

## **CHAPTER 9. RESIDENT SURVEY**

### **SUMMARY**

Conducting a Resident Survey is one of the most valuable tools for a broad-based watershed planning effort since it provides accurate input from a true cross-section of people living in the watershed. The Resident Survey, using a statistically sound approach, was mailed to about ten percent of landowners in the watershed with a 58% response rate. The profile of the respondents generally mirror the population as a whole in terms of rural/urban, type of land use and large/small parcels. A wealth of information was gathered on perceptions of water quality and the ways to protect the lake. In general, residents felt that regulations can protect quality and the quality of life. However, many believe strongly that land use regulation results in the loss of individual freedom. Most residents felt that water quality had a major impact on property values. Results also show that, although watershed residents may not have all the facts at this time, more than half of the respondents were willing to spend additional moneys to “keep Seneca Lake clean.”

### **INTRODUCTION**

This chapter summarizes the results of the Seneca Lake Watershed Resident Survey, which is part of the Seneca Lake Watershed Management Plan process. The survey was conducted in 1998 by the Southern Tier Central Regional Planning & Development Board (STCRPDB) and the Genesee/Finger Lakes Regional Planning Council (G/FLRPC), in association with the Seneca Lake Area Partners in the Five Counties of the Seneca Lake Watershed (SLAP-5).

1200 surveys were mailed to a scientifically selected group of landowners throughout the watershed to sample the total of approximately 26,700 parcels. 692 responses were received from the Seneca Lake Watershed Resident Survey. Illustrative figures and tables showing watershed-wide results conclude this chapter. Results comparing rural/urban landowners can be found in the Appendix. In addition, the entire database, coded by subwatershed to maintain the confidentiality of individual replies, is available in a spreadsheet format for research purposes. Breakdowns by income level, type of land use and other parameters are also in digital form.

### **RESULTS**

Of these 692 respondents, 77% are year-round residents of the lake, with the rest residing in the watershed either for weekends or summers. (*See Figure 9.1*)

76.0% of the landowners said that their property did not have lake frontage with the remaining 24% with direct access to the lake. (*See Figure 9.2*) This correlates closely with Figure 10.3 which shows that 20% of the homes are located one hundred feet or less from the lake. Although a common perception is that lakefront properties are overwhelmingly seasonal, the statistics show that a surprising 41% of the 167 lakefront owners are year round (*68 out of 167*). As could be expected, 78% of the 525 upland owners were year round residents (*410 year round out of 525 total property owners without lake frontage*).

78% of the seasonal respondents are residents of the State of New York (96 “within 60 miles” plus 39 “within NYS” out of 174 respondents), with the next highest proportions being Florida with 5.7% (10 out of 174) and Pennsylvania with 4.6% (8 out of 174). This is a reassuring statistic since there are often concerns that the area will be bought up by “outside developers.” 12.9% of the respondents are members of the Seneca Lake Pure Waters Association. (See the Appendix for watershed-wide results tabulation.)

20.3% of the 692 responses came from residences in the Catharine Creek Subwatershed, making it the most frequent response site. 14.0% of the responses came from Geneva Drainage, and 6.8% came from the Keuka Lake Outlet Subwatershed. (See Table 9.1)

By municipality, the Town of Geneva was the most frequent response, accounting for 14% of the total replies (44 replies out of 362). The Town of Hector was next with 10% (37 out of 362), followed by the Town of Starkey with 9% (33 out of 362). This compares favorably with the proportion of parcels within the watershed: the Town of Geneva contains 10 % of all the parcels within Towns, Town of Hector: 11% and Town of Starkey: 7%. (See Table 9.2) In all, 80% of the respondents resided in rural settings, with the remaining 20% classified as urban. The overall response rate shows a skew toward rural residents responding more frequently than could be expected since only 61% of the total parcels are “rural” while 40% are urban parcels. (See Table 9. 2)

Table 9.1. Survey Returns By Sub-Watershed

SUB-WATERSHED	# OF SURVEYS RETURNED	PERCENT
Catharine Creek	140	20.2%
Geneva DD	97	14%
Keuka Lake Outlet	47	6.8%
Big Stream	45	6.5%
Unnamed	44	6.4%
Reading DD	28	4%
Starkey DD	28	4%
Reed Point DD	27	3.9%
Long Point DD	25	3.7%
Benton DD	21	3%
Valois DD	20	2.9%
Hector Falls Creek	19	2.7%
Kashong Creek	17	2.5%
Sunset Bay DD	17	2.5%
Wilson Creek	15	2.2%
Lamoreaux Landing DD	14	2%
Satterly Hill DD	14	2%
Sixteen Falls Creek DD	13	1.9%
Plum Point Creek	10	1.4%
Wilcox Creek DD	10	1.4%
Simpson Creek	8	1.2%
Mill Creek	7	1%
Glen Eldridge	6	.87%
Sawmill/Bullhorn Creek	6	.87%
Lodi Point	5	.74%
Indian Creek	3	.44%
Kendaia Creek	2	.29%
Rock Stream	2	.29%
Reeder Creek	1	.15%
Sampson State Park DD	1	.15%
Total	692	100%

TABLE 9.2. Comparison of Returned Survey Forms to Tax Parcels in the Watershed

MUNICIPALITY	TOTAL PARCELS	% OF TOTAL PARCELS	SURVEYS RETURNED BY TOWN	% OF TOTAL RETURNED MINUS "NO RESPONSE" OR 692- 238 = 454
<b>COUNTY</b>	<b>25747</b>	<b>100%</b>	<b>454</b>	<b>100%</b>
Chemung	1804	7%	27	6%
Ontario	7011	27%	76	17%
Schuyler	7148	28%	125	28%
Seneca	3020	12%	75	17%
Yates	6764	26%	143	30%
Other	N/A	N/A	8	2%
<b>TOWN</b>	<b>15662</b>	<b>100%</b>	<b>362</b>	<b>100%</b>
Barrington	464	3%	19	5%
Benton	885	3%	23	6%
Catharine	535	3%	11	3%
Catlin	315	2%	2	1%
Cayuta	26	0%	2	1%
Dix	909	6%	14	4%
Fayette	334	2%	12	3%
Geneva	1604	10%	44	12%
Gorham	19	0%	1	0%
Hector	1768	11%	37	10%
Horseheads	369	2%	5	1%
Jerusalem	130	1%	3	1%
Lodi	718	5%	13	4%
Milo	813	5%	20	6%
Montour	485	3%	7	2%
Orange	154	1%	2	1%
Ovid	370	2%	12	3%
Phelps	16	0%	4	1%
Potter	36	0%	0	0%
Reading	919	6%	18	5%
Romulus	407	3%	7	2%
Seneca	689	4%	12	3%
Starkey	1124	7%	33	9%
Torrey	714	5%	19	5%
Tyrone	187	1%	2	1%
Varick	388	2%	14	2%
Veteran	952	6%	16	5%
Waterloo	332	2%	2	1%
Other Towns	N/A	N/A	8	3%
<b>CITY</b>	<b>4688</b>	<b>100%</b>	<b>27</b>	<b>100%</b>
Geneva	4688	100%	27	100%

VILLAGE	5397	100%	65	100%
Burdett	182	3%	4	6%
Dresden	169	3%	4	6%
Dundee	557	10%	9	14%
Horseheads	8	01%	1	2%
Lodi	177	03%	3	5%
Millport	160	03%	3	5%
Montour Falls	624	12%	10	15%
Odessa	296	05%	8	12%
Ovid	292	05%	2	3%
Penn Yan	1868	35%	13	2%
Watkins Glen	1064	6%	8	6%
URBAN	10085	39.2%	92	20.3%
NONURBAN	15662	60.8%	362	79.7%
TOTAL	25747	100%	54	100%

Four indicator questions were asked to subdivide the total responses: length of property ownership (*See Figure 9.4*), kind of property (*See Figure 9.5*), acreage of land owned (*See Figure 9.6*), and total household income (*See Figure 9.7*).

