

BLUE EARTH COUNTY

Comprehensive
Water Management Plan
Survey Results – Fall 2015

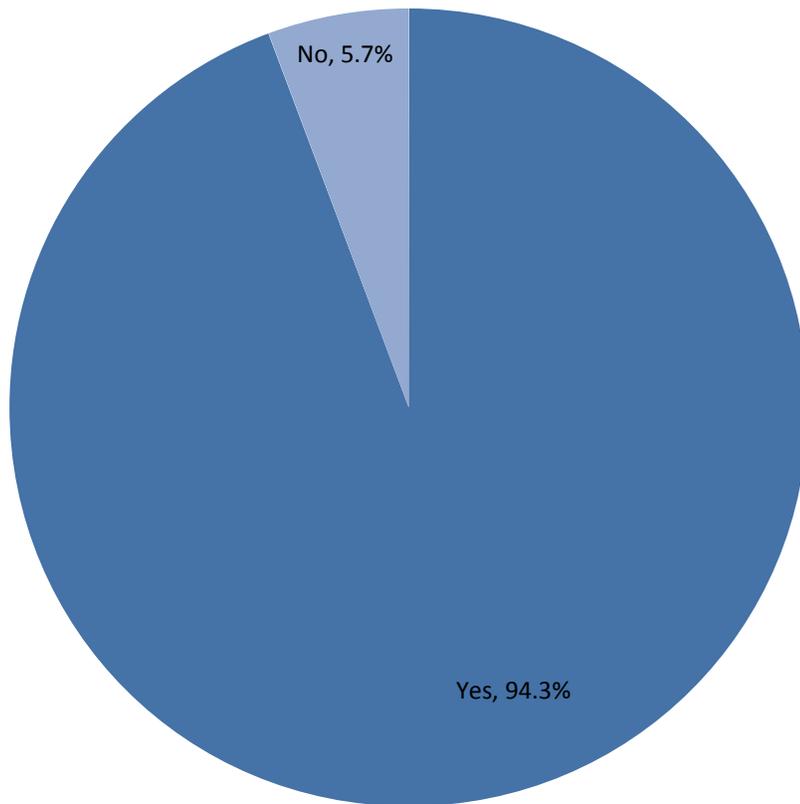


Background

In 2015 Blue Earth County initiated the process of updating the Comprehensive Water Management Plan. To help determine priority concerns to address in the plan, the county administered an 11 question online survey using Survey Monkey in September and October 2015. The survey was promoted using the county website, press releases and emails to township and city officials. There were 123 survey respondents. The survey and results are summarized in this document.

Question 1 - Are you a resident of Blue Earth County?

Answer Options	Response Percent	Response Count
Yes	94.3%	116
No	5.7%	7
<i>answered question</i>		123
<i>skipped question</i>		0



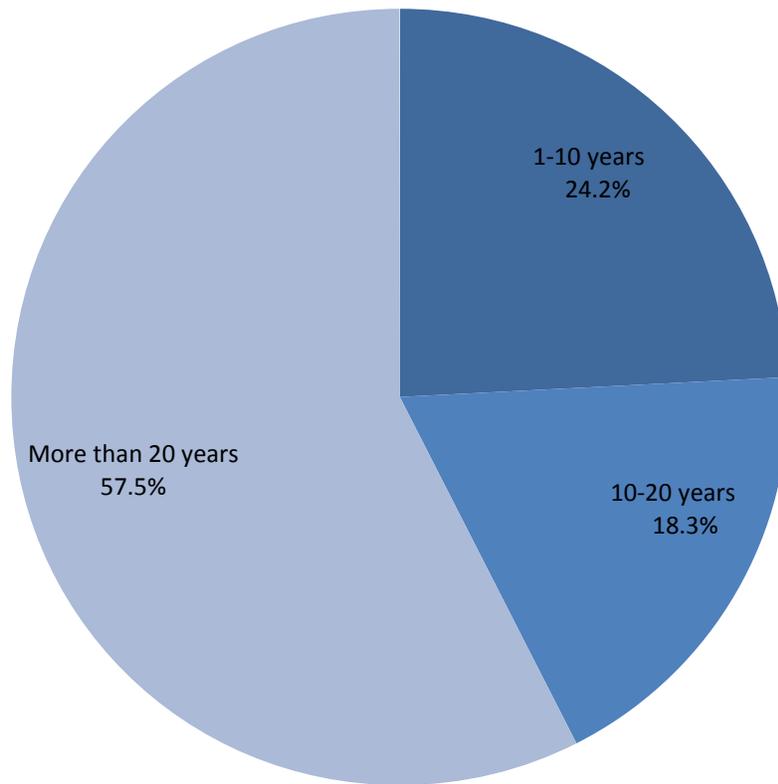
Question 2 - Choose one that best describes where you live:

