

2019 Wabamun Lake User Survey

Final Report

December 2019 Don Meredith, Communications Chair

Introduction

In November of 2019, the Wabamun Watershed Management Council (WWMC) conducted a survey of lake users to determine how they use the lake and value the quality of their lake experience. The survey was not scientific but was a straw poll of contacted lake users who chose to take the survey. As such, it is an index of how some people use and value the lake.

Methods

The WWMC used the services of SurveyMonkey (<u>www.surveymonkey.com</u>) to collect and analyze the responses. We created seven questions we felt people could easily answer. We kept the survey short so people would not be discouraged to take or finish the survey because of its length. With the exception of Question 7, all the questions were multiple choice. In brief, the questions were as follows:

- 1. How do you use Wabamun Lake?
- 2. What sections of the lake do you use most?
- 3. About how many days do you spend on the lake in an average year?
- 4. How would you characterize the overall quality of the lake?
- 5. What quality issues do you see on the lake?
- 6. What are you willing to do to maintain or improve the quality of the lake?
- 7. Any other concerns?

We opened the survey on November 7 and closed it on November 30, 2019. The 215 members of the WWMC were invited to take the survey by email. Others were invited through our Facebook page (<u>www.facebook.com/groups/Wabamun</u>) and Twitter (<u>www.twitter.com/WabamunWMC</u>). As well, people were encouraged to contact other lake users and invite them to participate.

Results-All Data

Two-hundred-sixty-two (262) people responded to the survey. Figure 1 illustrates how the responses were recorded over time. The most responses (99) were gathered on the day the survey was announced. Other response peaks (less than 20 each of November 14-15 and 21) occurred when members contacted groups of anglers and boaters.

Note: the following are result highlights. A summary of all the survey data is presented in Appendix 1.

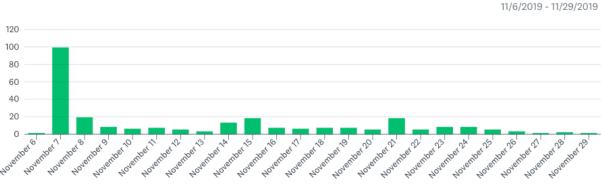


Figure 1 Distribution of responses over time. (All graphics courtesy of SurveyMonkey)

Q1 Lake Use

Over 50% (132) of the respondents owned cottages on the lake and 19% (51) were permanent residents of the lake. Other highlights of lake use included: 75% of respondents boat on the lake, 58% swim, 58% fish, 46% watch wildlife and 30% hike near the lake.

Twenty (20) respondents added Other uses not listed in the question. These included "cross-country skiing, snow shoeing, skating," "kayak & canoe," "board sports (stand up paddling and windsurfing)," sailing club members, and "lake is meeting place for friends and family." See Appendix 1 for full list of Other responses.

Q2 Most Used Lake Sections

Fifty-eight percent (58%) of respondents used the northwest section of the lake (Seba Beach to Fallis). 38% used the north central section (Fallis to Wabamun) and 29% used the southwest (Beaver Creek to Seba Beach). 20% used the northeast (Provincial Park to Kapasiwin), followed by 12% for south central (Sundance Power Plant to Beaver Creek) and 7% for the southeast (Paul First Nation).

Q3 Days Spent at the Lake in an Average Year

Thirty-three percent (33%) of respondents spent from 30 to 100 days per year at the lake. 26% spent 100 to 365 days, 21% spent 10 to 30 days, 10% spent less than five days and 9% spent 5 to 10 days per year at the lake.

Q4 Overall Quality of Wabamun Lake

46% of respondents characterized the overall quality of the lake as Very Good (very few issues), followed by 44% that felt the lake was Good (a few issues). Combined, 90% of the lake users surveyed felt the lake quality was Good or Very Good. This was followed by 6% who felt the lake was Poor in quality, 2% felt it was Excellent and 2% felt it was Awful.

Q5 Issues Observed

The most identified quality issues were: 50% of respondents identified blue-green algae (cyanobacteria), 44%—too few authorized boat launches, 41%—boats/boating/personal watercraft (congestion, noise, safety), 24%—noise, 22%—lake water level and 21% identified development as an issue.

Forty-four (44) respondents listed Other issues. They included: "stunted and sick pike," "CN rail noise," "quality of trophy pike fishing has declined," "great fishing," fish "catch levels are high but small fish," "late night fireworks," "boating disturbance in sensitive area, e.g., creeks, nesting habitats," invasive weeds on CN tracks, "erosion caused by high lake levels," and "little if any enforcement." See Appendix 1 for full list of responses.

Q6 Willingness to Maintain or Improve Lake Quality

A majority of respondents were willing to do their part to help the lake. Most (60+%) expressed willingness to minimize shoreline disturbance, avoid use of fertilizers, use phosphate-free soaps and detergents or work with neighbours and community associations to protect and improve lake quality.

Q7 Other Concerns

A wide range of other concerns were expressed by 73 of the respondents. Some took the opportunity to explain their answers to previous questions. Others pointed out specific problems with government, fishing, the walleye introduction, fish management generally, enforcement, sewage and holding tanks, water quality, the number of piers, control of boat traffic, etc. Some praised the work of the WWMC, others felt the WWMC wasn't doing enough, and one criticized the WWMC's interference with development (i.e., Samco). All 73 responses are listed in Appendix 1.

Results—Individual Uses

Using SurveyMonkey's analysis tools we looked at how differing uses of the lake affected how people value their experiences. For example, do people who fish the lake have differing values from those who watch wildlife or swim in the lake?

Note: The following is a summary of the highlights of those uses with sufficient responses to justify analysis.

Although swimming, fishing, boating and watching wildlife each had sufficient responses, their data did not significantly deviate from that of all respondents.

Permanent Residents (Appendix 2) and Cottage Owners (Appendix 3)

Fifty-one (51) of the respondents were permanent residents around the lake. Their responses, as a group, did not significantly deviate from those of total respondents except in the **number of days** spent at the lake, where as expected the vast majority (85%) spent 100 to 365 days. Similarly, the responses of the 132 (50%) cottage owners did not significantly change from those of all the respondents except in the number of days spent at the lake. 56% of them spent 30 to 100 days, followed by 23% who spent 100 to 365 days, and 18% who spent 10 to 30 days.

Hiking (Appendix 4)

Seventy-eight (78) of the respondents identified hiking as a use of the lake. The only major deviation this group had from all respondents was that 33% of them spent 100 to 365 days at the lake as opposed to 26% of all respondents spending 100 to 365 days at the lake.

Discussion

The results of the survey illustrate the variety of uses and concerns lake users have for Wabamun Lake. A majority of respondents owned property around the lake and, as such, are the most likely to express their concerns. If there is a failing of this survey it is that we did not get more people to take the survey who do not own property at the lake but come as either day-users or who camp or otherwise rent accommodation at the lake.

Boating was the most popular use of the lake (75%), with swimming (58%) and fishing (58%) tying for second place, and watching wildlife a close third (56%). Although people use Wabamun Lake differently, their concerns for the lake are similar. The recent blue-green algae bloom was at the top of many people's minds, followed by boating issues including too few authorized boat launches. The WWMC is well aware of these issues and is working to alleviate or mitigate them. The results of this survey help us get a sense of how deep these concerns are among lake users. They will help us set priorities and goals, including better communication with lake users.

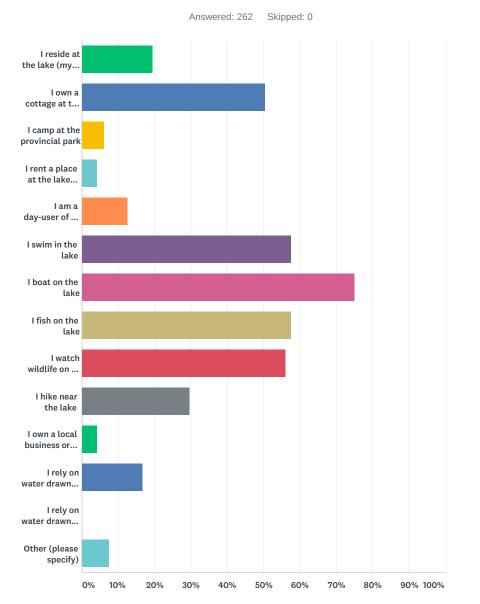
Thank You!

We thank all who participated. With regard to the comments about the work of the WWMC, we are pleased many recognize the work we have done. We also understand that we cannot please all the people all the time. However, if you feel we are not adequately addressing issues, please let us know (<u>info@wwmc.ca</u>). The WWMC is a volunteer-run organization and can always use more help.

With regard to the complaint about the WWMC interfering with development, we do not apologize. It has been shown that uncontrolled development is a chief cause of the degradation of lake quality. We will always stand-up for the lake.

