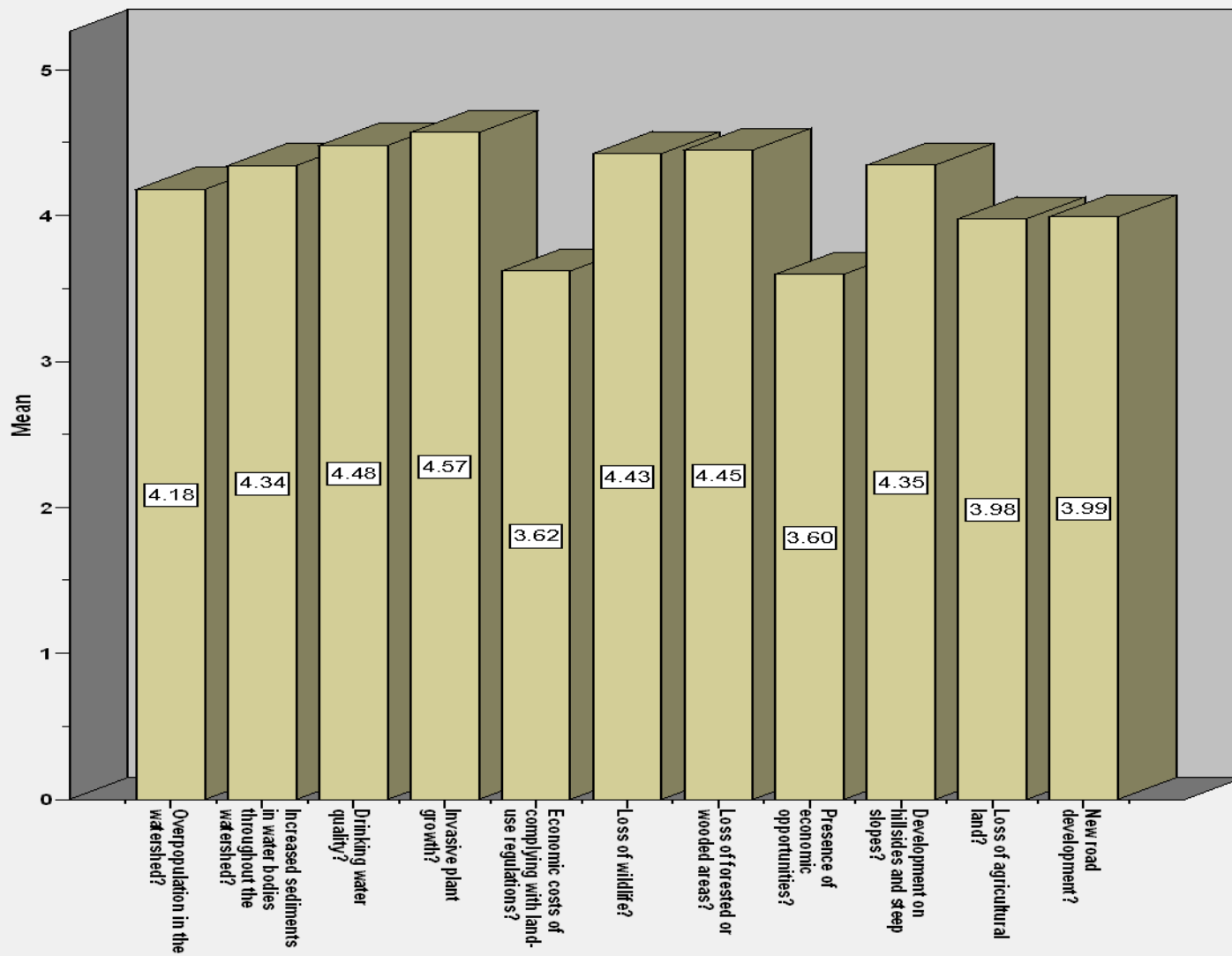
Respondents' Level of Agreement With Statements About the Newfound Lake Watershed



Level of Concern for issues about the Watershed (1=Not concerned at all, 3=Neutral, 5=Very concerned)