For length of property ownership, 55.4% of the respondents indicated a total length of greater than 20 years, with 10 to 20 years next highest at 26.3%. Tax parcel information on length of ownership was spotty, so no comparisons could be made between the responses to the survey and the total number of parcels in the watershed.

For kind of property, 63.8% of the respondents owned residential land, followed by 9.0% for recreational, 9.0% for agricultural, and 4.5% for both residential and agricultural. (*See Table 9.3 below*).

Table 9.3 Seneca Lake Land Use by Tax Parcel and Survey Return

LAND USE	NUMBER OF PARCELS	% OF PARCELS	# OF SURVEY RESPONSES	% OF RETURNS
AGRICULTURE	1902	7.4%	58	9.0%
RESIDENTIAL	17,020	67.0%	416	63.8%
COMMERCIAL	1518	5.9%	7	1.0%
RECREATION	129	.3%	59	90.0%
INDUSTRIAL	65	.2%	2	.3%
OPEN/FOREST/ PARKS	4348	16.9%	18	2.8%
AG/RES.	N/A	N/A	29	4.5%
OTHER COMBINATIONS	N/A	N/A	63	9.6%
COMMUNITY/ PUBLIC	765	2.3%	N/A	N/A
TOTAL	25747	100%	652	100%

The correlation between agricultural, residential and industrial parcel: survey figures is high while survey returns do not match what could be expected from looking at the parcel data for commercial and recreational properties. Several possibilities exist for these discrepancies:

1. People may see themselves as “recreation” when the assessor sees them as “commercial” or another use.
2. Commercial establishments do not answer surveys at a very high rate.
3. If you add in the 12 commercials that were part of combined land uses in survey , the total increases to 2.8%.
4. The other categories had too small a number of surveys returned to compare accurately.
5. Some of the open space category for the survey is probably counted as recreation by the assessor.
6. Open spaces generally do not answer surveys because the owners are not on-site.

However, for the purposes of this analysis, it is significant that the survey results reflect the residential land base accurately because action recommendations based on this report will target homeowners as the largest landowners in the watershed.

For total acreage, 25.6% of the respondents owned between 0.5 and 1 acre, followed by 24.7% who owned less than 0.5 acre. (*See Figure 9.6 and Table 9.4.*) These results are generally representative of the mix of parcel sizes within the watershed with two exceptions. (*See Table 9.5.*) The parcels less than one half acre in size are under-represented (*25% of the responses vs. 44% of all parcels*) and the parcels between one half and one acre are over-represented (*26% vs. 15% respectively.*) However, when these categories are combined to be considered as “small parcels,” the survey results are more representative (*51% vs. 59% respectively.*)

Table 9.4. Number and Percentage of Survey Results by Size of Property Owned

		ACRES																	
		<.5		.5 - 1		1.1 - 3		3.1 - 5		5.1 - 10		10.1 - 25		25.1 - 100		>100		Total	
Survey	Responses	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		161	25%	167	26%	87	13%	38	6%	31	5%	41	6%	81	12%	46	7%	652	100%

Table 9.5. Number and Percentage of Parcels in the Seneca Lake Watershed by Size

		ACRES																	
County		<.5		.5 - 1		1.1 - 3		3.1 - 5		5.1 - 10		10.1 - 25		25.1 - 100		>100		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Yates		2647	41%	1052	16%	801	13%	334	5%	358	6%	388	6%	561	9%	251	4%	6392	100%
Seneca		989	37%	454	17%	418	16%	119	4%	159	6%	152	6%	264	10%	113	4%	2668	100%
Schuyler		1957	28%	1014	15%	1089	16%	491	7%	558	8%	680	10%	946	14%	175	3%	6910	100%
Ontario		4745	69%	879	13%	597	9%	132	2%	147	2%	133	2%	214	3%	76	1%	6923	100%
Chemung		508	26%	335	17%	309	16%	151	8%	160	8%	138	7%	231	12%	100	5%	1932	100%
TOTAL		10846	44%	3734	15%	3214	13%	1227	5%	1382	6%	1491	6%	2216	9%	715	3%	24825	100%

Note: Total parcels are those with acreage figures available.

For total household income, 51.2% earned between \$0 and \$40,000. Next was the \$40,001 to \$80,000 group, comprising 35.3% of the total responses. (See Figure 9.7) Census figures could not be broken down in a comparative way, so that no direct correlation could be made between survey participants and watershed residents as a whole based on income levels.

A series of questions was asked to determine the water quality for various activities on the lake. (See Figure 9.8) Respondents felt that water quality for boating was the most satisfactory, with an average score from of 1.55 from 519 replies (with 1 as excellent, 2 as good, 3 as fair and 4 as poor). Fishing came next, with an average score of 1.87 from 481 replies, and swimming came last with an average score of 2.27 from 516 replies. Only 38.3% of the respondents had seen any deterioration in the lake's water quality, although 50.6% did believe there was an aquatic weed problem.

Respondents were then asked to rate various means of dealing with excessive loading of nutrients on the lake. (See Figure 9.9) The most preferred method was increased inspection of lakeshore property septic systems, with an average score of 4.28 from 569 replies (with 1 as not acceptable, and 2 as least preferred ranging to 5 as most preferred). The next highest preference was to require farmers in the area to use Best Management Practices, with an average score of 4.12 from 563 replies. The least popular method was to use weed-killing chemicals, receiving an average score of 1.88 from 555 replies.

Residents were asked about land use regulations and their effect on both quality of life and water quality. (See Figure 9.10) Only 2.7% of the respondents felt that current land use regulations very adequately protected water quality in the lake. 23.4% felt they were simply adequate, 24.5% felt they were not adequate, and 49.4% didn't know. A series of statements about land use regulations were then asked. (See Tables 9.6 and 9.7) The results indicated that most residents feel that regulations can protect quality and the quality of life. However, many believe strongly that land use regulation results in the loss of individual freedom, and that with too many regulations it will not be worth living in the area. Most respondents disagreed with the statement that regulations around the lakeshore are too strict, and most also disagreed with the statement that the lake is too large to make land use controls practical. Finally, most residents felt that water quality impacted property values. (See Figure 9.11) 52.9% felt there was a major impact, while only 10.4% said that water quality did not affect property values.

