Opinion Survey Summary - Berry Lake

Introduction

This final report provides an analysis of the Berry Lake Opinion Survey. The purpose of this report is to communicate the findings of the opinion survey to the stakeholders in order to facilitate discussions regarding sustainable lake planning. The survey assessed characteristics of the property, use of Berry Lake, concerns about Berry Lake, and opinions concerning potential ways to solve these concerns.

Data Collection

An opinion survey was mailed to each property owner in the Town of Underhill and a select few property owners in Menominee County on March 9, 2009. Additionally, post card thank you/reminders were sent to all that was mailed an opinion survey on March 16, 2009. Overall, the twelve-page questionnaire was returned by 60% of all surveys sent out.

Methods

The survey responses were coded into a Microsoft Excel spreadsheet. The difference between the means of the Lake front property owners and the Non-Lake front property owners is only presented if that difference is greater than one point on a 1 to 5 scale.

Ouestion 1: Have you ever visited or used Berry Lake?

Response	Frequency*	Percent
Yes	318	74.8
No	107	25.2

^{*}Respondents = 425; non-respondents = 72

Question 2: How frequently do you visit or use Berry Lake?

N*	Not at all	Slight	Moderate	Often	Very Often	Mean
399	16.0	32.8	20.6	13.0	17.5	2.8

^{*}N's may vary due to some respondents not answering every question

Lake front property owners mean response was 4.4

Non-Lake front property owners mean response was 2.4

Question 3: How would you describe Berry Lake's water clarity?

N*	Clear		Cloudy		Murky	Don't know	Mean
394	16.5	23.6	17.5	8.9	3.3	30.2	2.4

^{*}N's may vary due to some respondents not answering every question

Lake front property owners mean response was 1.9

Non-Lake front property owners mean response was 3.9

Ouestion 4: How would you describe Berry Lake's aquatic plant growth?

	Тоо				Overly weed-	Don't	
N*	sparse				choked	know	Mean
394	.3	2.8	36.5	13.7	5.6	41.1	3.4

^{*}N's may vary due to some respondents not answering every question

Ouestion 5: How would you describe Berry Lake's level of crowding on WEEKENDS?

N*	Calm/little activity	Slight	Moderate	Crowded	Overly crowded	Don't know	Mean
392	3.1	11.5	28.1	15.6	5.4	36.5	3.1

^{*}N's may vary due to some respondents not answering every question

Ouestion 6: How would you describe Berry Lake's level of crowding on WEEKDAYS?

N*	Calm/little activity	Slight	Moderate	Crowded	Overly crowded	Don't know	Mean
391	32.2	23.8	7.9	1.0	0.0	35.0	1.7

^{*}N's may vary due to some respondents not answering every question

Question 7: How would you describe Berry Lake's availability of public access?

Response	N*	Too little				Too much	Don't know	Mean
Boating	390	9.2	9.2	43.6	10.0	4.9	23.1	2.9
Swimming	390	21.0	11.0	30.3	6.7	4.4	26.7	2.5

^{*}N's may vary due to some respondents not answering every question Lake front property owners mean response was 3.4 on swimming Non-Lake front property owners mean response was 2.1 on swimming

Question 8: How would you describe the boating rules posted at the Berry Lake boat landing?

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N*	Inadequate				Overly restrictive	Don't know	Mean
360	4.4	6.4	36.9	6.1	1.1	45.0	2.87

^{*}N's may vary due to some respondents not answering every question

В

	Very					Don't	
N*	unfair		Fair		Very fair	know	Mean
378	1.3	.8	19.3	11.9	23.0	43.7	3.97

^{*}N's may vary due to some respondents not answering every question

Ouestion 9: How would you describe the level of law enforcement on Berry Lake?

N*	Inadequate		Adequate		Overly aggressive	Don't know	Mean
386	11.1	7.0	21.2	5.4	2.8	52.3	2.6

^{*}N's may vary due to some respondents not answering every question

Question 10: How is your "quality of life" affected by living or owning property in the vicinity of Berry Lake?

N*	Very negatively affected				Very positively affected	Mean
366	7.1	6.0	48.1	20.2	18.6	3.4

^{*}N's may vary due to some respondents not answering every question Lake front property owners mean response was 4.3

Non-Lake front property owners mean response was 3.1

Question 11: What value do you place on each of the following for Berry Lake as far as contributing to your "quality of life" as a local property owner?