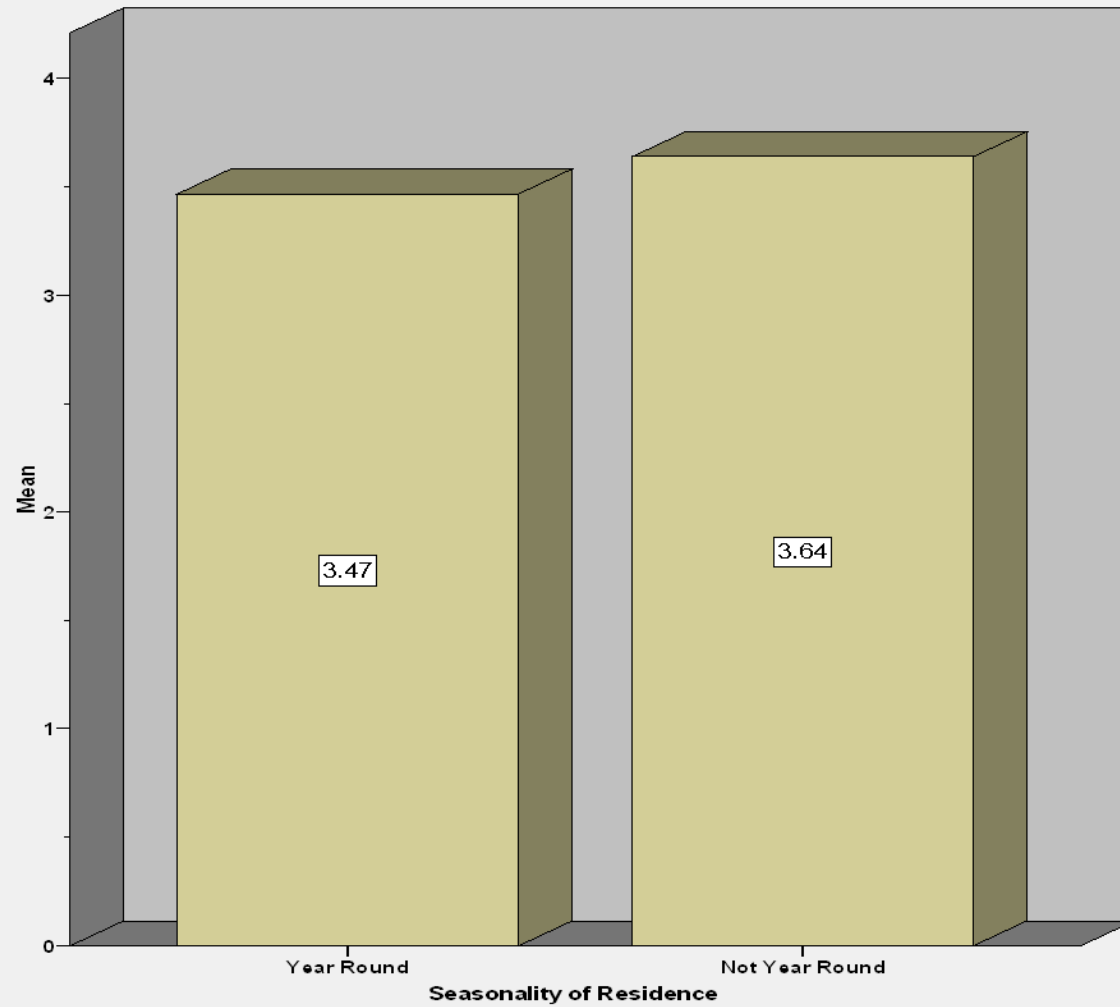


Level of Concern about Issues in the Watershed

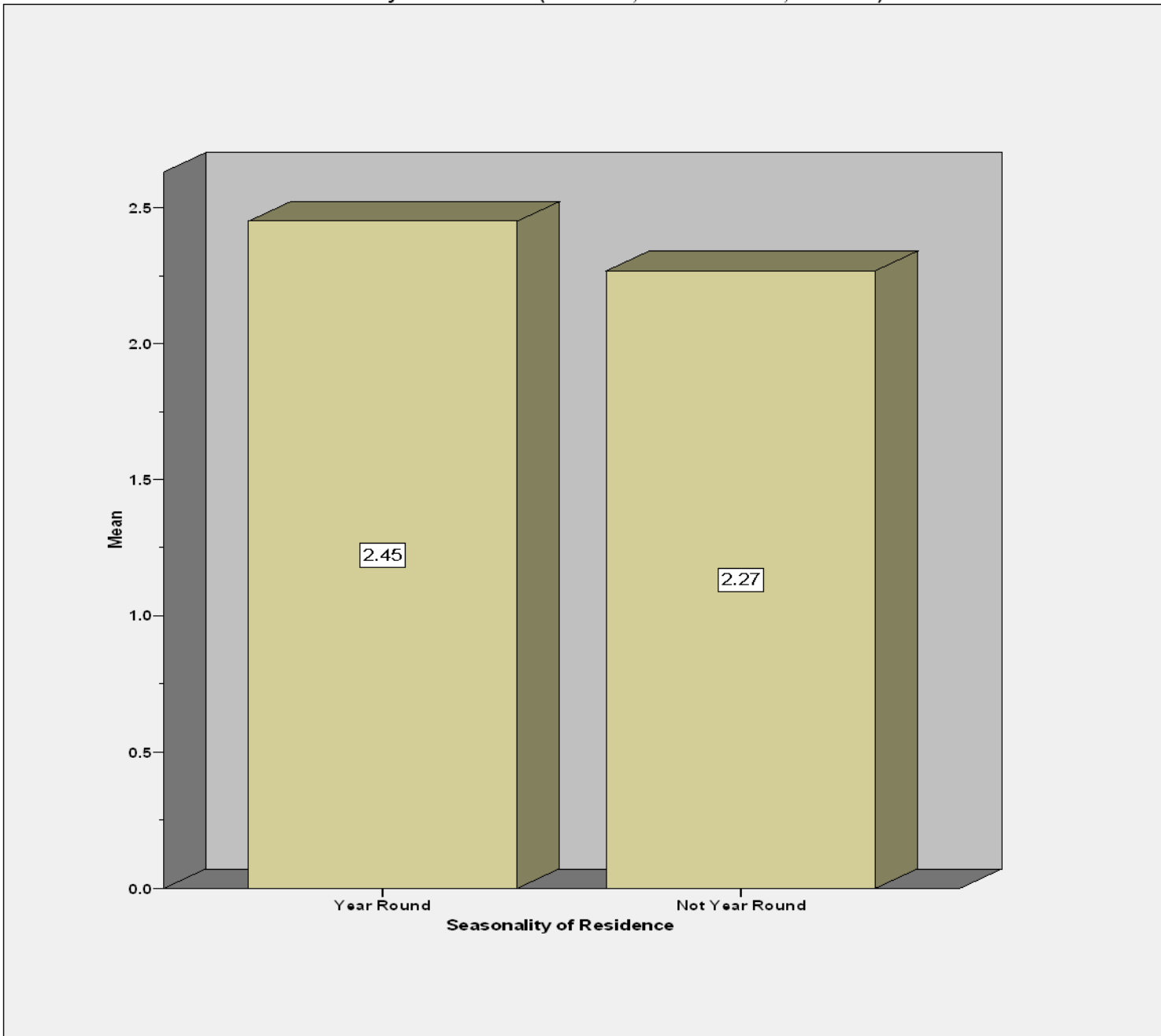


Bivariate Analyses: Purposes and the Presentation of Results

**Mean Rating of the Water Quality of Newfound Lake Broken Down by Seasonality