Two questions concerning who should pay for the cost of keeping the lake clean were posed to the residents. (See Figures 9.12 and 9.13) When asked what they would be willing to spend on a household level, 34.8% of the respondents were unwilling to contribute to keeping the lake clean. 29.1% said they would pay up to \$25, while 8.7% said they would pay over \$100. (598 responded to this question out of the 692 possible). If it is assumed that the 94 people who did not respond to the question were not willing to contribute to keep the lake clean, then the figures look like this:

44.0%	Unwilling to pay anything
25.1%	Willing to pay up to \$25
12.3%	Willing to pay between \$25 and \$50
11.4%	Willing to pay between \$50 and \$100
7.5%	Willing to pay over \$100.

Applying these figures to the potential contributors can project the dollar amount available to support the Seneca Lake watershed protection effort. Again, conservatively, using the respondents reporting that they owned residential land or residential/agricultural equaling 68.3% of the total, one can estimate the number of residential properties in the watershed: 68.3% of the total 26,747 parcels or 18,268 residential parcels. Continuing with the math reveals:

4585 Residential properties	Willing to pay \$12.50 (average)	\$ 57,313
2247 Residential properties	Willing to pay \$37.50 (average)	\$ 84,263
2082 Residential properties	Willing to pay \$75.00 (average)	\$156,150
1370 Residential properties	Willing to pay \$100 (minimum)	\$137,000

This totals \$434,726 potentially available “to keep Seneca Lake clean.”

When asked about the appropriate groups who should pay to keep the lake clean, 28.9% felt that those who cause lake pollution should pay for the entire cleanup. 10.1% felt that business and industry in the watershed should pay everything, and 9.3% felt that the state government should pay for the entire cleanup. Only 3.0% felt that everyone living in the watershed was responsible for the entire cleanup.

Finally, residents were asked what was the appropriate level of government for controlling land use in the Seneca Lake Watershed. (*See Figure 9.14*) The level deemed most suitable was a watershed-wide/multi-county district, with an average score of 1.82 from 485 replies (with 1 as most suitable, 2 as suitable, 3 as poorly suited and 4 as not suitable). The next most suitable was county government, with an average score of 2.22 from 495 replies, followed closely by state government at 2.26 (*502 replies*) and local government at 2.28 (*496 replies*). The federal government was deemed least suitable, with an average score of 2.79 from 476 replies.

### **Differences in Sub-Watershed Data**

Most of the categories, when broken down by indicator responses, conformed almost perfectly with the overall percentages and scores. (*See the Appendix for the summary of responses, watershed wide, rural and urban.*) However, the two largest subwatersheds (Catharine Creek and Geneva Drainage) exhibited some differing percentages.

On the north end of the lake (Geneva Drainage), only 37.1% of the 140 replies indicated an aquatic weed problem, compared with an overall percentage of 50.6%. However, on

the south end of the lake (Catharine Creek), 61.9% of the 97 replies indicated an aquatic weed problem, with 19% of these replies indicating the problem as “very serious”.

Residents in the Catharine Creek Subwatershed were less willing to contribute to cleanup of the lake, as 47.6% said they would not pay anything. In the Geneva Drainage, only 25.8% were not willing to contribute. In addition, the proportion of SLPWA members in the Catharine Creek Subwatershed was very low, at only 5.7%.

Replies from the Geneva Drainage indicated that inspection of septic systems (average score of 4.61) and required septic pumping (average score of 4.47) were by far the best means of dealing with excessive loading of nutrients in the lake. Much less popular was development controls and limiting the number of residences.

## **CONCLUSIONS**

The Resident Survey provides a rich database of responses that represent a scientifically selected cross section of people in the watershed by land use, lakeshore/upland, and rural/urban. The results skew toward “rural” areas with a larger percent of respondents residing in towns than was expected based on the rural/urban tax parcel ratio.

If a major purpose of the State of the Lake Report is to provide information for residents and their elected officials to take action, the report is filling a significant need:

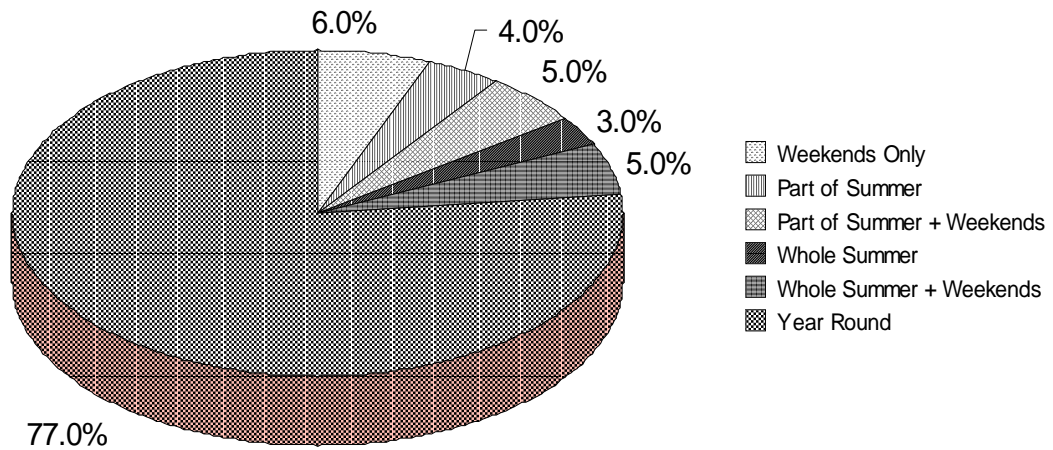
- almost half of the respondents do not know if land use regulations protect lake water quality on their behalf
- One quarter to 30% do not know the quality of water for swimming, fishing or boating
- about one third do not know what level of government should take the lead role.

And since *more than half* of those surveyed felt that water quality had a major impact on the value of their property, it is critical that residents and their representatives become informed about the contents of this report.

Although watershed residents may not have all the facts at this time, 54% of respondents were willing to spend additional moneys to “keep Seneca Lake clean.” Calculations show a potential of more than \$400,000 in residents’ wallets available for watershed protection efforts.