your quality of fire as a local		Not				Very	
Response	N*	important		Important		important	Mean
Safe water quality	375	5.1	2.4	12.8	21.9	57.9	4.3
Clear water	376	5.6	3.2	16.5	25.5	49.2	4.1
Observance of lake rules	371	6	5	19	21	49	4.0
Natural scenic beauty	377	5.6	2.9	23.6	25.7	42.2	4.0
Abundant fish/wildlife habitat	374	6	7	25	20	43	3.9
Peace and tranquility	375	7.2	4.8	25.9	21.9	40.3	3.8
Presence of lake	374	9.6	6.7	23.3	21.7	38.8	3.7
Unique & diverse wildlife	376	9.3	6.4	27.7	25.0	31.6	3.6
Good fishing	374	11.5	7.8	25.7	25.7	28.6	3.5
Slow-no-wake policies	371	14.8	7.5	25.6	19.9	32.1	3.5
Public boat-launch	374	15.2	9.4	25.7	16.0	33.7	3.4
Minimal boat traffic	373	11	10	39	20	20	3.3
Public swimming beaches	375	25.1	11.7	20.3	15.5	27.5	3.1
Walking/biking paths	373	25	13	29	16	18	2.9
Public shore-fishing areas	373	29.5	11.0	23.6	14.7	21.2	2.9

*N's may vary due to some respondents not answering every question
Lake front property owners mean response was 4.8 on *Presence of Lake*Non-Lake front property owners mean response was 3.4 on *Presence of Lake*Lake front property owners mean response was 1.7 on *Public Swimming Beaches*Non-Lake front property owners mean response was 3.5 on *Public Swimming Beaches*Lake front property owners mean response was 2.5 on *Public Boat Launch*Non-Lake front property owners mean response was 3.7 on *Public Boat Launch*Lake front property owners mean response was 1.5 on *Public Shore-Fishing Areas*Non-Lake front property owners mean response was 3.3 on *Public Shore-Fishing Areas*

Question 12: From the list above, please tell us the two that make the most important contributions to

your quality of life at Berry Lake.

			Second most
Response	Most important	Percent	important
Presence of lake	66	21	10
Good fishing	56	18	24
Safe water quality	41	13	38
Peace and tranquility	32	10	40
Clear water	27	9	39
Public swimming beaches	24	8	29
Natural scenic beauty	21	7	41
Public boat-launch	15	5	23
Abundant fish/wildlife habitat	10	3	27
Walking/biking paths	5	2	3
Unique & diverse wildlife	4	1	10
Public shore-fishing areas	2	1	8
Minimal boat traffic	2	1	3
Observance of lake rules	3	1	6
Slow-no-wake policies	1	0	6

³¹ respondents found that none of these were important.

Question 13: Below is a list of activities that take place on Berry Lake. Please indicate which activities you and your family participate in by marking the appropriate boxes.

Response	Number of responses	
Fishing	255	
Swimming	233	
Enjoying peace & tranquility	221	
Observing wildlife	191	
Ice fishing	143	
Slow, motorboat cruising	133	
Walking/biking around lake	112	
Sunbathing	104	
Canoeing/Kayaking	95	
Water skiing or tubing	91	
Rowing	79	
Nature photography	69	
Jet skiing	54	
Speed boating	44	
Ice skating	37	
Sailing or wind surfing	28	

Question 14: From the list in Question 13, please tell us the two activities, if any, you and your family

most enjoy while at Berry Lake.

			Second most
Response	Most enjoyable	Percent	enjoyable
Fishing	83	28.8	48
Swimming	66	22.9	53
Enjoying peace & tranquility	50	17.4	43
Ice fishing	20	6.9	18
Slow, motorboat cruising	17	5.9	27
Walking/biking around lake	17	5.9	8
Observing wildlife	9	3.1	25
Water skiing or tubing	9	3.1	12
Canoeing/Kayaking	4	1.4	14
Jet skiing	3	1.4	7
Speed boating	2	.7	3
Sunbathing	1	.3	2
Sailing or wind surfing	0	0	0
Rowing	0	0	0
Nature photography	0	0	3
Ice skating	0	0	2

⁴¹ respondents had no participation with the above activities

Question 15: How much of a problem, if at all, would you say each of the following are at Berry Lake?