of Residence
(1=Poor, 2=Fair, 3=Good, 4=Excellent)**



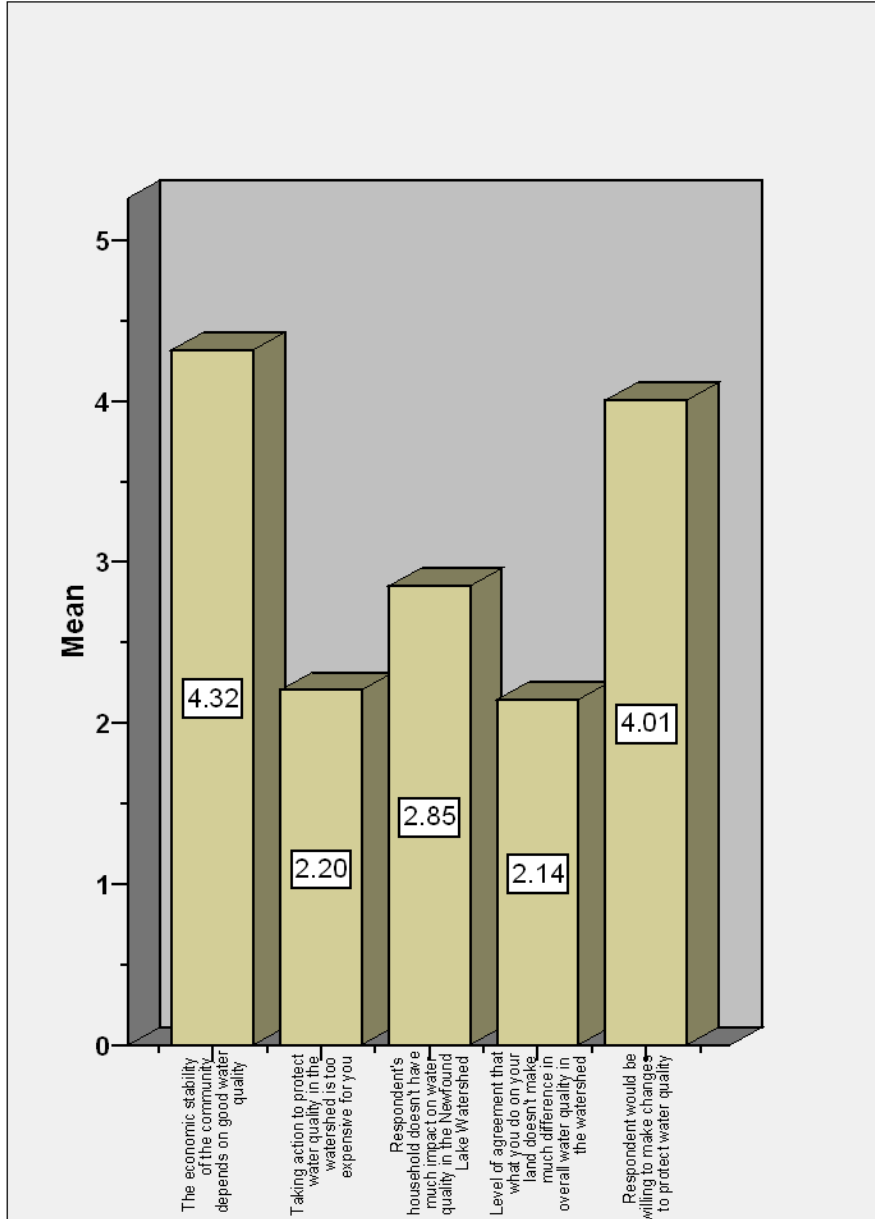
Mean Reported Frequency of Leaving a Buffer of Native Plants Between Surface Waters and Home Broken Down by Seasonality of Residence (1= Never, 2= Sometimes, 3= Often)