Appendix 1 Summary of All Data

Compiled by SurveyMonkey



Q1 How do you use Wabamun Lake? (check all that apply)

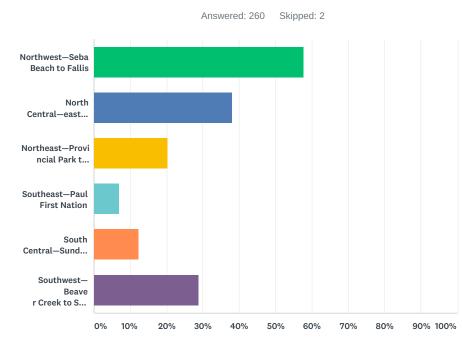
ANSWER CHOICES	RESPONS	ES
I reside at the lake (my prime residence)	19.47%	51
I own a cottage at the lake	50.38%	132
I camp at the provincial park	6.11%	16
I rent a place at the lake (cottage, RV park, private campground, etc.)	4.20%	11
I am a day-user of the provincial park and its beach	12.60%	33
I swim in the lake	57.63%	151
I boat on the lake	75.19%	197
I fish on the lake	57.63%	151
I watch wildlife on and adjacent to the lake	56.11%	147
I hike near the lake	29.77%	78
I own a local business or work in the area	4.20%	11
I rely on water drawn from the lake for my domestic household use—e.g., water lawns or gardens	16.79%	44

SurveyMonkey

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I rely on v	vater drawn from the lake for my business/industrial use	0.00%	
Other (pl	ease specify)	7.63%	2
Total Res	spondents: 262		
ш		DATE	
#	OTHER (PLEASE SPECIFY)	DATE	
1	Yacht Club Member	11/22/2019 9:23 PM	
2	Manage a year round children's camp, visit the site every 2 days to issue directives to the camp caretaker	11/22/2019 2:58 AM	
3	Stay at friends cabins	11/21/2019 11:56 A	М
4	I would like to hike, but there are no good trails that I am aware of near us.	11/19/2019 4:59 AM	
5	visit my brother's cottage and my other brother's home	11/17/2019 4:13 PM	
6	Just lawn and garden during summer if rain barrels not enough	11/17/2019 3:22 AM	
7	cross-country skiing, snow shoeing, skating	11/16/2019 5:31 PM	
8	I have a well	11/12/2019 7:43 PM	
9	bird watch	11/10/2019 5:40 PM	
10	We kayak & canoe on the lake	11/10/2019 4:03 PM	
11	Family makes extensive use of the lake for board sports (stand up paddling and windsurfing)	11/9/2019 6:45 AM	
12	Pleasant stop between home & city and often drive shoreline to Fallis	11/9/2019 3:55 AM	
13	Belong to a sailing club & rent a trailer stall on club property	11/8/2019 9:27 PM	
14	I	11/8/2019 8:33 PM	
15	would like to keep a fish	11/8/2019 6:28 PM	
16	recreational use all four seasons - skate, x country ski, ice fish	11/8/2019 5:26 PM	
17	sail on the lake	11/8/2019 12:54 PM	
18	Use the family cottage	11/8/2019 7:12 AM	
19	I cross country ski on the lake, the lake is a meeting place for friends and family, the lake is central to much of our social activities, the lake offers a solitude and escape from a chaotic and demanding world	11/8/2019 1:53 AM	
20	Paddle boarding	11/8/2019 12:37 AM	I

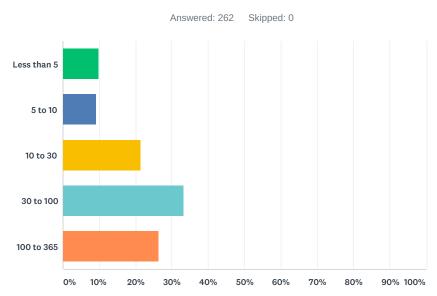
Q2 What sections of the lake do you use most? (check all that apply)



ANSWER CHOICES	RESPONSES	
Northwest—Seba Beach to Fallis	57.69%	150
North Central—east of Fallis to Village of Wabamun	38.08%	99
Northeast—Provincial Park to Kapasiwin	20.38%	53
Southeast—Paul First Nation	6.92%	18
South Central—Sundance Power Plant to Beaver Creek Natural Area	12.31%	32
Southwest—Beaver Creek to Seba Beach	28.85%	75
Total Respondents: 260		

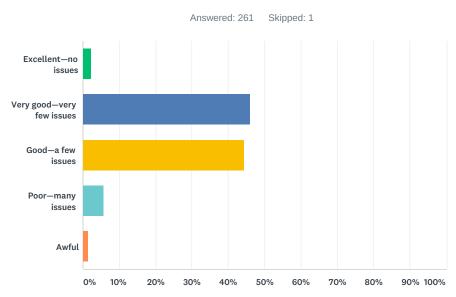
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Q3 About how many days do you spend at the lake in an average year? (check one)



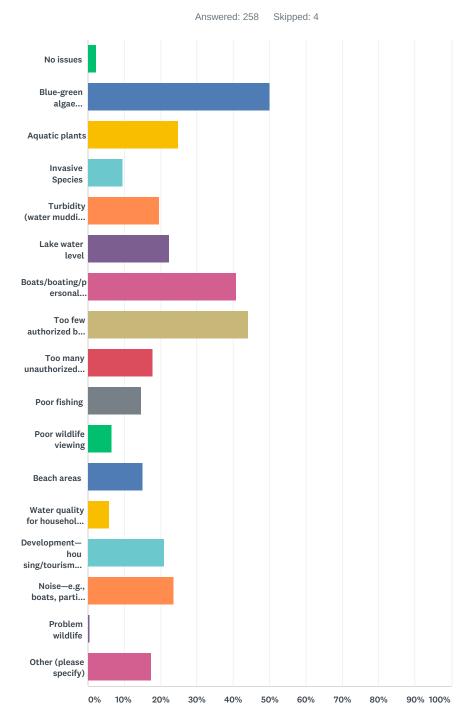
ANSWER CHOICES	RESPONSES	
Less than 5	9.92%	26
5 to 10	9.16%	24
10 to 30	21.37%	56
30 to 100	33.21%	87
100 to 365	26.34%	69
TOTAL		262

Q4 How would you characterize the overall quality of Wabamun Lake? (check one)



ANSWER CHOICES	RESPONSES	
Excellent—no issues	2.30%	6
Very good—very few issues	45.98%	120
Good—a few issues	44.44%	116
Poor—many issues	5.75%	15
Awful	1.53%	4
TOTAL		261

Q5 If you indicated above that the lake has some quality issues, what issues are you seeing? (check all that apply)



ANSWER CHOICES	RESPONSES	
No issues	2.33%	6
Blue-green algae (cyanobacteria)	50.00%	129
Aquatic plants	24.81%	64
Invasive Species	9.69%	25
Turbidity (water muddied from sediments and erosion)	19.77%	51
Lake water level	22.48%	58

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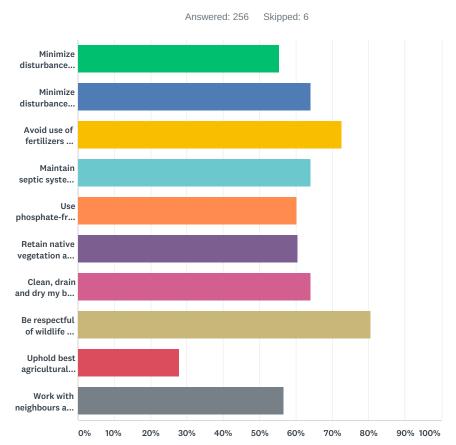
Boats/boating/personal watercraft—congestion, noise, safety	40.70%	105
Too few authorized boat launches—including parking issues	44.19%	114
Too many unauthorized boat launches—including parking issues	17.83%	46
Poor fishing	14.73%	38
Poor wildlife viewing	6.59%	17
Beach areas	15.12%	39
Water quality for household or other use (e.g., swimming)	5.81%	15
Development—housing/tourism density, construction	20.93%	54
Noise—e.g., boats, parties, traffic	23.64%	61
Problem wildlife	0.39%	1
Other (please specify)	17.44%	45
Total Description 200		

Total Respondents: 258

#	OTHER (PLEASE SPECIFY)	DATE
1	stunted and sick pike do to over populating with walleye	11/27/2019 5:48 AM
2	too much regulations. NO NEW REGULATIONS!!!	11/26/2019 7:52 PM
3	CN railway noise has increased considerably	11/25/2019 8:59 PM
4	Can't eat fish	11/25/2019 8:32 AM
5	I have not seen blue green algae but I am concerned that it appeared last summer. I am also concerned about about bathroooms on boats that may get emptied into the lake	11/22/2019 5:30 AM
6	The Pike fishing has suffered greatly after the misconcieved stocking of 11.7 million walleye. The deforestaion that occured with the development on the north side just east of fallis pinisula.	11/22/2019 1:09 AM
7	quality of trophy pike fishery has declined since introduction of walleye	11/20/2019 3:53 AM
8	decrease in fishing numbers and size over the past years since the introduction of more walleye	11/20/2019 12:44 AM
9	I wouldn't say poor fishing just yet, but definitely declining fishing quality and declining fish health	11/19/2019 4:46 PM
10	Alge is getting worse every year.	11/18/2019 2:39 PM
11	crime	11/18/2019 4:18 AM
12	Blue Green in fall of 2019 was by far the worst witnessed in 60 years	11/17/2019 3:22 AM
13	ridiculous fishing regulations	11/17/2019 2:33 AM
14	Blue-green only this year** invasive species now washed away** high powered boats	11/16/2019 7:30 PM
15	Too many walleye	11/16/2019 5:45 PM
16	wild life harassment, sea doo type craft intentionally harassing pelicans. Ski doo type machines driving on to private property. Garbage left on the lake during winter ice fishing. Not a chronic problem but happens more often than would be idea. Boat lifts that line lake accesses in the winter that at times impedes tobogganing. I don't understand why they don't have to take them back to their own property. Years ago we were told that "soft" enforcement was going to be started. We only see more personal docks and boat lifts stored on the lake access paths.	11/16/2019 5:31 PM
17	"Weir" does not seem to control lake level. We are losing our beach and land because of high lake level! Our boathouse is in danger!	11/16/2019 1:27 AM
18	Great fishing	11/15/2019 10:20 PN
19	catch numbers are high but small fish	11/15/2019 9:23 PM
20	Fish limits should increase from no catch to at least 1 walleye	11/15/2019 5:18 PM
21	People are still cutting aquatic plants down - more education needed why this shouldnt happen	11/14/2019 10:29 PM
22	Seba Beach nightmare, from residences not allowing parking, to the main beach being disgusting, very untidy, broken glass, ruts, trip hazards everywhere, the people are so rude	11/12/2019 10:39 PM
23	Lake was excellent fishing for many spiecies. Now walleye only and 0 limit.	11/12/2019 7:43 PM
24	Late night fireworks	11/12/2019 7:33 PM
25	boating disturbance in sensitive areaseg creeks, nesting habitats	11/10/2019 5:40 PM
26	The high level of the lake The waves are causing damage,	11/10/2019 12:49 AM