Figure 9.1

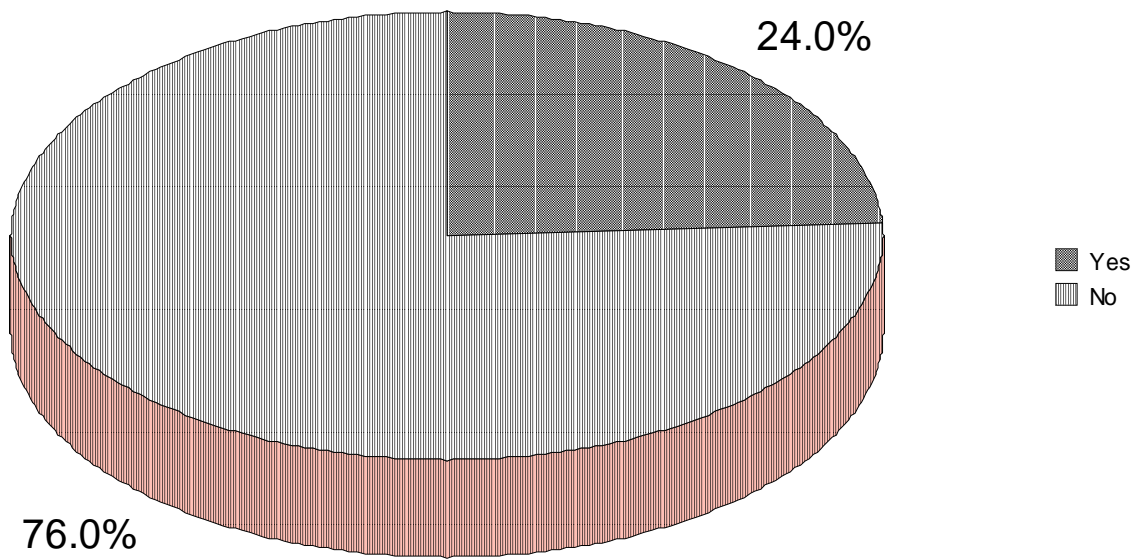
### Length of Residence in 1997



Total Responses 597

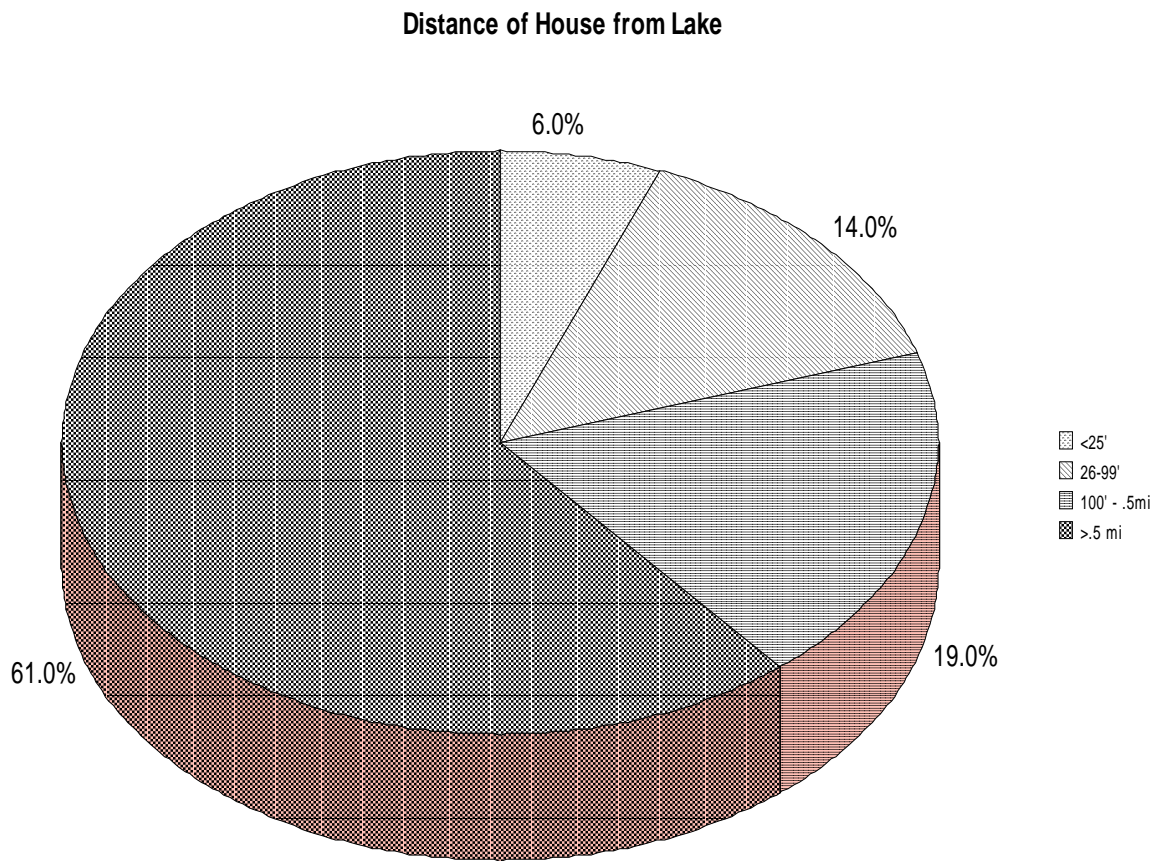
Figure 9.2

Does the Property Have Lake Frontage ?