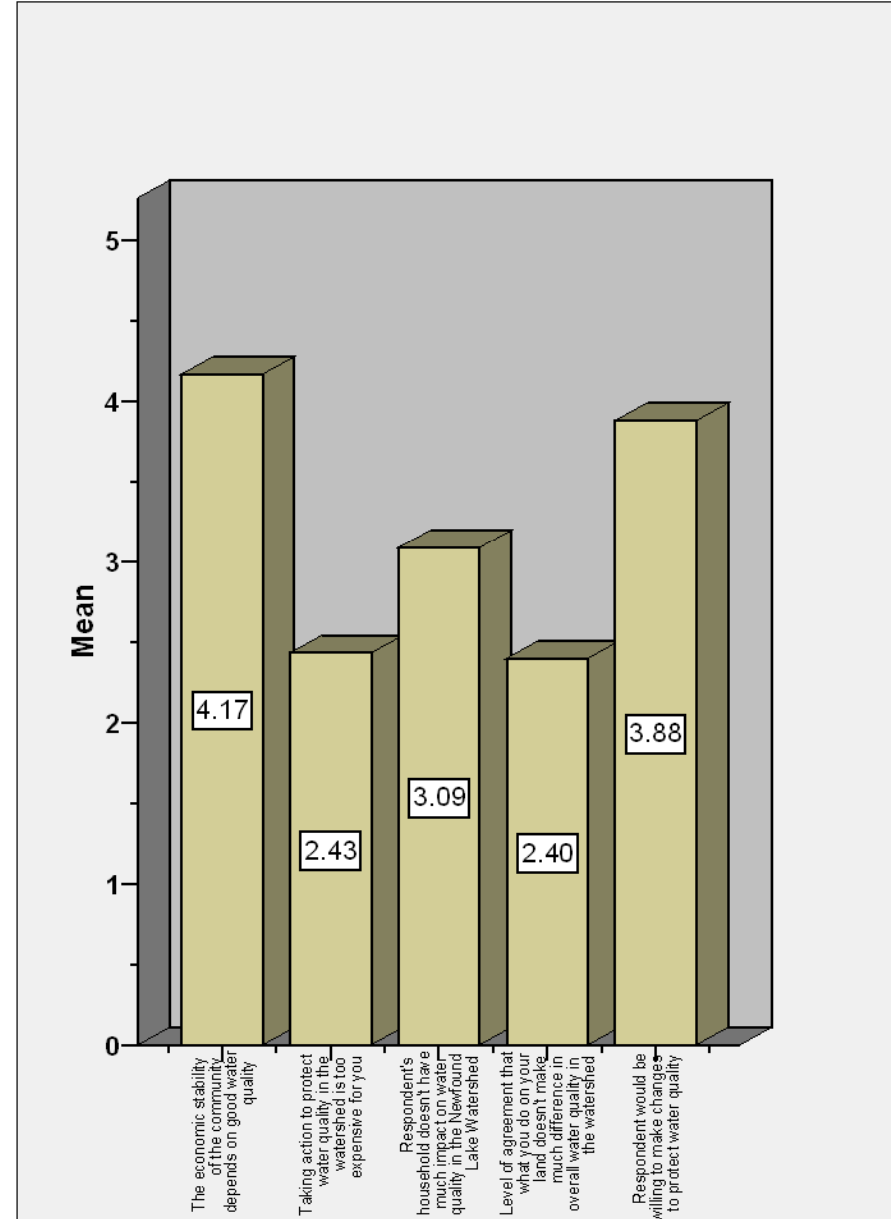
Respondent's level of agreement with the following statements about the Newfound Lake Watershed:
 (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)