27	Railway has ignored invasive species of weeds that have started in its right-of-way and spread to adjacent property and the lakeshore. Railway often has ear-damaging screeching levels that should be formally recorded and reported to AEP/whomever. Water quality has detiorated significantly during the past 2 years. I suspect that failure of at least 90% of property owners to remediate ice-push erosion in 2018 is a factor.	11/9/2019 6:45 AM
28	can't understand the zero limit for whitefish.	11/9/2019 3:55 AM
29	No immature fish ie; minnows of any species	11/8/2019 9:32 PM
30	not able to keep fish. Would like a licence for a certain amount of Pike per houshold/cabin	11/8/2019 7:57 PM
31	I can not believe that cottage owners can still use mounds or fields for sewer disposal. We have one on either side of our property, causing our property to be lower. This causes, i believe. our property to be more wet. Also during heavy rains last summer, I often witnessed run off from these mounds to be greenish and soapy looking, yet these got rated as excellent by the county!	11/8/2019 6:56 PM
32	Poor fisheries management	11/8/2019 6:38 PM
33	Can't keep fish, over run with walleye and pike, whites and perch populations diminishing due to walleye populating.	11/8/2019 6:28 PM
34	We have had one episode of Cyanobacteria that we can recall in the last several years. The water level has been fairly stable in the past 10 years. There has been land clearing (? For an RV development) to which we are strongly opposed. It would be nice to have the ability to keep 1 to 2 fish (possession) to eat once a week. We used to fish all summer but have not bothered with this activity other than for the odd child because catching fish with a zero limit is, quite frankly not interesting to us.	11/8/2019 5:57 PM
35	erosion caused by high lake levels, poor shore management on adjacent properties, lack of water plants	11/8/2019 5:26 PM
36	The amount of garbage (mostly beverage containers) that wash up	11/8/2019 3:37 PM
37	Unable to harvest fish since 2005	11/8/2019 1:53 PM
38	laws and enforcement of laws and more public education to sustain/enhance water quality/environment;	11/8/2019 12:54 PM
39	As a swimer, row boater and small boat sailer, there are many motor boats that cause me some anxiety for my safety.	11/8/2019 2:40 AM
40	would like to keep a fish or two	11/8/2019 2:04 AM
41	Indicated poor fishing due to the lack of the whitefish being restocked to provide food for the walleye and pike. Boat traffic largely wakeboard boats that are loud, create large unsafe and shore damaging wakes and no boating etiquette whatsoever.	11/8/2019 1:56 AM
42	little if any enforcement of activities both summer and winter	11/8/2019 1:53 AM
43	Litter	11/8/2019 1:44 AM
44	Very few northern pike around our area this year worst catching in 45 years.	11/8/2019 1:05 AM

Q6 What have you been or are you willing to do to maintain or improve the quality of Wabamun Lake? (check all that apply)



ANSWER CHOICES	RESPON	SES
Minimize disturbance from activities on the shoreline	55.47%	142
Minimize disturbance that could increase erosion and add sediment to the lake	64.06%	164
Avoid use of fertilizers and pesticides	72.66%	186
Maintain septic system in working order	64.06%	164
Use phosphate-free soaps and detergents, and avoid putting toxic chemicals down the drain	60.16%	154
Retain native vegetation and not introduce non-native or invasive species	60.55%	155
Clean, drain and dry my boat or personal watercraft before moving between lakes to avoid transporting invasive species	64.06%	164
Be respectful of wildlife and their habitats when recreating around or on the lake	80.47%	206
Uphold best agricultural/industrial management practices	27.73%	71
Work with neighbours and community associations, such as wwmc.ca	56.64%	145
Total Respondents: 256		

Q7 Any other concerns you would like the WWMC to know?

Answered: 73 Skipped: 189

#	RESPONSES	DATE
1	the proposed new "permits" for piers and docks et c. are ridiculous and unnecessary. please tell AEP that we need less government intrusion and that if they want to help, you will let them know. wwmc and the people on the lake are doing a great job maintaining it, theres no need for government to get involved in my opinion. thank you for your efforts to keep the lake in good shape.	11/26/2019 7:52 PM
2	No	11/26/2019 12:05 AM
3	none	11/25/2019 9:56 PM
4	What horrible questions this survey is crap	11/24/2019 11:17 PM
5	Thanks for your good work!	11/24/2019 6:46 PM
6	My biggest concern is the lack of parking for day use boatingparticularly at the wabamun launch I do not feel that the water traffic is congested or can be, all due to the fact that parking and launch access is the bottleneck that allows the lake to be enjoyed by all.	11/24/2019 2:49 AM
7	The overstocking of walleye, not a native species in the lake has destroyed the pike, perch and whitefish fisheries.	11/23/2019 1:12 AM
8	no	11/22/2019 5:37 PM
9	Most of the boat traffic is at the east end of the lake because the two launches are there. If there was another launch then the boats would be spread out more. The illegal development near Fallis has hardly changes since the trees were cleared. Parkland County needs to do more to naturalize this area. Parkland County should also mandate septic tanks in good working order for the whole watershed	11/22/2019 5:30 AM
10	Need facilities especially toilets at access points. More enforcement of boating regs including liquor laws	11/22/2019 12:27 AM
11	It's long past time for us to keep a few Walleye	11/21/2019 11:56 AM
12	I routinely pick up garbage when I am kayaking and fishing, there are garbage cans at each place I launch around the lake. Generally, I think most people are taking decent care of the lake.	11/21/2019 3:38 AM
13	Need to intercept nutrients coming from Jackpine Grazing Reserve using constructed wetlands along Tomahawk Creek	11/20/2019 2:01 PM
14	Walleye should not of been stocked in the lake; they are not growing whatsoever.	11/20/2019 3:00 AM
15	It felt like very little concern was given to the lake and the shoreline after the ice heave in 2018.	11/19/2019 4:59 AM
16	No	11/18/2019 2:20 PM
17	These are not really the relevant questions.	11/17/2019 5:39 PM
18	Just the concern about the algae at the end of this past summer (2019). If it was fertilizer, we need to do something about that especially with lake front properties. Concern about the ongoing loud parties & fireworks being set off continually within yards in Seba Beach. No Bylaw Officer. RCMP too busy for such complaints. What to do?	11/17/2019 2:22 PM
19	As someone who regularly fishes Wabamun, it really frustrates me the money trap CN has going. They don't put a sign up,but along the canal many days there are 4+ cars you will see them handing tickets \$300 tickets	11/17/2019 8:21 AM
20	Walleye seem to be taking over to detriment of pike. Feel some consumption of fish should be allowed to promote fishing.	11/17/2019 3:22 AM
21	fishing regulations are a joke and the locals leave their garbage on the ice	11/17/2019 2:33 AM
22	Noisy, disrespectful, garbage-leaving people fishing from shore off old TransAlta inlet between Wab town and sailing club. Also noisy cigarette boats frequently racing up the inlet	11/16/2019 9:01 PM
23	Open it up for keeping a fish	11/16/2019 7:46 PM
24	The last 3 years high water has removed a lot of my beach and other shoreline, believe this is why blue-green algie this year for the first time.	11/16/2019 7:30 PM
25	No other concerns. Overall we are pleased with WWMC. We are please with the improvements over the last all the years. The availability of having learned advisors to come to the property and advise on best eco practices for lake living was very worthwhile. Newsletters are great. Well done.	11/16/2019 5:31 PM
26	more patrolling enforcement	11/16/2019 3:50 PM
27	Stocking walleye has collapsed what was a great pike fishery.	11/16/2019 11:42 AM
28	Lake level dangerously high.	11/16/2019 1:27 AM