Answer Options	Response Percent	Response Count
In Lake Crystal	41.0%	50
In the country or rural subdivision	18.0%	22
In Mankato	16.4%	20
In Madison Lake	9.0%	11
On a farm	7.4%	9
Other (please specify)	4.1%	5
In Skyline	1.6%	2
In Mapleton	0.8%	1
In St. Clair	0.8%	1
In Vernon Center	0.8%	1
	<i>answered question</i>	122
	<i>skipped question</i>	1

Question 3 – How long have you lived in Blue Earth County?

Answer Options	Response Percent	Response Count
1-10 years	24.2%	29
10-20 years	18.3%	22
More than 20 years	57.5%	69
<i>answered question</i>		120
<i>skipped question</i>		3

How long have you lived in Blue Earth County?



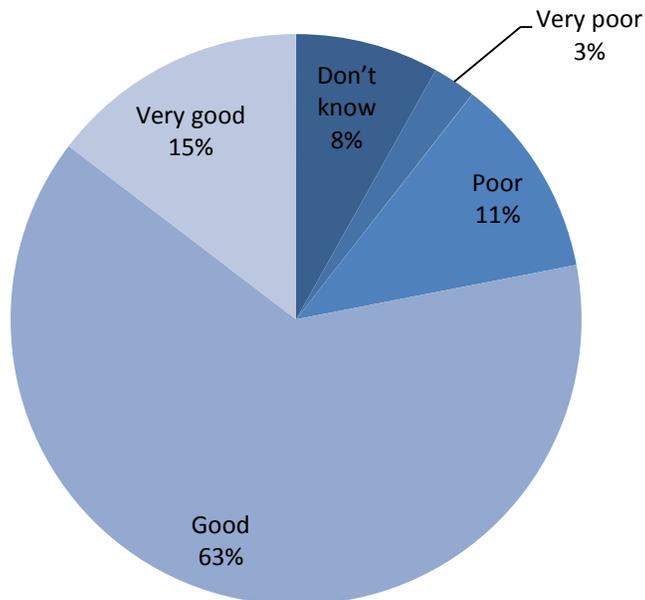
Question 4 - In a typical year, how often do you do the following types of recreation in Blue Earth County?

Answer Options	Rarely or never	1-5 times year	More than 5 times a year	Response Count
Swimming in lakes, rivers or streams	54	36	31	121
Canoeing or kayaking	57	42	13	112
Boating, water skiing, etc.	33	35	47	115
Fishing	27	51	39	117
Camping or using trails	32	44	40	116
Hunting	65	22	27	114
<i>answered question</i>				123
<i>skipped question</i>				0

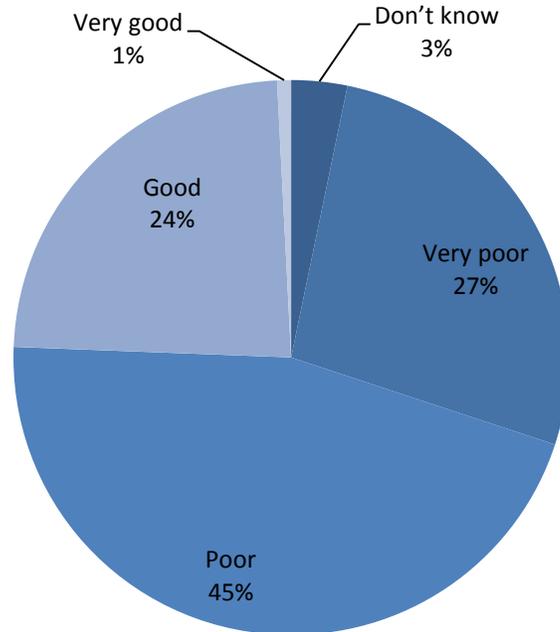
Question 5 - How would you describe the quality of the following in Blue Earth County?