Lakefront property owner

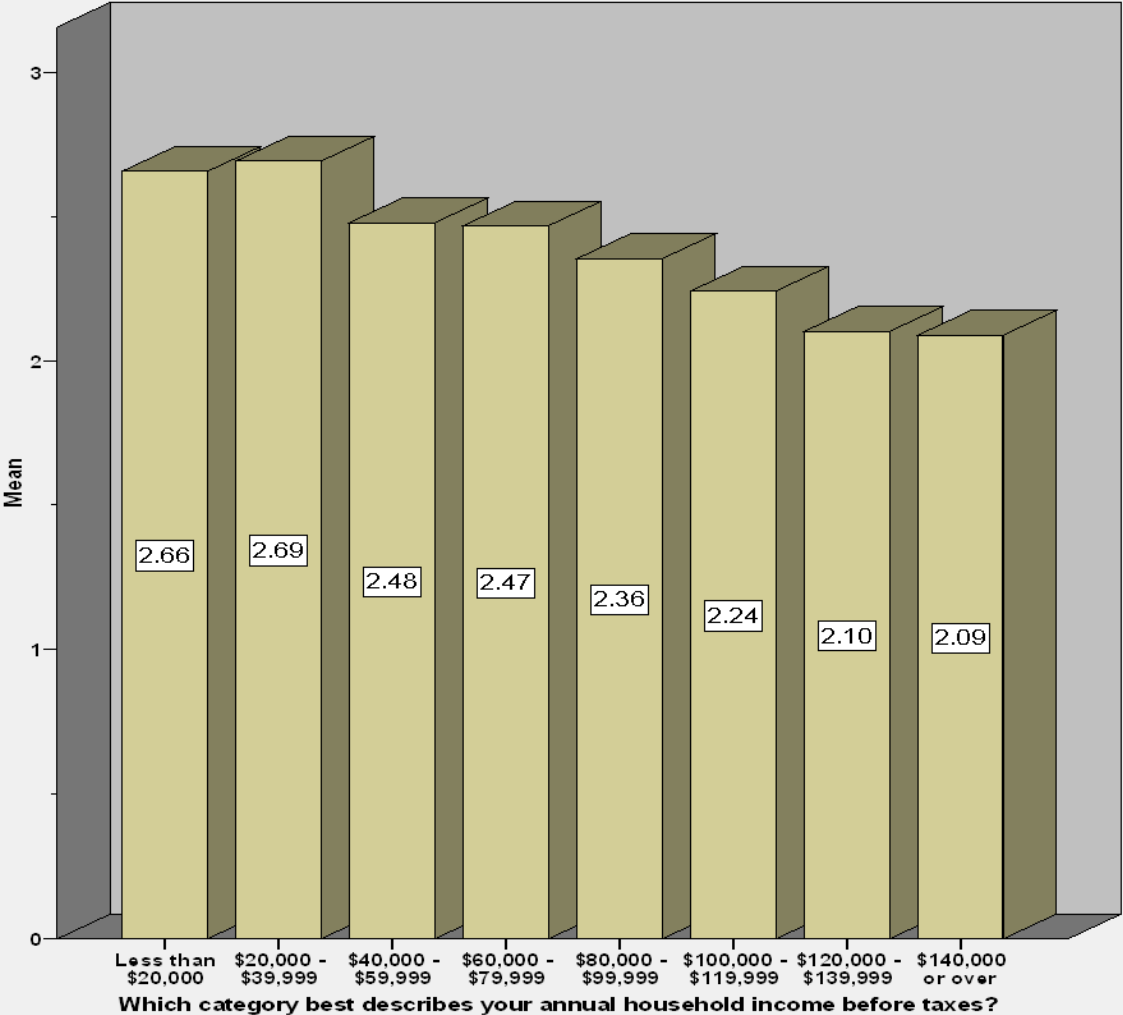
Yes



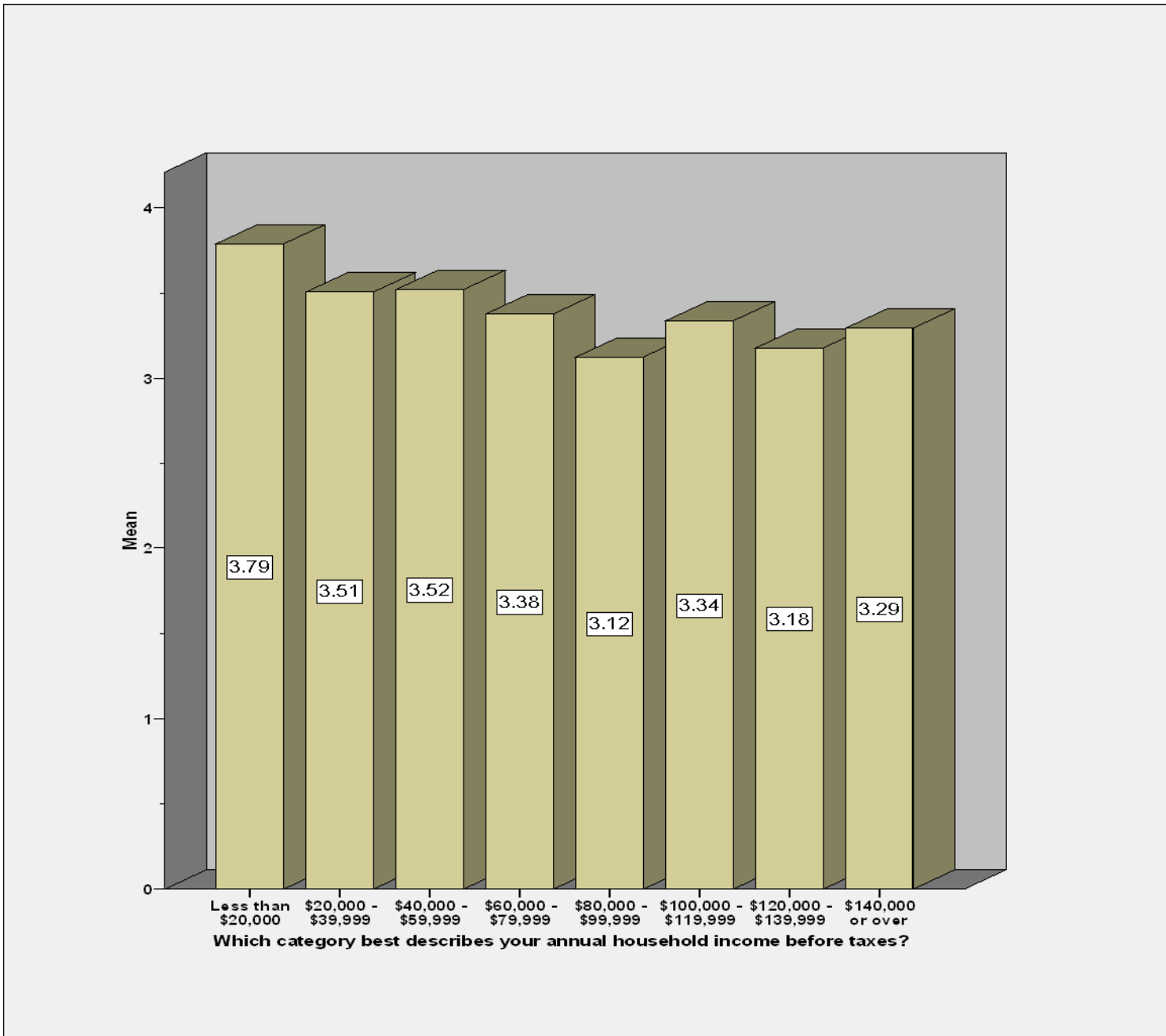
No