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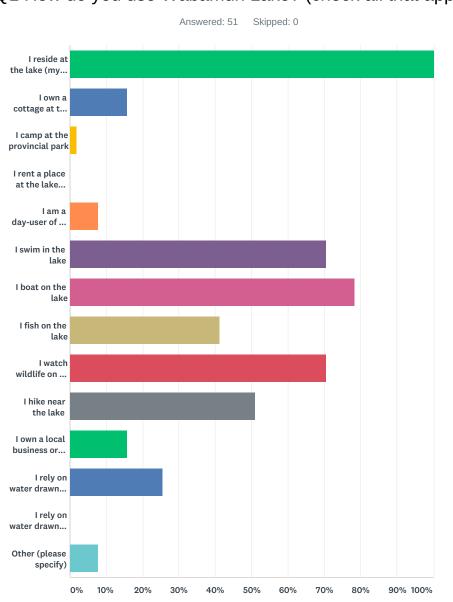
20		11/15/2010 2:47 044
29	MORE ACCESS FOR BOATS	11/15/2019 3:47 PM
30 31	I have a holding tank for sewage.More info on BGA would be appreciated Thank you for all of your hard work, it is immeasurably important!!	11/15/2019 3:11 PM 11/14/2019 10:29 PM
31	Issues associated with late night noise and partying - I appreciate this is not an issue that falls within the mandate of the WWMC.	11/14/2019 10:29 PM
33	Govt consultation practices inconsistent and obstruct accountability	11/13/2019 10:05 AM
34	To tell the seba beach, beachowners that this is everyone's lake, and let them know that tourism is beneficial for their economy, more tourism = more money into their little community	11/12/2019 10:39 PM
35	Poor choice of fish species to introduce to lake which has decimated jackfish population in Wabamun.	11/12/2019 9:56 PM
36	nothing downthe drain should reach the Lake. Need manditory septic tanks	11/12/2019 7:43 PM
37	No	11/11/2019 6:51 PM
38	No boating/jet ski zone in all creek areas. More awareness signage of importance of clean & drain watercrafts	11/10/2019 5:40 PM
39	Enhance Parks & Wildlife supervision - Increase funding for lake quality checks	11/10/2019 4:03 PM
40	Introduction of pickerel has caused the disappearance of many aquatic and avian species. WWMC should consider a class action lawsuit against the provincial government for Willful Habitat Destruction	11/9/2019 6:55 PM
41	water too high>risks ice damming>waterfront damage>erosion	11/9/2019 3:03 PM
12	We have a pump out holding tank. For those who have septic systems, they should be thoroughly inspected.	11/9/2019 6:45 AM
43	In Point Alison our water was absolutely green in late Aug and SEPT. Super concerned!	11/9/2019 4:40 AM
14	As a short stop visitor my activities don't apply to #6 but I value the lakeshore, the view and encourage all efforts to maintain water quality and improve angling recreation with a modest harvest.	11/9/2019 3:55 AM
15	Irresponsible septic disposal	11/8/2019 11:04 PM
16	moretesting to ensure existing (and new) septic systems are working correctly and not discarding into the lake	11/8/2019 10:13 PM
47	Keep up the good work	11/8/2019 7:57 PM
18	My concern is the high water levels that the lake has had over the past few years. We own a lakefront cottage and the high water level has caused us erosion problems. I would like the water level more constant around the level established at the wier. I would like the governement to stop or lower the amount being pumped into the lake.	11/8/2019 7:17 PM
49	we use a holding tank for our sewer system, every one should use this type of system if within s short distance to lake!	11/8/2019 6:56 PM
50	Lack of government leadership in protecting lakes.	11/8/2019 6:38 PM
51	I rated the quality of the lake as poor because of the uncertainty of Blue-Green Algae event from last summer.	11/8/2019 6:15 PM
52	Better police presence	11/8/2019 5:01 PM
53	Excessive algae bloom this fall that has never occurred before. Is it due to fertilizer being washed down to the lake from residents or large businesses above the lake?	11/8/2019 4:40 PM
54	My lake shore at 66 South Seba beach has eroded 30 ft in the last 4 years. The lake level is to high. Shoreline restoration is required. The beaver Dams need to be cleared from the First nations out flow tributaries.	11/8/2019 3:03 PM
55	Open the fishing for walleye. They seem to be taking over the lake, eating the minnows which help with the algi	11/8/2019 2:33 PM
56	Boat launch on the south side of the lake is much needed to avoid damage to the lake bed launching large water craft (wake boats) via access roads	11/8/2019 2:06 PM
57	Allow people to use the fish resources in a sustainable manner	11/8/2019 1:53 PM
58	Run-off from farm fields and cattle stock farms need to be addressed. They are very likely to be major contributors of ecolli, fertilizers and herbicides.	11/8/2019 1:46 PM
59	That there is blue-green algae in the lake for the time	11/8/2019 7:12 AM
60	The water quality an the end of the season was terrible in Point Alison and really concerns us! Thick green algae. We are doing everything we can to not cause contamination into the lake. Also, the water level was extremely high last year. This drainage of agriculture was likely the cause of the poor water quality. It resulted in loss of frontage for us and others and constant islands floating past us. We are very concerned!	11/8/2019 5:07 AM

Wabamun Watershed Management Council: Lake User Survey

61	What can be done about the high lake level? Are the beaver dams being cleared yearly on the outlet to the N Sask River? It would be nice to be able to launch/remove relatively small boats at multiple locations without having to pay a fee each time.	11/8/2019 3:55 AM
62	To many piers	11/8/2019 2:54 AM
63	Is there control for the use of snowmobiles on the lake in the winter, especially up the creek and streams. On a selfish note, they also take over all the fresh snow and can wreck the cross country ski tracks.	11/8/2019 2:40 AM
64	Algae for the first time ever. The lake is done. Too little, too late folks.	11/8/2019 2:22 AM
65	I'd like to see the temporary boat launch at Fallis blocked off/ closed off. This creates a parking issue and stuck vehicles trying to launch watercraft thus disturbing and contanimating the lake in that area	11/8/2019 2:20 AM
66	would like to put out swimming markers in front of property	11/8/2019 2:04 AM
67	There are many opportunities to increase the enjoyable use of the lake and surrounding areas EG: proper cross country trails on and beside the lake, walking trails along the lake, effective management of county property around the lake, more collaboration with residents regarding development around the lake (not just adjacent properties) some way toeffectively integrate the roles of the county and the province in managing development around and activities on the lake	11/8/2019 1:53 AM
68	Litter	11/8/2019 1:44 AM
69	Any new developments such as the north shore RV park east of Falis . Any agricultural such as cattle grazing close to the lake	11/8/2019 1:05 AM
70	The watershed needs a plan to minimize algae friendly runoff	11/8/2019 1:00 AM
71	WWMC interference in developments. (SAMCO)	11/8/2019 12:40 AM
72	Close unauthorized boat launches.	11/8/2019 12:25 AM
73	Make a difference	11/8/2019 12:05 AM

Appendix 2 Permanent Residents Data

Compiled by SurveyMonkey



	0%	10%	20%	30%	40%	50%	60%	70%	80%	90% 100%		
ANSWER CHOICES											RESPONSE	S
I reside at the lake (my prime r	esiden	ce)									100.00%	51
I own a cottage at the lake											15.69%	8
I camp at the provincial park											1.96%	1
I rent a place at the lake (cotta	ge, RV	park, pr	ivate car	npgroun	d, etc.)						0.00%	0
I am a day-user of the provinci	al park	and its t	beach								7.84%	4
I swim in the lake											70.59%	36
I boat on the lake											78.43%	40
I fish on the lake											41.18%	21
I watch wildlife on and adjacen	it to the	lake									70.59%	36
I hike near the lake											50.98%	26
I own a local business or work	in the a	area									15.69%	8
I rely on water drawn from the	lake fo	r my don	nestic ho	usehold	use—e.g	g., water	lawns or	gardens	5		25.49%	13
					1	/9						

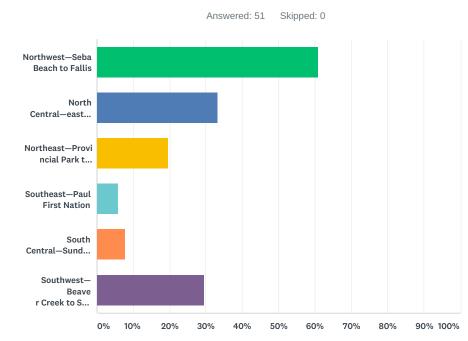
Q1 How do you use Wabamun Lake? (check all that apply)

SurveyMonkey

Wabamun Watershed Management Council: Lake User Survey

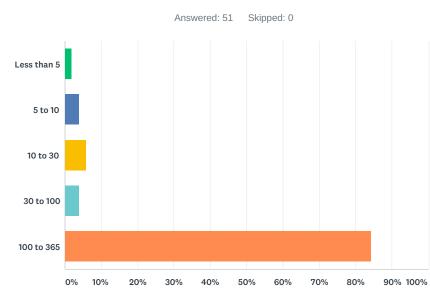
I rely on	water drawn from the lake for my business/industrial use	0.00%	0
Other (p	lease specify)	7.84%	4
Total Re	espondents: 51		
#	OTHER (PLEASE SPECIFY)	DATE	
1	bird watch	11/10/2019 5:40 PM	
2	would like to keep a fish	11/8/2019 6:28 PM	
3	sail on the lake	11/8/2019 12:54 PM	Λ
4	I cross country ski on the lake, the lake is a meeting place for friends and family, the lake is central to much of our social activities, the lake offers a solitude and escape from a chaotic and demanding world	11/8/2019 1:53 AM	

Q2 What sections of the lake do you use most? (check all that apply)



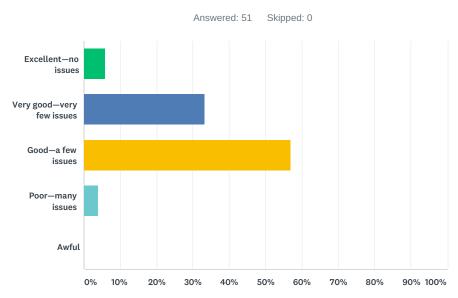
ANSWER CHOICES	RESPONSES
Northwest—Seba Beach to Fallis	60.78% 3:
North Central—east of Fallis to Village of Wabamun	33.33% 1
Northeast—Provincial Park to Kapasiwin	19.61% 10
Southeast—Paul First Nation	5.88%
South Central—Sundance Power Plant to Beaver Creek Natural Area	7.84%
Southwest—Beaver Creek to Seba Beach	29.41% 15
Total Respondents: 51	

Q3 About how many days do you spend at the lake in an average year? (check one)



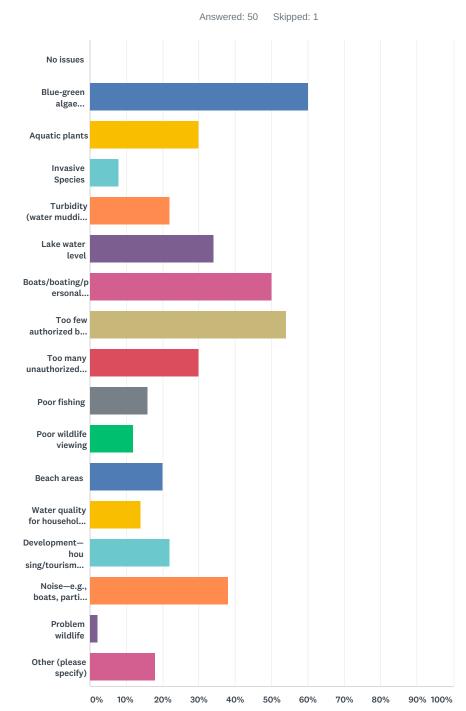
ANSWER CHOICES	RESPONSES	
Less than 5	1.96%	1
5 to 10	3.92%	2
10 to 30	5.88%	3
30 to 100	3.92%	2
100 to 365	84.31%	43
TOTAL		51