Total Responses 692

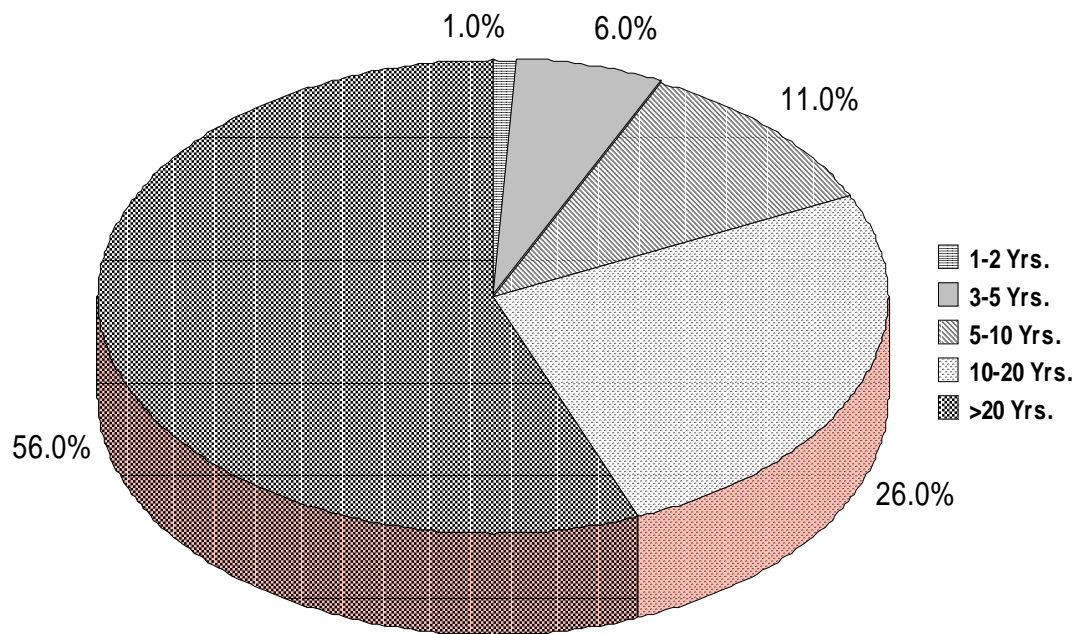
Figure 9.3



Total Responses 664

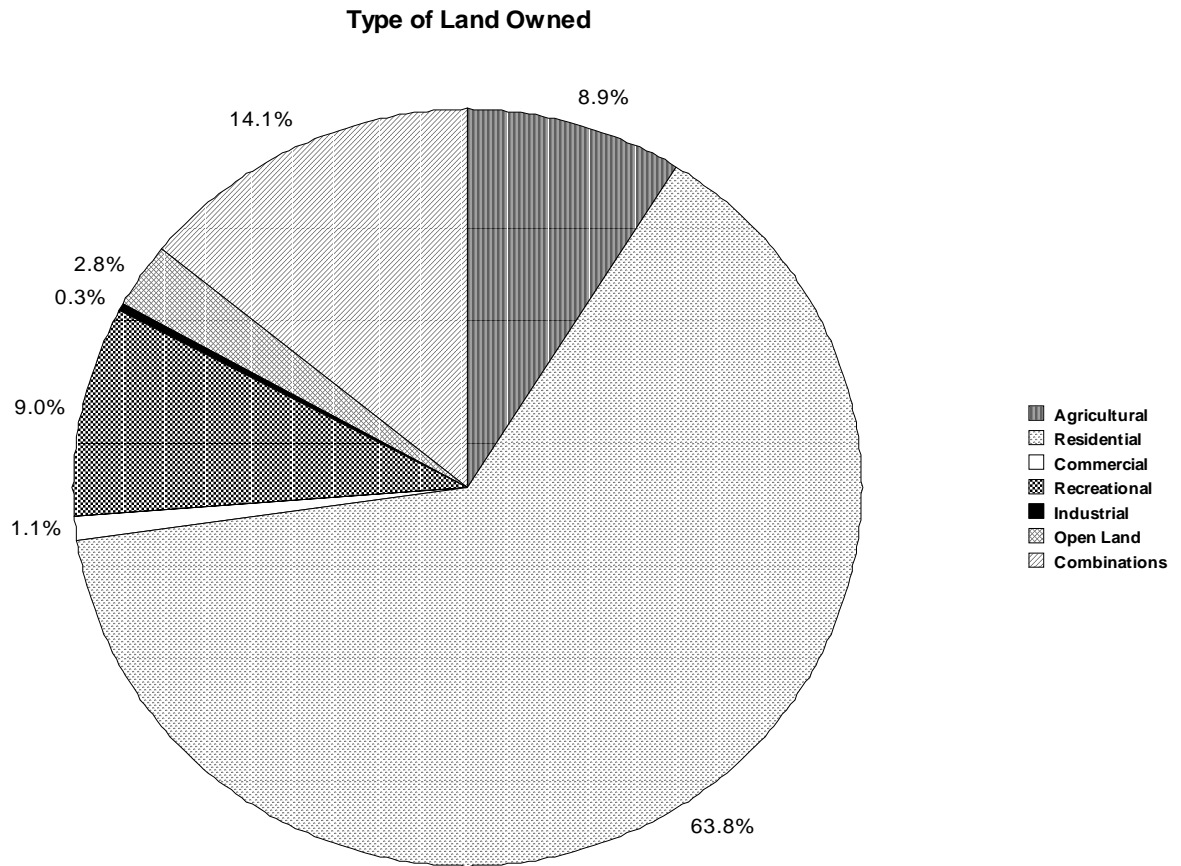
Figure 9.4

### How many years have you owned property in the watershed?



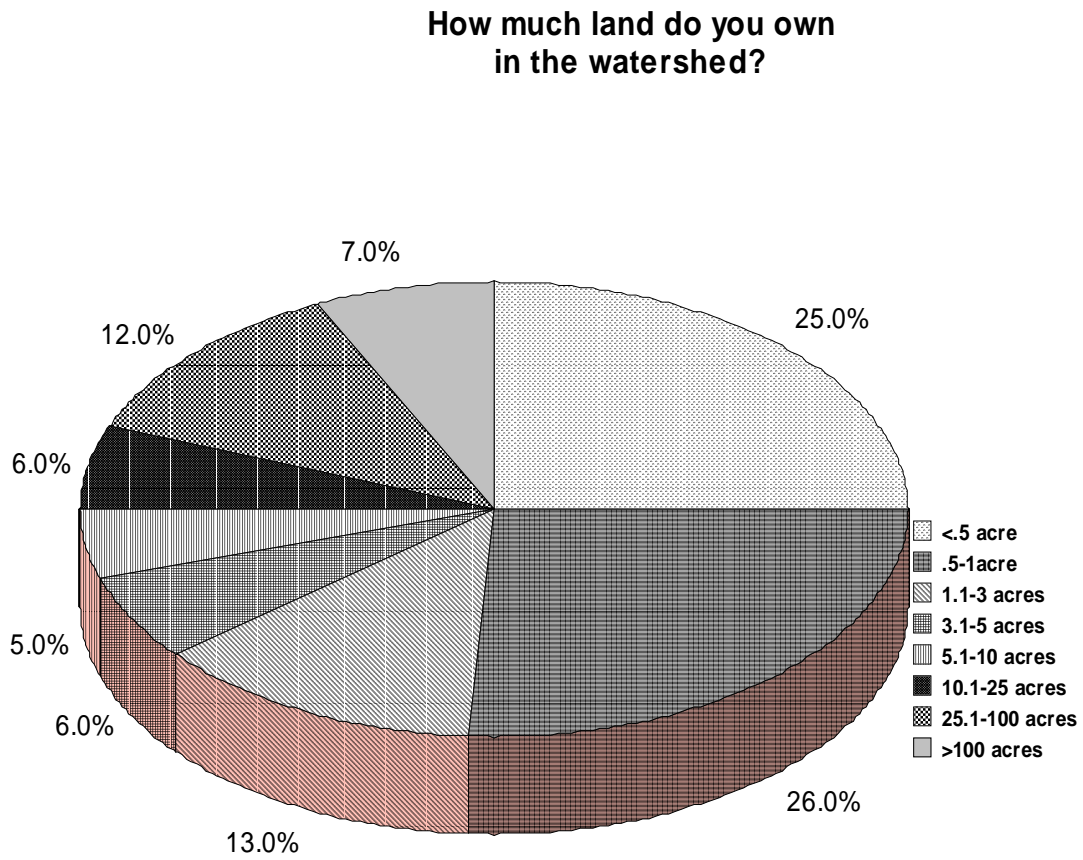
Total Responses 653

Figure 9.5



Total Response 562

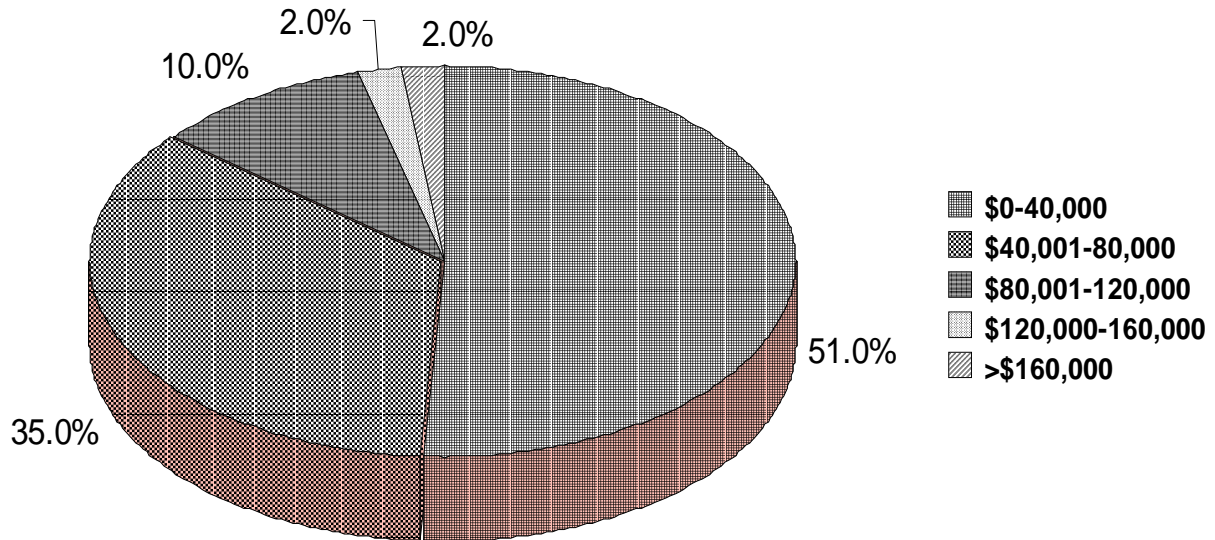
Figure 9.6



Total Responses 652

Figure 9.7

### Household Income Before Taxes in 1997



Total Responses 563

Figure 9.8

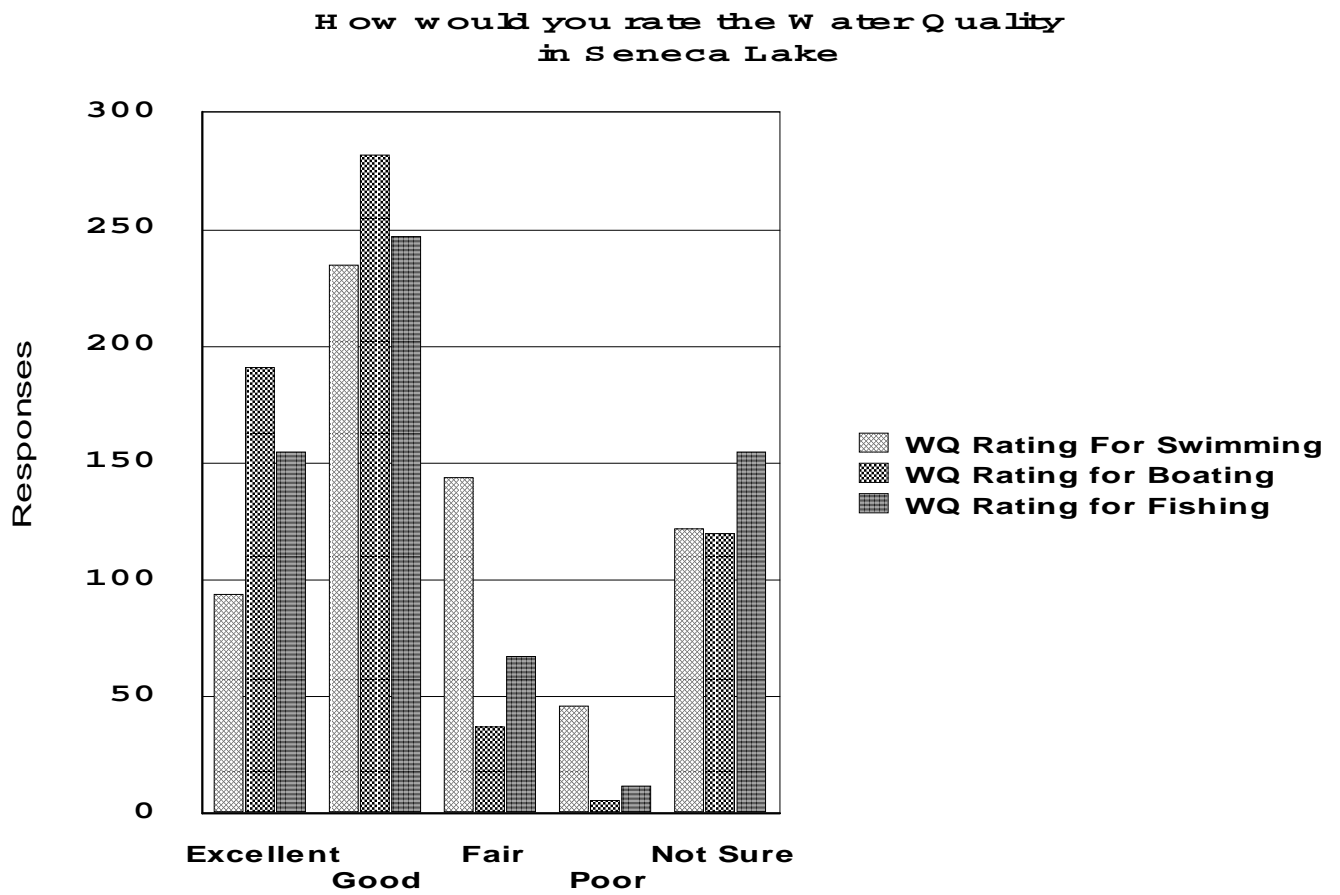


Figure 9.9

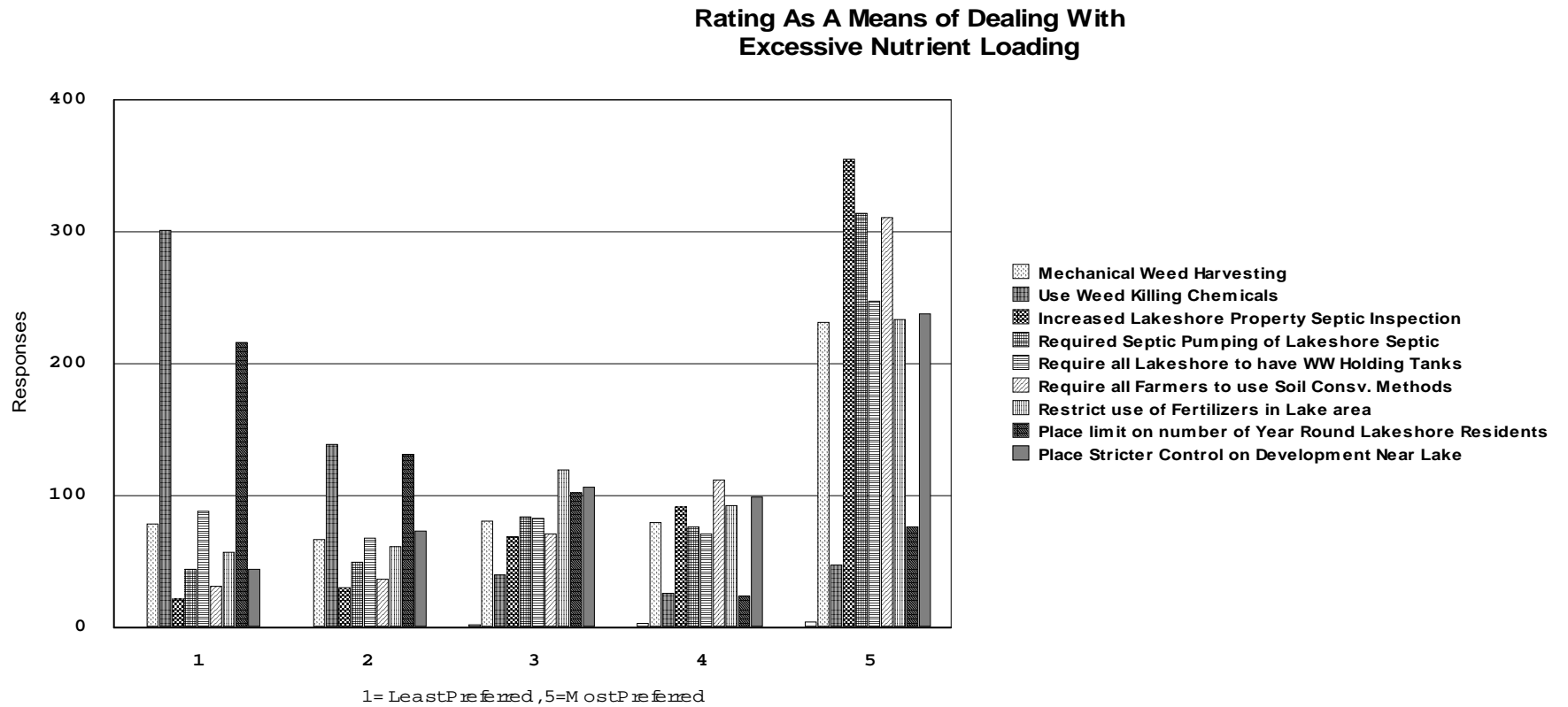
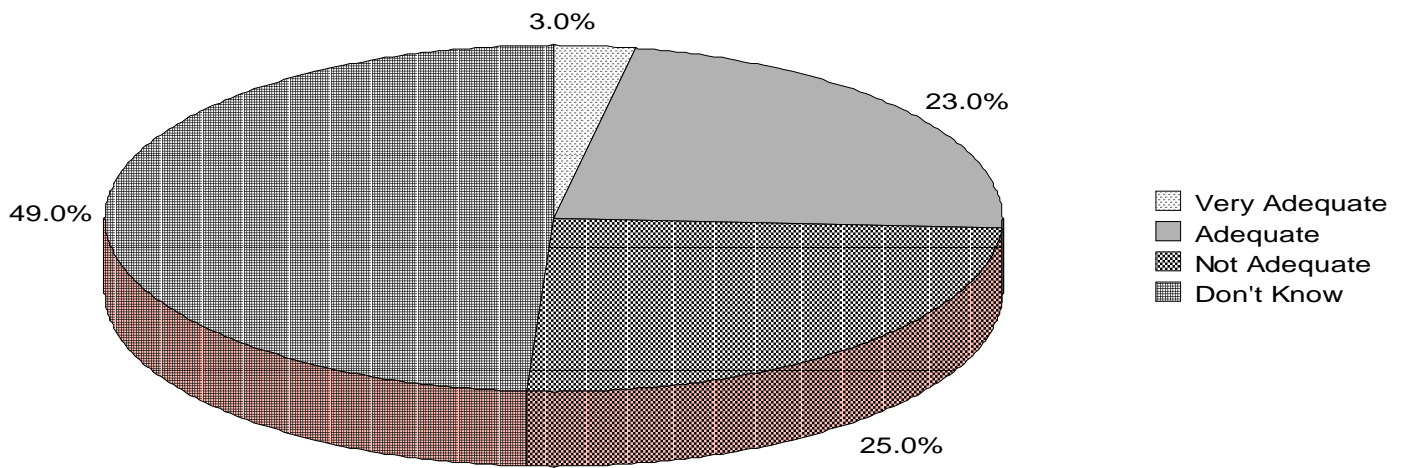


Figure 9.10

How Adequately Do Present Land Use Regulations Protect Lake W Q ?



Total Responses 636

Table 9.6 Land Use Regulations for Protection of Water Quality in Seneca Lake

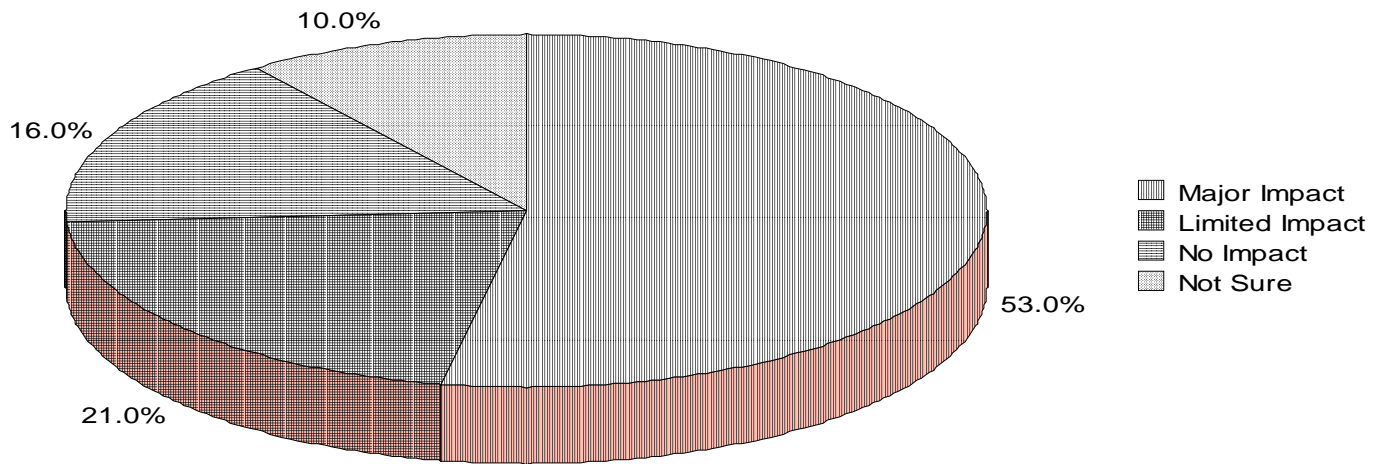
	Strongly Disagree
The lake is so large that land use controls to protect water quality are not practicable	156
Rural areas don't need strict land use laws	135