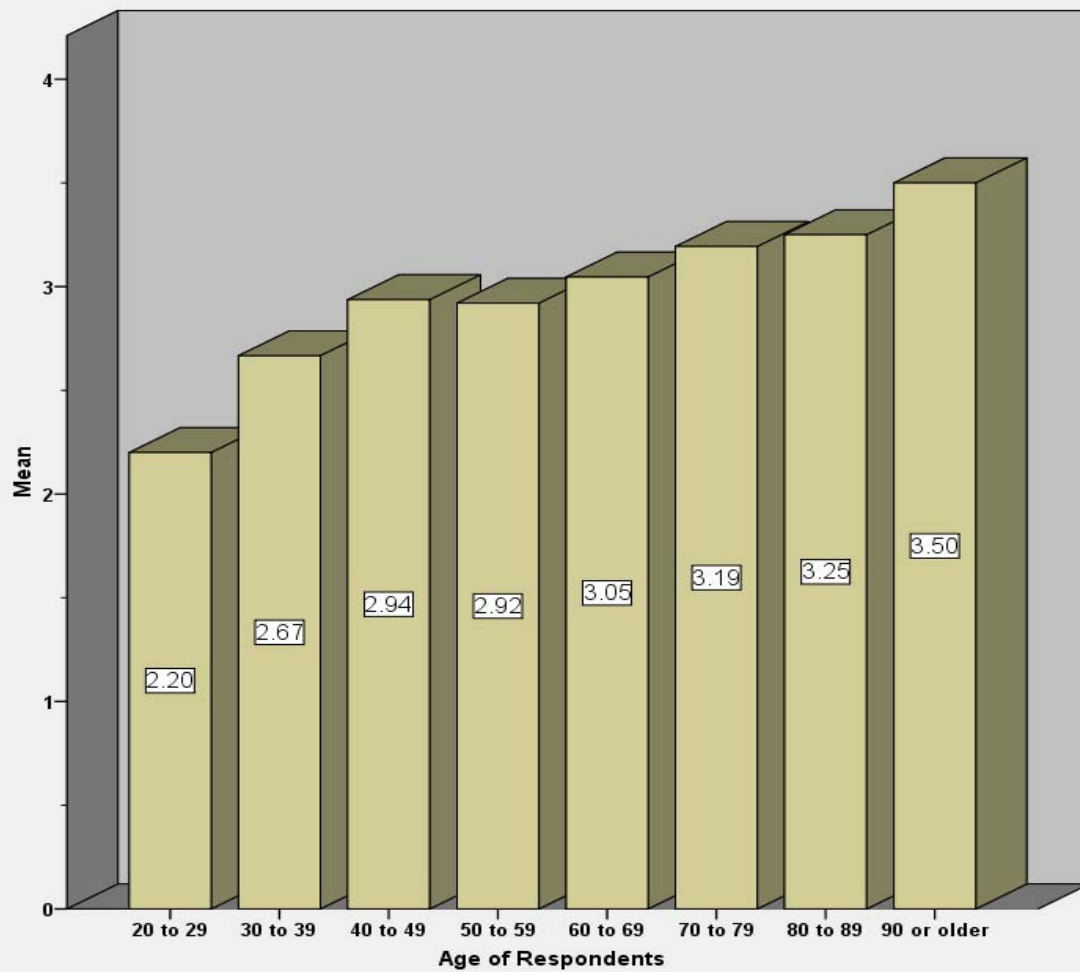
Mean Level of Agreement that Taking Action is Too Expensive Broken Down by Annual Household Income Before Taxes