Q4 How would you characterize the overall quality of Wabamun Lake? (check one)



ANSWER CHOICES	RESPONSES	
Excellent—no issues	5.88%	3
Very good—very few issues	33.33%	17
Good—a few issues	56.86%	29
Poor—many issues	3.92%	2
Awful	0.00%	0
TOTAL		51

Q5 If you indicated above that the lake has some quality issues, what issues are you seeing? (check all that apply)



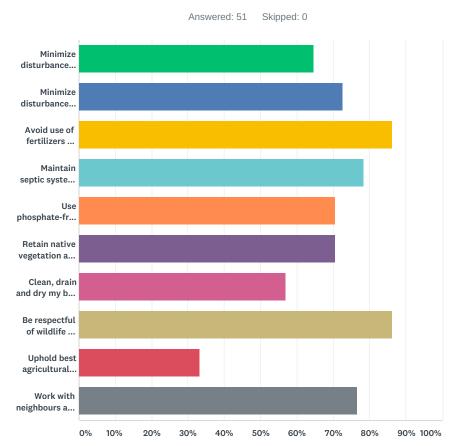
ANSWER CHOICES	RESPONSES	
No issues	0.00%	0
Blue-green algae (cyanobacteria)	60.00%	30
Aquatic plants	30.00%	15
Invasive Species	8.00%	4
Turbidity (water muddied from sediments and erosion)	22.00%	11
Lake water level	34.00%	17

Wabamun Watershed Management Council: Lake User Survey

Boats/boating/personal watercraft—congestion, noise, safety	50.00%	25
Too few authorized boat launches—including parking issues	54.00%	27
Too many unauthorized boat launches—including parking issues	30.00%	15
Poor fishing	16.00%	8
Poor wildlife viewing	12.00%	6
Beach areas	20.00%	10
Water quality for household or other use (e.g., swimming)	14.00%	7
Development—housing/tourism density, construction	22.00%	11
Noise—e.g., boats, parties, traffic	38.00%	19
Problem wildlife	2.00%	1
Other (please specify)	18.00%	9
Total Respondents: 50		

#	OTHER (PLEASE SPECIFY)	DATE
1	crime	11/18/2019 4:18 AM
2	boating disturbance in sensitive areaseg creeks, nesting habitats	11/10/2019 5:40 PM
3	No immature fish ie; minnows of any species	11/8/2019 9:32 PM
4	Can't keep fish, over run with walleye and pike, whites and perch populations diminishing due to walleye populating.	11/8/2019 6:28 PM
5	laws and enforcement of laws and more public education to sustain/enhance water quality/environment;	11/8/2019 12:54 PM
6	would like to keep a fish or two	11/8/2019 2:04 AM
7	Indicated poor fishing due to the lack of the whitefish being restocked to provide food for the walleye and pike. Boat traffic largely wakeboard boats that are loud, create large unsafe and shore damaging wakes and no boating etiquette whatsoever.	11/8/2019 1:56 AM
8	little if any enforcement of activities both summer and winter	11/8/2019 1:53 AM
9	Litter	11/8/2019 1:44 AM

Q6 What have you been or are you willing to do to maintain or improve the quality of Wabamun Lake? (check all that apply)



ANSWER CHOICES	RESPONS	SES
Minimize disturbance from activities on the shoreline	64.71%	33
Minimize disturbance that could increase erosion and add sediment to the lake	72.55%	37
Avoid use of fertilizers and pesticides	86.27%	44
Maintain septic system in working order	78.43%	40
Use phosphate-free soaps and detergents, and avoid putting toxic chemicals down the drain	70.59%	36
Retain native vegetation and not introduce non-native or invasive species	70.59%	36
Clean, drain and dry my boat or personal watercraft before moving between lakes to avoid transporting invasive species	56.86%	29
Be respectful of wildlife and their habitats when recreating around or on the lake	86.27%	44
Uphold best agricultural/industrial management practices	33.33%	17
Work with neighbours and community associations, such as wwmc.ca	76.47%	39
Total Respondents: 51		

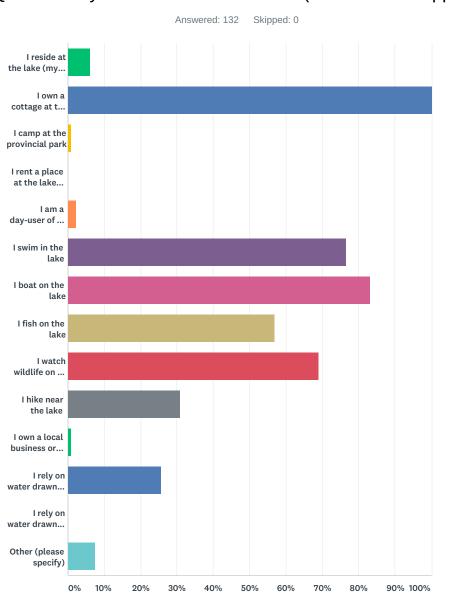
Q7 Any other concerns you would like the WWMC to know?

Answered: 13 Skipped: 38

#	RESPONSES	DATE
1	Just the concern about the algae at the end of this past summer (2019). If it was fertilizer, we need to do something about that especially with lake front properties. Concern about the ongoing loud parties & fireworks being set off continually within yards in Seba Beach. No Bylaw Officer. RCMP too busy for such complaints. What to do?	11/17/2019 2:22 PM
2	I have a holding tank for sewage.More info on BGA would be appreciated	11/15/2019 3:11 PM
3	Poor choice of fish species to introduce to lake which has decimated jackfish population in Wabamun.	11/12/2019 9:56 PM
4	No boating/jet ski zone in all creek areas. More awareness signage of importance of clean & drain watercrafts	11/10/2019 5:40 PM
5	Irresponsible septic disposal	11/8/2019 11:04 PM
6	Excessive algae bloom this fall that has never occurred before. Is it due to fertilizer being washed down to the lake from residents or large businesses above the lake?	11/8/2019 4:40 PM
7	Run-off from farm fields and cattle stock farms need to be addressed. They are very likely to be major contributors of ecolli, fertilizers and herbicides.	11/8/2019 1:46 PM
8	To many piers	11/8/2019 2:54 AM
9	would like to put out swimming markers in front of property	11/8/2019 2:04 AM
10	There are many opportunities to increase the enjoyable use of the lake and surrounding areas EG: proper cross country trails on and beside the lake, walking trails along the lake, effective management of county property around the lake, more collaboration with residents regarding development around the lake (not just adjacent properties) some way toeffectively integrate the roles of the county and the province in managing development around and activities on the lake	11/8/2019 1:53 AM
11	Litter	11/8/2019 1:44 AM
12	The watershed needs a plan to minimize algae friendly runoff	11/8/2019 1:00 AM
13	WWMC interference in developments. (SAMCO)	11/8/2019 12:40 AM

Appendix 3 Cottage Owners Data

Compiled by SurveyMonkey



Q1 How do you use Wabamun Lake? (check all that apply)

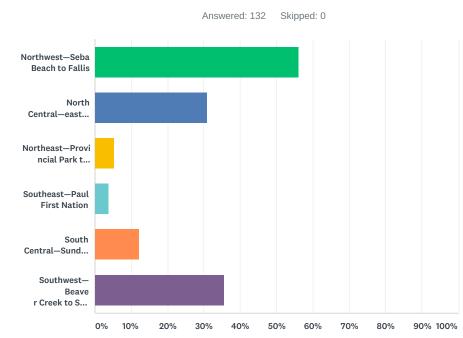
ANSWER CHOICES	RESPONSE	ES
I reside at the lake (my prime residence)	6.06%	8
I own a cottage at the lake	100.00%	132
I camp at the provincial park	0.76%	1
I rent a place at the lake (cottage, RV park, private campground, etc.)	0.00%	0
I am a day-user of the provincial park and its beach	2.27%	3
I swim in the lake	76.52%	101
I boat on the lake	83.33%	110
I fish on the lake	56.82%	75
I watch wildlife on and adjacent to the lake	68.94%	91
I hike near the lake	31.06%	41
I own a local business or work in the area	0.76%	1
I rely on water drawn from the lake for my domestic household use—e.g., water lawns or gardens	25.76%	34

SurveyMonkey

Wabamun Watershed Management Council: Lake User Survey

I rely on	water drawn from the lake for my business/industrial use	0.00%	0
Other (please specify)		7.58%	10
Total Re	spondents: 132		
#	OTHER (PLEASE SPECIFY)	DATE	
1	I would like to hike, but there are no good trails that I am aware of near us.	11/19/2019 4:59 A	Μ
2	Just lawn and garden during summer if rain barrels not enough	11/17/2019 3:22 A	М
3	cross-country skiing, snow shoeing, skating	11/16/2019 5:31 P	М
4	I have a well	11/12/2019 7:43 P	М
5	We kayak & canoe on the lake	11/10/2019 4:03 P	М
6	Family makes extensive use of the lake for board sports (stand up paddling and windsurfing)	11/9/2019 6:45 AM	1
7	I	11/8/2019 8:33 PM	1
8	recreational use all four seasons - skate, x country ski, ice fish	11/8/2019 5:26 PM	1
9	Use the family cottage	11/8/2019 7:12 AM	1
10	Paddle boarding	11/8/2019 12:37 A	М

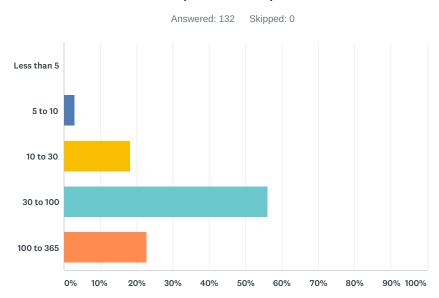
Q2 What sections of the lake do you use most? (check all that apply)