Answer Options	Don't know	Very poor	Poor	Good	Very good	Response Count
Ground water/drinking water	10	3	14	78	18	123
Rivers and streams	4	33	56	29	1	123
Lakes	1	52	50	20	0	123
<i>answered question</i>						123
<i>skipped question</i>						0

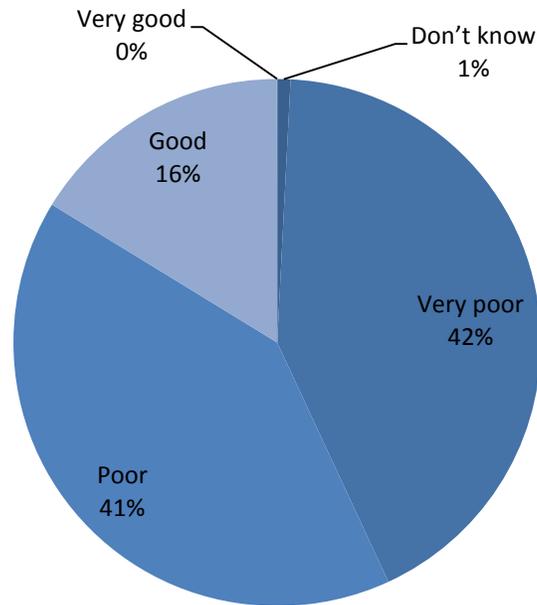
How would you describe the quality of ground water/drinking water in Blue Earth County?



How would you describe the quality of rivers and streams in Blue Earth County?



How would you describe the quality of lakes in Blue Earth County?



Question 6 - Thinking about Blue Earth County, please rate your level of concern with the following water management issues:

Answer Options	Not Concerned	Somewhat Concerned	Very Concerned	Response Count
Quantity and use of groundwater	23	55	45	123
Drinking water quality	22	45	56	123
Flooding	53	54	16	123
Eroding river or stream banks	21	48	52	121
Eroding ravines or bluffs	24	49	50	123
Loss of wetlands	21	31	70	122
Aquatic invasive species such as zebra mussels, Eurasian water milfoil, curly leaf pondweed, invasive carp, etc.	15	40	67	122

Question 7 - Thinking about Blue Earth County, please rate your level of concern with the following water management issues related to development:

Answer Options	Not Concerned	Somewhat Concerned	Very Concerned	Response Count
Water pollution from industry	19	64	40	123
Stormwater runoff and stormwater management	7	48	68	123
Runoff from construction sites	19	72	32	123
Residential development near lakes and rivers	15	41	67	123
Discharge from municipal sewage treatment facilities	23	46	54	123
Discharge from failing septic systems to groundwater or lakes and rivers	15	37	71	123
Road salt runoff to lakes, rivers and streams	16	59	48	123
Residential use of fertilizers and pesticides	11	43	69	123

Question 8 - Thinking about Blue Earth County, please rate your level of concern with the following issues related to agriculture:

Answer Options	Not Concerned	Somewhat Concerned	Very Concerned	Response Count
Drainage ditches and subsurface drainage tile in agricultural areas	15	25	83	123
Pesticide containers storage and disposal	24	50	48	122
Agricultural use of fertilizers and pesticides	16	41	66	123
Runoff from farm fields	15	28	80	123
Runoff from feedlots	18	37	68	123
Livestock manure runoff from farm fields	18	33	71	122

Question 9 - Thinking about Blue Earth County, please rank the relative importance of the following water management issues (Rankings are from 1 to 4 with 1 being most important)

Answer Options	1	2	3	4	Response Count
Drinking Water or Ground Water Quality	56	16	13	16	101
Water Quality of Lakes	32	44	16	11	103
Water Quality of Streams or Rivers	12	35	51	17	115
Flooding	16	14	26	62	118

Question 10 - How effective do you think the following practices are?