Mean Level of Agreement that the Lake has been Damaged by Local Land Uses Broken Down by Annual Household Income Before Taxes



Mean Level of Agreement that Respondent's Household does not have Much Impact on the Watershed Broken Down by Age

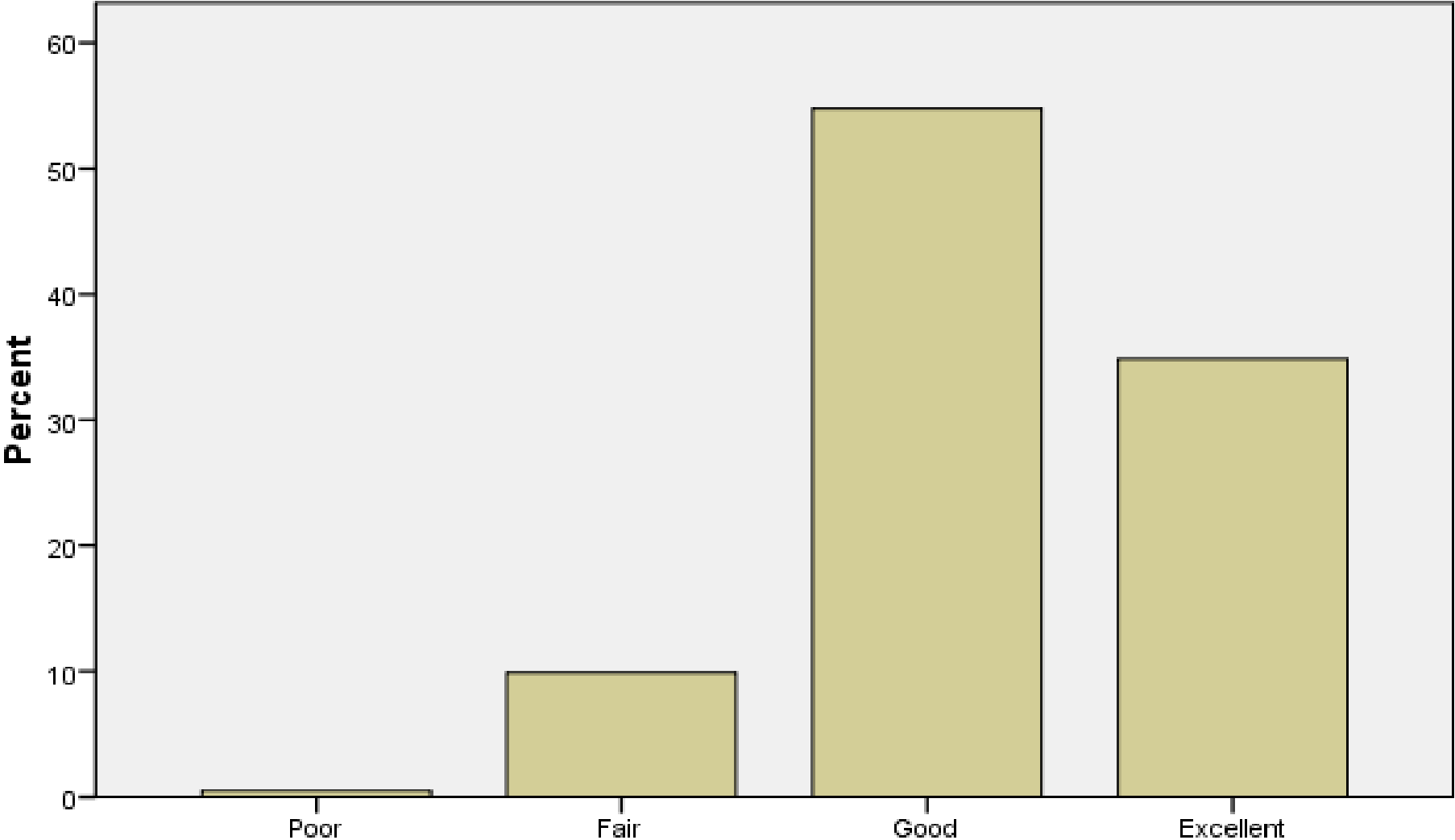


The Appendix...

The overall image of the Newfound Lake Watershed as it exists now?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	4	.5	.5	.5
	Fair	76	9.6	9.9	10.4
	Good	421	53.0	54.7	65.1
	Excellent	268	33.8	34.9	100.0
	Total	769	96.9	100.0	
Missing	Don't Know	11	1.4		
	Missing	14	1.8		
	Total	25	3.1		
Total		794	100.0		

The overall image of the Newfound Lake Watershed as it exists now?