ANSWER CHOICES	RESPONSES
Northwest—Seba Beach to Fallis	56.06% 74
North Central—east of Fallis to Village of Wabamun	31.06% 41
Northeast—Provincial Park to Kapasiwin	5.30%
Southeast—Paul First Nation	3.79% 5
South Central—Sundance Power Plant to Beaver Creek Natural Area	12.12% 16
Southwest—Beaver Creek to Seba Beach	35.61% 4
Total Respondents: 132	

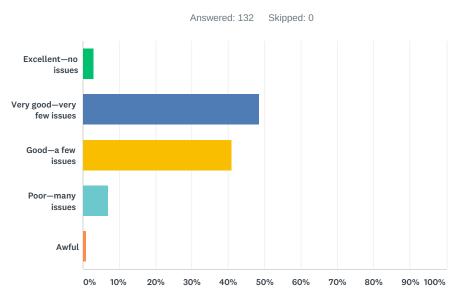
3/11

Q3 About how many days do you spend at the lake in an average year? (check one)



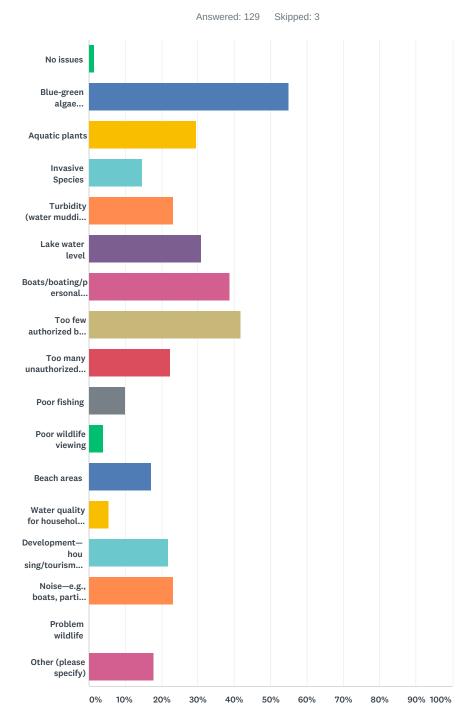
ANSWER CHOICES	RESPONSES	
Less than 5	0.00%	0
5 to 10	3.03%	4
10 to 30	18.18%	24
30 to 100	56.06%	74
100 to 365	22.73%	30
TOTAL		132

Q4 How would you characterize the overall quality of Wabamun Lake? (check one)



ANSWER CHOICES	RESPONSES	
Excellent—no issues	3.03%	4
Very good—very few issues	48.48%	64
Good—a few issues	40.91%	54
Poor—many issues	6.82%	9
Awful	0.76%	1
TOTAL		132

Q5 If you indicated above that the lake has some quality issues, what issues are you seeing? (check all that apply)



ANSWER CHOICES	RESPONSES	
No issues	1.55%	2
Blue-green algae (cyanobacteria)	55.04%	71
Aquatic plants	29.46%	38
Invasive Species	14.73%	19
Turbidity (water muddied from sediments and erosion)	23.26%	30
Lake water level	31.01%	40

Wabamun Watershed Management Council: Lake User Survey

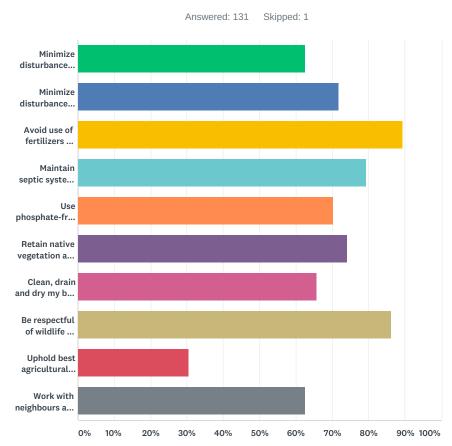
Boats/boating/personal watercraft—congestion, noise, safety	38.76%	50
Too few authorized boat launches—including parking issues	41.86%	54
Too many unauthorized boat launches—including parking issues	22.48%	29
Poor fishing	10.08%	13
Poor wildlife viewing	3.88%	5
Beach areas	17.05%	22
Water quality for household or other use (e.g., swimming)	5.43%	7
Development—housing/tourism density, construction	21.71%	28
Noise—e.g., boats, parties, traffic	23.26%	30
Problem wildlife	0.00%	0
Other (please specify)	17.83%	23
7.15		

Total Respondents: 129

#	OTHER (PLEASE SPECIFY)	DATE
1	too much regulations. NO NEW REGULATIONS!!!	11/26/2019 7:52 PM
2	I have not seen blue green algae but I am concerned that it appeared last summer. I am also concerned about about bathroooms on boats that may get emptied into the lake	11/22/2019 5:30 AM
3	Alge is getting worse every year.	11/18/2019 2:39 PM
4	Blue Green in fall of 2019 was by far the worst witnessed in 60 years	11/17/2019 3:22 AM
5	Blue-green only this year** invasive species now washed away** high powered boats	11/16/2019 7:30 PM
6	Too many walleye	11/16/2019 5:45 PM
7	wild life harassment, sea doo type craft intentionally harassing pelicans. Ski doo type machines driving on to private property. Garbage left on the lake during winter ice fishing. Not a chronic problem but happens more often than would be idea. Boat lifts that line lake accesses in the winter that at times impedes tobogganing. I don't understand why they don't have to take them back to their own property. Years ago we were told that "soft" enforcement was going to be started. We only see more personal docks and boat lifts stored on the lake access paths.	11/16/2019 5:31 PM
8	"Weir" does not seem to control lake level. We are losing our beach and land because of high lake level! Our boathouse is in danger!	11/16/2019 1:27 AM
9	Great fishing	11/15/2019 10:20 PM
10	People are still cutting aquatic plants down - more education needed why this shouldnt happen	11/14/2019 10:29 PM
11	Lake was excellent fishing for many spiecies. Now walleye only and 0 limit.	11/12/2019 7:43 PM
12	Late night fireworks	11/12/2019 7:33 PM
13	The high level of the lake The waves are causing damage,	11/10/2019 12:49 AM
14	Railway has ignored invasive species of weeds that have started in its right-of-way and spread to adjacent property and the lakeshore. Railway often has ear-damaging screeching levels that should be formally recorded and reported to AEP/whomever. Water quality has detiorated significantly during the past 2 years. I suspect that failure of at least 90% of property owners to remediate ice-push erosion in 2018 is a factor.	11/9/2019 6:45 AM
15	not able to keep fish. Would like a licence for a certain amount of Pike per houshold/cabin	11/8/2019 7:57 PM
16	I can not believe that cottage owners can still use mounds or fields for sewer disposal. We have one on either side of our property, causing our property to be lower. This causes, i believe. our property to be more wet. Also during heavy rains last summer, I often witnessed run off from these mounds to be greenish and soapy looking, yet these got rated as excellent by the county!	11/8/2019 6:56 PM
17	Poor fisheries management	11/8/2019 6:38 PM
18	We have had one episode of Cyanobacteria that we can recall in the last several years. The water level has been fairly stable in the past 10 years. There has been land clearing (? For an RV development) to which we are strongly opposed. It would be nice to have the ability to keep 1 to 2 fish (possession) to eat once a week. We used to fish all summer but have not bothered with this activity other than for the odd child because catching fish with a zero limit is, quite frankly not interesting to us.	11/8/2019 5:57 PM
19	erosion caused by high lake levels, poor shore management on adjacent properties, lack of water plants	11/8/2019 5:26 PM
20	The amount of garbage (mostly beverage containers) that wash up	11/8/2019 3:37 PM

ZT	As a swimer, row boater and small boat sailer, there are many motor boats that cause me some anxiety for my safety.	11/8/2019 2:40 AM
22	Very few northern pike around our area this year worst catching in 45 years.	11/8/2019 1:05 AM

Q6 What have you been or are you willing to do to maintain or improve the quality of Wabamun Lake? (check all that apply)



ANSWER CHOICES		RESPONSES	
Minimize disturbance from activities on the shoreline	62.60%	82	
Minimize disturbance that could increase erosion and add sediment to the lake	71.76%	94	
Avoid use of fertilizers and pesticides	89.31%	117	
Maintain septic system in working order	79.39%	104	
Use phosphate-free soaps and detergents, and avoid putting toxic chemicals down the drain	70.23%	92	
Retain native vegetation and not introduce non-native or invasive species	74.05%	97	
Clean, drain and dry my boat or personal watercraft before moving between lakes to avoid transporting invasive species	65.65%	86	
Be respectful of wildlife and their habitats when recreating around or on the lake	86.26%	113	
Uphold best agricultural/industrial management practices	30.53%	40	
Work with neighbours and community associations, such as wwmc.ca	62.60%	82	
Total Respondents: 131			

Q7 Any other concerns you would like the WWMC to know?