Watershed-wide regulations are worse than each town devising its own land use regulations	111
We do not need more land use controls as there are natural limits on what people can do on their land	107
Land use regulations around lakeshore are unnecessarily strict	107
Residents of each town decide how they want to regulate land use	103
I will not be able to sell my property if there are too many restrictions on it	91
Too many land use regulations will frighten people away from this area	83
Land use regulations destroy property rights	73
Too many land use regulations - wouldn't be worth living here	71
The land use laws presently in existence are adequate to protect lake water quality	55
Land use regulations in loss of individual freedom	53
Regulations does not slow down the rate of development	47
Land use regulations can protect water quality and the quality of life	28

Table 9.7 Land Use Regulations for Protection of Water Quality in Seneca Lake

	Strongly Agree
Land use regulations can protect water quality and the quality of life	173
Land use regulations in loss of individual freedom	102
Too many land use regulations - wouldn't be worth living here	102
Residents of each town decide how they want to regulate land use	78
Land use regulations destroy property rights	59
Too many land use regulations will frighten people away from this area	47
Regulations does not slow down the rate of development	46
Rural areas don't need strict land use laws	41
Watershed-wide regulations are worse than each town devising its own land use regulations	31
The land use laws presently in existence are adequate to protect lake water quality	27
Land use regulations around lakeshore are unnecessarily strict	24
We do not need more land use controls as there are natural limits on what people can do on their land	37
The lake is so large that land use controls to protect water quality are not practicable	15
I will not be able to sell my property if there are too many restrictions on it	47