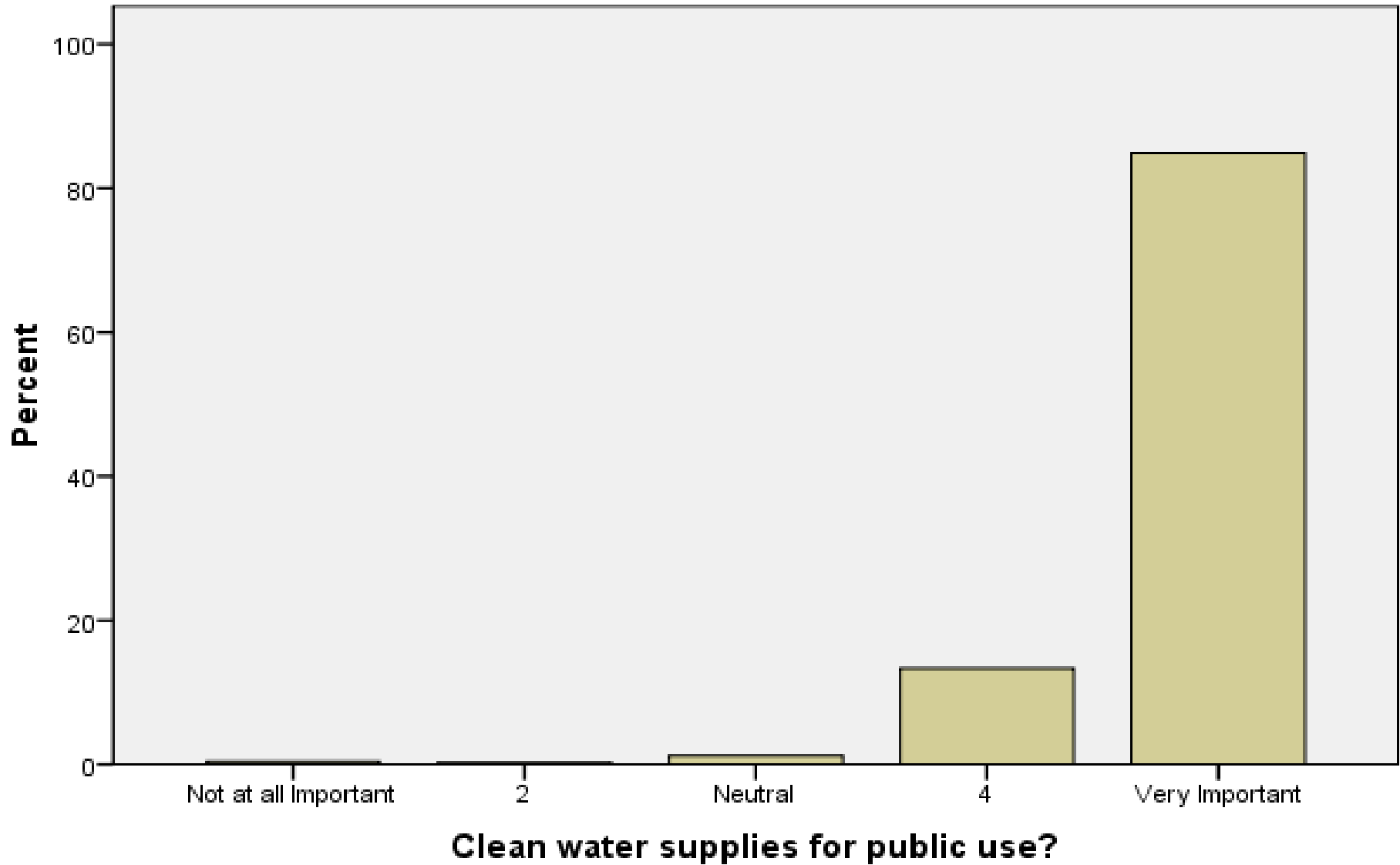


The overall image of the Newfound Lake Watershed as it exists now?

Clean water supplies for public use?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all Important	3	.4	.4	.4
	2	2	.3	.3	.6
	Neutral	9	1.1	1.2	1.8
	4	103	13.0	13.3	15.2
	Very Important	655	82.5	84.8	100.0
	Total	772	97.2	100.0	
Missing	Don't Know	3	.4		
	Missing	19	2.4		
	Total	22	2.8		
Total		794	100.0		

Clean water supplies for public use?



Conclusions—Observations, Conclusions, and Recommendations

- Designed to highlight usable, applicable information
- The report is a reference!
 - Be sensitive to what the data does not tell (key differences in underrepresented populations)
 - Use the report as a guide
 - for understanding issue perceptions
 - To identify what is important for management and plan goals
 - Contact us with questions

*Thank You to the Project Team,
and Most Importantly the Residents
of the Newfound Watershed for All
Your Time and Efforts!*