Answered: 43 Skipped: 89

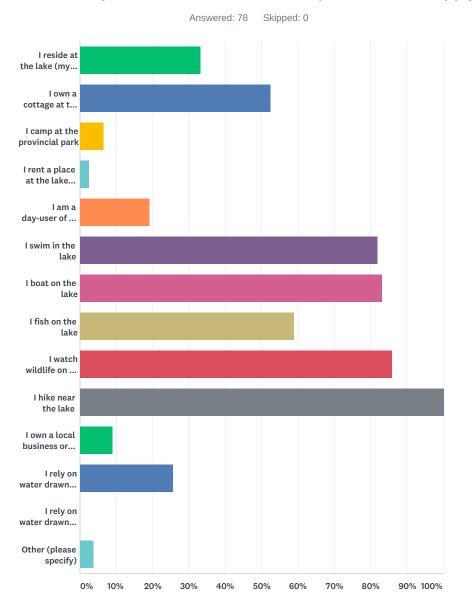
#	RESPONSES	DATE
1	the proposed new "permits" for piers and docks et c. are ridiculous and unnecessary. please tell AEP that we need less government intrusion and that if they want to help, you will let them know. wwmc and the people on the lake are doing a great job maintaining it, theres no need for government to get involved in my opinion. thank you for your efforts to keep the lake in good shape.	11/26/2019 7:52 PM
2	none	11/25/2019 9:56 PM
3	Most of the boat traffic is at the east end of the lake because the two launches are there. If there was another launch then the boats would be spread out more. The illegal development near Fallis has hardly changes since the trees were cleared. Parkland County needs to do more to naturalize this area. Parkland County should also mandate septic tanks in good working order for the whole watershed	11/22/2019 5:30 AM
4	Need facilities especially toilets at access points. More enforcement of boating regs including liquor laws	11/22/2019 12:27 AM
5	Need to intercept nutrients coming from Jackpine Grazing Reserve using constructed wetlands along Tomahawk Creek	11/20/2019 2:01 PM
6	It felt like very little concern was given to the lake and the shoreline after the ice heave in 2018.	11/19/2019 4:59 AM
7	These are not really the relevant questions.	11/17/2019 5:39 PM
8	Walleye seem to be taking over to detriment of pike. Feel some consumption of fish should be allowed to promote fishing.	11/17/2019 3:22 AM
9	Noisy, disrespectful, garbage-leaving people fishing from shore off old TransAlta inlet between Wab town and sailing club. Also noisy cigarette boats frequently racing up the inlet	11/16/2019 9:01 PM
10	The last 3 years high water has removed a lot of my beach and other shoreline, believe this is why blue-green algie this year for the first time.	11/16/2019 7:30 PM
11	No other concerns. Overall we are pleased with WWMC. We are please with the improvements over the last all the years. The availability of having learned advisors to come to the property and advise on best eco practices for lake living was very worthwhile. Newsletters are great. Well done.	11/16/2019 5:31 PM
12	Lake level dangerously high.	11/16/2019 1:27 AM
13	MORE ACCESS FOR BOATS	11/15/2019 3:47 PM
14	I have a holding tank for sewage.More info on BGA would be appreciated	11/15/2019 3:11 PM
15	Thank you for all of your hard work, it is immeasurably important!!	11/14/2019 10:29 PM
16	Issues associated with late night noise and partying - I appreciate this is not an issue that falls within the mandate of the WWMC.	11/14/2019 12:10 AM
17	nothing downthe drain should reach the Lake. Need manditory septic tanks	11/12/2019 7:43 PM
18	No	11/11/2019 6:51 PM
19	Enhance Parks & Wildlife supervision - Increase funding for lake quality checks	11/10/2019 4:03 PM
20	Introduction of pickerel has caused the disappearance of many aquatic and avian species. WWMC should consider a class action lawsuit against the provincial government for Willful Habitat Destruction	11/9/2019 6:55 PM
21	water too high>risks ice damming>waterfront damage>erosion	11/9/2019 3:03 PM
22	We have a pump out holding tank. For those who have septic systems, they should be thoroughly inspected.	11/9/2019 6:45 AM
23	In Point Alison our water was absolutely green in late Aug and SEPT. Super concerned!	11/9/2019 4:40 AM
24	moretesting to ensure existing (and new) septic systems are working correctly and not discarding into the lake	11/8/2019 10:13 PM
25	Keep up the good work	11/8/2019 7:57 PM
26	My concern is the high water levels that the lake has had over the past few years. We own a lakefront cottage and the high water level has caused us erosion problems. I would like the water level more constant around the level established at the wier. I would like the governement to stop or lower the amount being pumped into the lake.	11/8/2019 7:17 PM
27	we use a holding tank for our sewer system, every one should use this type of system if within s	11/8/2019 6:56 PM
	short distance to lake!	

Wabamun Watershed Management Council: Lake User Survey

29	I rated the quality of the lake as poor because of the uncertainty of Blue-Green Algae event from last summer.	11/8/2019 6:15 PM
30	Better police presence	11/8/2019 5:01 PM
31	Excessive algae bloom this fall that has never occurred before. Is it due to fertilizer being washed down to the lake from residents or large businesses above the lake?	11/8/2019 4:40 PM
32	My lake shore at 66 South Seba beach has eroded 30 ft in the last 4 years. The lake level is to high. Shoreline restoration is required. The beaver Dams need to be cleared from the First nations out flow tributaries.	11/8/2019 3:03 PM
33	Open the fishing for walleye. They seem to be taking over the lake, eating the minnows which help with the algi	11/8/2019 2:33 PM
34	Boat launch on the south side of the lake is much needed to avoid damage to the lake bed launching large water craft (wake boats) via access roads	11/8/2019 2:06 PM
35	That there is blue-green algae in the lake for the time	11/8/2019 7:12 AM
36	The water quality an the end of the season was terrible in Point Alison and really concerns us! Thick green algae. We are doing everything we can to not cause contamination into the lake. Also, the water level was extremely high last year. This drainage of agriculture was likely the cause of the poor water quality. It resulted in loss of frontage for us and others and constant islands floating past us. We are very concerned!	11/8/2019 5:07 AM
37	What can be done about the high lake level? Are the beaver dams being cleared yearly on the outlet to the N Sask River? It would be nice to be able to launch/remove relatively small boats at multiple locations without having to pay a fee each time.	11/8/2019 3:55 AM
38	Is there control for the use of snowmobiles on the lake in the winter, especially up the creek and streams. On a selfish note, they also take over all the fresh snow and can wreck the cross country ski tracks.	11/8/2019 2:40 AM
39	Algae for the first time ever. The lake is done. Too little, too late folks.	11/8/2019 2:22 AM
40	Any new developments such as the north shore RV park east of Falis . Any agricultural such as cattle grazing close to the lake	11/8/2019 1:05 AM
41	WWMC interference in developments. (SAMCO)	11/8/2019 12:40 AM
42	Close unauthorized boat launches.	11/8/2019 12:25 AM
43	Make a difference	11/8/2019 12:05 AM

Appendix 4 Hiking Data

Compiled by SurveyMonkey



Q1 How do you use Wabamun Lake? (check all that apply)

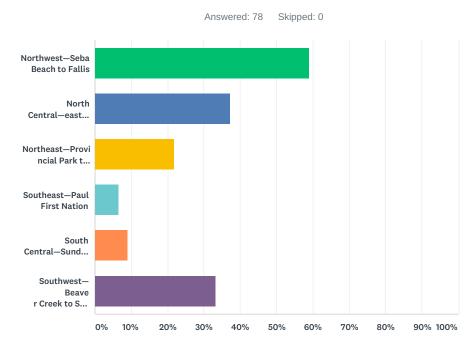
ANSWER CHOICES	RESPONSES	6
I reside at the lake (my prime residence)	33.33%	26
I own a cottage at the lake	52.56%	41
I camp at the provincial park	6.41%	5
I rent a place at the lake (cottage, RV park, private campground, etc.)	2.56%	2
I am a day-user of the provincial park and its beach	19.23%	15
I swim in the lake	82.05%	64
I boat on the lake	83.33%	65
I fish on the lake	58.97%	46
I watch wildlife on and adjacent to the lake	85.90%	67
I hike near the lake	100.00%	78
I own a local business or work in the area	8.97%	7
I rely on water drawn from the lake for my domestic household use—e.g., water lawns or gardens	25.64%	20

SurveyMonkey

Wabamun Watershed Management Council: Lake User Survey

I rely on wate	er drawn from the lake for my business/industrial use		0.00%	0
Other (pleas	e specify)		3.85%	3
Total Respo	ndents: 78			
#	OTHER (PLEASE SPECIFY)	DATE	=	
1	bird watch		-)/2019 5:40 PM	
2	We kayak & canoe on the lake	11/10	/2019 4:03 PM	
3	I cross country ski on the lake, the lake is a meeting place for friends and family, the lake is central to much of our social activities, the lake offers a solitude and escape from a chaotic and demanding world	11/8/2	2019 1:53 AM	

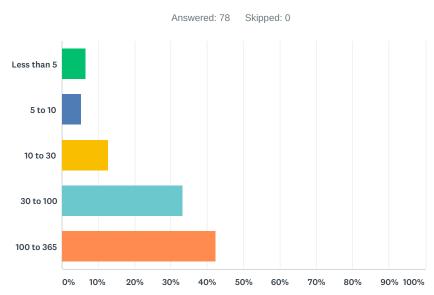
Q2 What sections of the lake do you use most? (check all that apply)



ANSWER CHOICES	RESPONSES
Northwest—Seba Beach to Fallis	58.97% 46
North Central—east of Fallis to Village of Wabamun	37.18% 29
Northeast—Provincial Park to Kapasiwin	21.79% 17
Southeast—Paul First Nation	6.41% 5
South Central—Sundance Power Plant to Beaver Creek Natural Area	8.97% 7
Southwest—Beaver Creek to Seba Beach	33.33% 26
Total Respondents: 78	

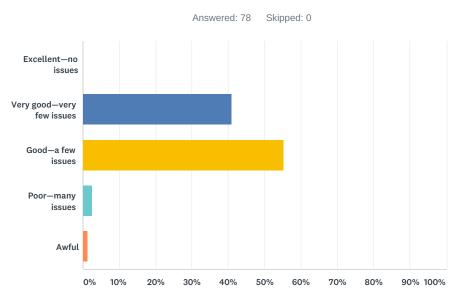
3/10

Q3 About how many days do you spend at the lake in an average year? (check one)