		Not a				Big	
Response	N*	problem		Problem		problem	Mean
Water level fluctuations	315	8.3	7.6	20.6	22.2	41.3	3.81
Property crime	307	15.6	13.0	31.9	19.5	19.5	3.14
Too many lake weeds	302	9.9	16.2	36.8	26.2	10.9	3.12
Jet skis	306	20.3	14.1	24.8	19.3	21.6	3.08
Quality of fishing	304	14.1	14.1	37.5	21.1	13.2	3.05
Big wake motorboats	307	18.6	16.3	27.7	17.6	19.9	3.04
Algal blooms (green algae)	300	14.7	19.3	34.3	23.7	8.0	2.91
Litter	307	16.6	19.2	35.2	18.2	10.7	2.88
Not enough habitat	304	17.1	17.4	39.5	20.4	5.6	2.80
Boating congestion/conflicts	297	15.8	24.2	39.1	13.8	7.1	2.72
Development on the lake	305	21.0	17.4	37.7	17.7	6.2	2.71
Loss of natural beauty	307	21.8	17.9	36.2	15.6	8.5	2.71
Lack of lake rule compliance	298	23.5	19.8	34.2	13.1	9.4	2.65
Crowding	304	20.7	23.0	35.9	16.8	3.6	2.60
Dogs running-at large	306	29.7	18.6	25.5	15.4	10.8	2.59
Water clarity	311	22.8	22.2	35.0	15.8	4.2	2.56
Fireworks (Not on 4 th of July)	309	34.0	17.2	23.0	10.4	15.5	2.56
Dogs barking	303	28.1	20.8	29.4	10.6	10.6	2.54
Not enough public access	306	34.6	13.7	29.1	10.5	12.1	2.52
Noise	306	26.1	23.5	30.4	14.1	5.9	2.50
Personal safety (crime)	300	30.3	20.0	31.3	11.7	6.7	2.44
Issues related to piers	296	32.4	20.3	31.4	9.5	6.4	2.37
Too much public access	303	36.0	20.1	27.7	8.6	7.6	2.32
Fireworks (On 4 th of July)	310	55.8	14.8	17.4	5.2	6.8	1.92

^{*}N's may vary due to some respondents not answering every question Lake front property owners mean response was 3.1 on *Too Much Public Access* Non-Lake front property owners mean response was 2.0 on *Too Much Public Access* Lake front property owners mean response was 1.6 on *Not Enough Public Access* Non-Lake front property owners mean response was 2.9 on *Not Enough Public Access*

Question 16: From the list in Question 15 please tell us the two, if any, which you think are the biggest

problems at Berry Lake.

_	Biggest		Second biggest
Response	problem	Percent	problem
Water level fluctuations	65	25.3	31
Property crime	39	15.2	18
Not enough public access	16	6.2	12
Jet skis	15	5.8	23
Water clarity	14	5.4	3
Quality of fishing	14	5.4	12
Dogs running-at large	12	4.7	14
Too many lake weeds	9	3.5	22
Big wake motorboats	8	3.1	16
Litter	7	2.7	6
Fireworks (Not on 4 th of July)	7	2.7	4
Algal blooms (green algae)	6	2.3	4
Not enough habitat	6	2.3	8
Lack of lake rule compliance	6	2.3	4
Loss of natural beauty	5	1.9	7
Too much public access	4	1.6	11
Crowding	3	1.2	3
Development on the lake	3	1.2	8
Noise	3	1.2	2
Dogs barking	3	1.2	6
Personal safety (crime)	3	1.2	10
Boating congestion/conflicts	2	.8	8
Issues related to piers	0	0	2
Fireworks (On 4 th of July)	0	0	8

⁴¹ respondents found that none of these are a problem.

Question 17: Which of the following do you feel are Berry Lake's biggest threats?

				/			
Response	N*	Not a threat		Threat		Big threat	Mean
Invasive species infestations	310	5.5	6.1	19.0	33.9	35.5	3.88
Extreme lake-level fluctuations	310	8.4	6.5	20.3	22.6	42.3	3.84
Loss of fish & wildlife habitat	312	4.5	8.7	25.0	29.5	32.4	3.77
Declining groundwater	305	7.2	7.5	29.2	24.3	31.8	3.66
Use of fertilizers/pesticides	309	12.9	11.3	30.7	23.0	22.0	3.30
Runoff from lawns	311	12.2	21.9	34.7	19.6	11.6	2.96
Lake-use pressures	296	14.2	18.6	41.6	18.2	7.4	2.86
Development pressures	301	17.6	20.6	34.9	17.9	9.0	2.80
Land-use planning	293	18.8	16.4	4.1	15.7	7.8	2.77
Lack of lake rules compliance	298	19.5	20.8	36.6	10.7	12.4	2.76
Lack of zoning compliance	293	21.2	19.5	38.6	9.6	11.3	2.70

^{*}N's may vary due to some respondents not answering every question

Question 18: From the list in Question 17, please tell us the two which are the biggest threats to Berry Lake.

Response	Biggest threat	Percent	Second biggest threat
Invasive species infestations	98	34.5	30
Extreme lake-level fluctuations	64	22.5	47
Loss of fish & wildlife habitat	32	11.3	53
Declining groundwater	26	9.2	40
Use of fertilizers/pesticides	23	8.1	32

Development pressures	8	2.8	8
Lake-use pressures	8	2.8	12
Lack of lake rules compliance	8	2.8	9
Runoff from lawns	7	2.5	19
Lack of zoning compliance	3	1.1	8
Land-use planning	2	.7	7

¹⁹ respondents found that none of these are a threat.

Question 19: Does this property you own have waterfront footage on Berry Lake?

Response	Frequency*	Percent
No	276	75.2
Yes	91	24.8

^{*}Respondents = 367; non-respondents = 130