Figure 9.11

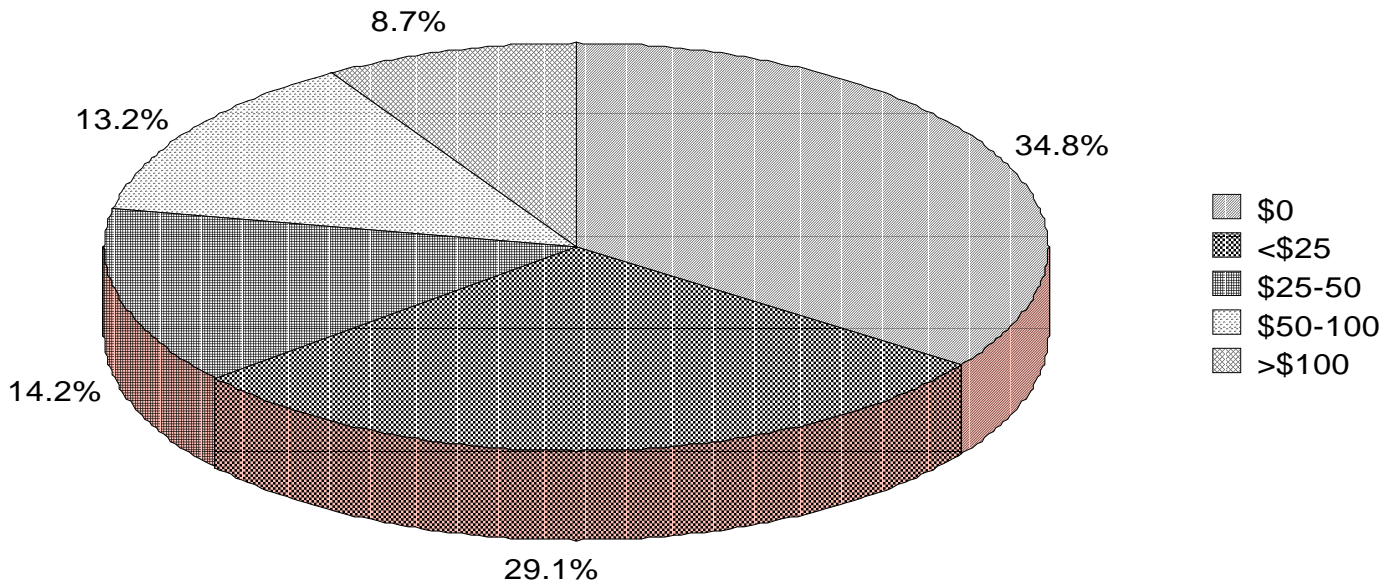
How much impact does water quality have on the value of property?



Total Responses 647

Figure 9.12

How much would you be willing to pay to keep Seneca Lake clean?



Total Responses 598

Figure 9.13

### How Much Should Each Pay for the Cost of Keeping the Lake Clean?

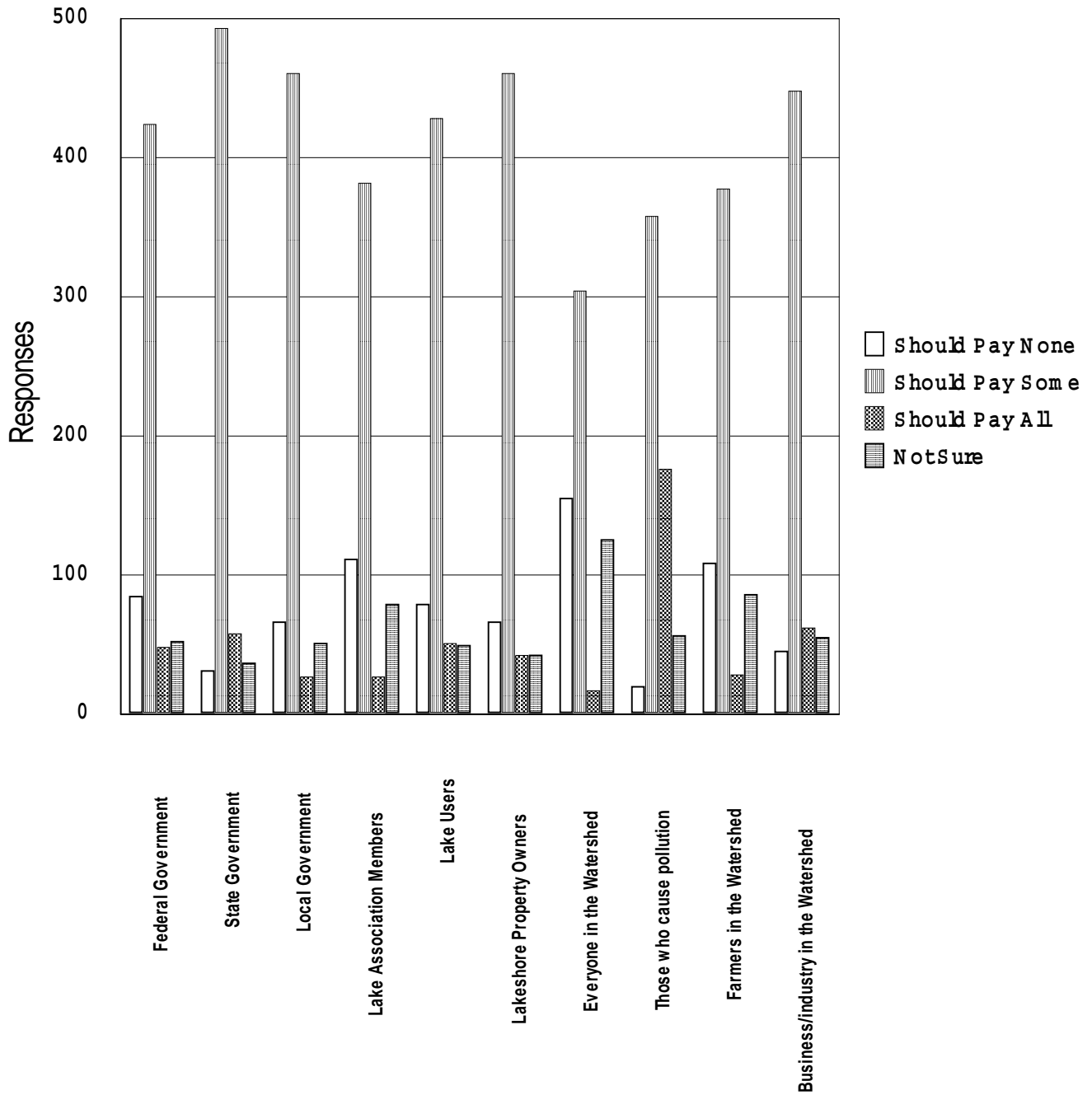


Figure 9.14

Appropriate Level of Government for Controlling Land Use in the Watershed