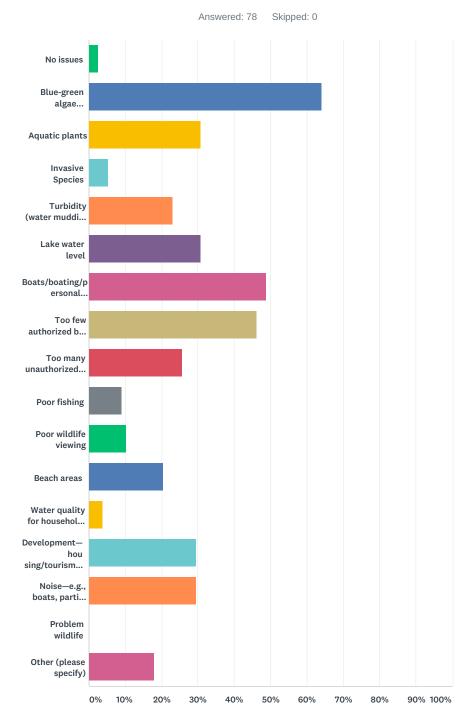
ANSWER CHOICES	RESPONSES	
Less than 5	6.41%	5
5 to 10	5.13%	4
10 to 30	12.82%	10
30 to 100	33.33%	26
100 to 365	42.31%	33
TOTAL		78

Q4 How would you characterize the overall quality of Wabamun Lake? (check one)



ANSWER CHOICES	RESPONSES	
Excellent—no issues	0.00%	0
Very good—very few issues	41.03%	32
Good—a few issues	55.13%	43
Poor—many issues	2.56%	2
Awful	1.28%	1
TOTAL		78

Q5 If you indicated above that the lake has some quality issues, what issues are you seeing? (check all that apply)



ANSWER CHOICES	RESPONSES	
No issues	2.56%	2
Blue-green algae (cyanobacteria)	64.10%	50
Aquatic plants	30.77%	24
Invasive Species	5.13%	4
Turbidity (water muddied from sediments and erosion)	23.08%	18
Lake water level	30.77%	24

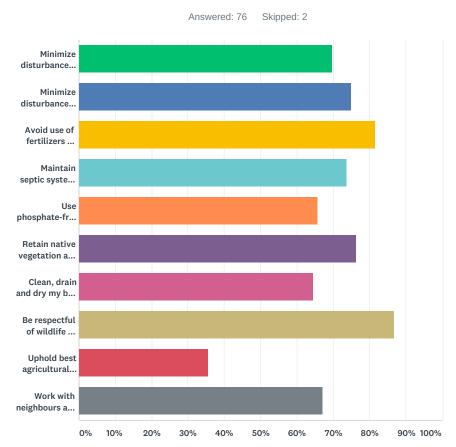
Wabamun Watershed Management Council: Lake User Survey

Boats/boating/personal watercraft—congestion, noise, safety	48.72%	38
Too few authorized boat launches—including parking issues	46.15%	36
Too many unauthorized boat launches—including parking issues	25.64%	20
Poor fishing	8.97%	7
Poor wildlife viewing	10.26%	8
Beach areas	20.51%	16
Water quality for household or other use (e.g., swimming)	3.85%	3
Development—housing/tourism density, construction	29.49%	23
Noise—e.g., boats, parties, traffic	29.49%	23
Problem wildlife	0.00%	0
Other (please specify)	17.95%	14
Total Design dentes 70		

Total Respondents: 78

#	OTHER (PLEASE SPECIFY)	DATE
1	too much regulations. NO NEW REGULATIONS!!!	11/26/2019 7:52 PM
2	The Pike fishing has suffered greatly after the misconcieved stocking of 11.7 million walleye. The deforestaion that occured with the development on the north side just east of fallis pinisula.	11/22/2019 1:09 AM
3	Blue-green only this year** invasive species now washed away** high powered boats	11/16/2019 7:30 PM
4	Too many walleye	11/16/2019 5:45 PM
5	People are still cutting aquatic plants down - more education needed why this shouldnt happen	11/14/2019 10:29 PM
6	Seba Beach nightmare, from residences not allowing parking, to the main beach being disgusting, very untidy, broken glass, ruts, trip hazards everywhere, the people are so rude	11/12/2019 10:39 PM
7	boating disturbance in sensitive areaseg creeks, nesting habitats	11/10/2019 5:40 PM
8	No immature fish ie; minnows of any species	11/8/2019 9:32 PM
9	Poor fisheries management	11/8/2019 6:38 PM
10	We have had one episode of Cyanobacteria that we can recall in the last several years. The water level has been fairly stable in the past 10 years. There has been land clearing (? For an RV development) to which we are strongly opposed. It would be nice to have the ability to keep 1 to 2 fish (possession) to eat once a week. We used to fish all summer but have not bothered with this activity other than for the odd child because catching fish with a zero limit is, quite frankly not interesting to us.	11/8/2019 5:57 PM
11	As a swimer, row boater and small boat sailer, there are many motor boats that cause me some anxiety for my safety.	11/8/2019 2:40 AM
12	would like to keep a fish or two	11/8/2019 2:04 AM
13	little if any enforcement of activities both summer and winter	11/8/2019 1:53 AM
14	Litter	11/8/2019 1:44 AM

Q6 What have you been or are you willing to do to maintain or improve the quality of Wabamun Lake? (check all that apply)



ANSWER CHOICES	RESPONS	SES
Minimize disturbance from activities on the shoreline	69.74%	53
Minimize disturbance that could increase erosion and add sediment to the lake	75.00%	57
Avoid use of fertilizers and pesticides	81.58%	62
Maintain septic system in working order	73.68%	56
Use phosphate-free soaps and detergents, and avoid putting toxic chemicals down the drain	65.79%	50
Retain native vegetation and not introduce non-native or invasive species	76.32%	58
Clean, drain and dry my boat or personal watercraft before moving between lakes to avoid transporting invasive species	64.47%	49
Be respectful of wildlife and their habitats when recreating around or on the lake	86.84%	66
Uphold best agricultural/industrial management practices	35.53%	27
Work with neighbours and community associations, such as wwmc.ca	67.11%	51
Total Respondents: 76		

Q7 Any other concerns you would like the WWMC to know?

Answered: 29 Skipped: 49

#	RESPONSES	DATE
1	the proposed new "permits" for piers and docks et c. are ridiculous and unnecessary. please tell AEP that we need less government intrusion and that if they want to help, you will let them know. wwmc and the people on the lake are doing a great job maintaining it, theres no need for government to get involved in my opinion. thank you for your efforts to keep the lake in good shape.	11/26/2019 7:52 PM
2	No	11/26/2019 12:05 AM
3	What horrible questions this survey is crap	11/24/2019 11:17 PM
4	no	11/22/2019 5:37 PM
5	Need facilities especially toilets at access points. More enforcement of boating regs including liquor laws	11/22/2019 12:27 AM
6	These are not really the relevant questions.	11/17/2019 5:39 PM
7	Just the concern about the algae at the end of this past summer (2019). If it was fertilizer, we need to do something about that especially with lake front properties. Concern about the ongoing loud parties & fireworks being set off continually within yards in Seba Beach. No Bylaw Officer. RCMP too busy for such complaints. What to do?	11/17/2019 2:22 PM
8	As someone who regularly fishes Wabamun, it really frustrates me the money trap CN has going. They don't put a sign up,but along the canal many days there are 4+ cars you will see them handing tickets \$300 tickets	11/17/2019 8:21 AM
9	The last 3 years high water has removed a lot of my beach and other shoreline, believe this is why blue-green algie this year for the first time.	11/16/2019 7:30 PM
10	MORE ACCESS FOR BOATS	11/15/2019 3:47 PM
11	I have a holding tank for sewage.More info on BGA would be appreciated	11/15/2019 3:11 PM
12	Thank you for all of your hard work, it is immeasurably important!!	11/14/2019 10:29 PM
13	To tell the seba beach, beachowners that this is everyone's lake, and let them know that tourism is beneficial for their economy, more tourism = more money into their little community	11/12/2019 10:39 PM
14	No	11/11/2019 6:51 PM
15	No boating/jet ski zone in all creek areas. More awareness signage of importance of clean & drain watercrafts	11/10/2019 5:40 PM
16	Enhance Parks & Wildlife supervision - Increase funding for lake quality checks	11/10/2019 4:03 PM
17	Irresponsible septic disposal	11/8/2019 11:04 PM
18	moretesting to ensure existing (and new) septic systems are working correctly and not discarding into the lake	11/8/2019 10:13 PM
19	My concern is the high water levels that the lake has had over the past few years. We own a lakefront cottage and the high water level has caused us erosion problems. I would like the water level more constant around the level established at the wier. I would like the governement to stop or lower the amount being pumped into the lake.	11/8/2019 7:17 PM
20	Lack of government leadership in protecting lakes.	11/8/2019 6:38 PM
21	Better police presence	11/8/2019 5:01 PM
22	Boat launch on the south side of the lake is much needed to avoid damage to the lake bed launching large water craft (wake boats) via access roads	11/8/2019 2:06 PM
23	Run-off from farm fields and cattle stock farms need to be addressed. They are very likely to be major contributors of ecolli, fertilizers and herbicides.	11/8/2019 1:46 PM
24	Is there control for the use of snowmobiles on the lake in the winter, especially up the creek and streams. On a selfish note, they also take over all the fresh snow and can wreck the cross country ski tracks.	11/8/2019 2:40 AM
25	would like to put out swimming markers in front of property	11/8/2019 2:04 AM
26	There are many opportunities to increase the enjoyable use of the lake and surrounding areas EG: proper cross country trails on and beside the lake, walking trails along the lake, effective management of county property around the lake, more collaboration with residents regarding development around the lake (not just adjacent properties) some way toeffectively integrate the roles of the county and the province in managing development around and activities on the lake	11/8/2019 1:53 AM

28	The watershed needs a plan to minimize algae friendly runoff	11/8/2019 1:00 AM
29	Close unauthorized boat launches.	11/8/2019 12:25 AM