Answer Options	Don't know	Not effective	Somewhat effective	Very effective	Response Count
Vegetated buffers along lakes, rivers and streams	10	7	49	57	123
Increased water storage to reduce runoff and flooding	13	5	54	50	122
Improved soil health with nutrient management, tillage practices	10	7	47	58	122
More enforcement of ordinances to protect sensitive areas near lakes, rivers and streams	11	12	39	58	120
Directing or targeting local staff, grant funding and other financial resources to areas where science shows potential problems	11	11	45	56	123
More education and training for citizens about water related issues	6	19	58	40	123

Question 11 - If you are concerned about specific water bodies in Blue Earth County or have other suggestions or concerns about water resources in Blue Earth County, please describe below.

Number	Response Text
1	I am concerned about the effect of mining aggregate and other materials on groundwater quality and quantity. Mining will expand in many areas of the county, and it seems no local governments are prepared to address the water quality effects.
2	Blue Green Algae is hazardous - Lake Crystal
3	Very concerned about the water quality in Crystal Lake. Soil characteristics make runoff worse in its watershed, so farmers need help to minimize runoff. In additions, we need more beneficial aquatic plants (e.g., bulrushes) and vegetated buffers all around the lake (on private and public land).
4	Crystal Lake in Lake Crystal & Minneopa Creek.
5	I lived in Lake Crystal for 30 t years. Our children had swimming lesson in the lake. A pontoon & swimming occurred almost daily during the summer months kids at the park with Lifeguards and parents watching groups of kids of their docks..A small speed was purchased and skiing& boarding began. Later came the ski boat. Some days there were 30 boat craft on the lake not that many years ago. Sadly today we have no water craft & I have not been in this lake for over 3 years..When you ask what's a typical year in your questions it's difficult to answer because that was typical maybe 6 years ago. I'm saddened to see our Lake So empty because of water quality. We have made some improvements with hard work in our community...More is needed from a larger source..You are needed to help make these changes begin Blue Earth County
6	You need to work on reduction of nutrients entering Ida and Lura lakes, especially Ida. When I see Ida I am embarrassed to call B.E. Co. my home.
7	improving everything about madison lake..
8	Weed problems on Madison Lake. Can't use the lake until July because of the weeds.
9	Get rid of above ground field tile intakes they are a direct line of pollution to our lakes and streams and ultimately to our ground water.
10	Madison Lake
11	Concerned with agricultural run-off into the lake. . .needs to be filtered and monitored to stop the growth of non native weeds and algae
12	Crystal Lake
13	most lakes and rivers in southern Minn. buffer strips may work on ditches for erosion and sediment control but the tiling run off still comes in below that with chemical run off.
14	I live on Madison Lake and am concerned about Eurasion millfoil, Pond Weed, Carp and farm run off. Southern MN lakes continue to detieriate.
15	I'm concerned about current agriculture practices and the effect they're having on our fresh water supply.
16	The Minnesota and Blue Earth Rivers.

Number	Response Text
17	<p>I've recently noticed some development surrounding Duck Lake, Lake Ballantyne and Madison Lake and am concerned that required stormwater management, both temporary and permanent, isn't being properly address and that State shoreland rules are not being followed. I'm highly concerned with the permitting process of the city of Madison Lake and do not believe that these areas are properly addressed.</p> <p>I also believe that setbacks from bluffs and water features needs to be increased from the current County setbacks. New setback regulations should be designed to vary depending on the percent slope and the presence of water features, particularly at the base of the slope. I'd recommend a minimum setback of 100 feet from the top of the bluff and increase from there.</p> <p>I recommend no development occurring within the flood fringe area; I believe the county floodplain ordinance should be updated and prohibit any development in the flood fringe, even if it is built up above the regulatory flood plain elevation (RFPE).</p> <p>I would like to see wetland delineations required for any shoreland alteration permit issued within county. County staff should be reviewing and regulating wetland determinations, not conducting them. I'd suggest that ordinary high water level determinations be completed by licensed surveyor during the permitting process.</p>
18	<p>Non point source water contamination must be addressed, and that means agriculture practices. Farming is no longer a mom and pop operation like Monsanto and Cargill would like the general public to believe. Modern day farming is truly an industry that demands additional regulation (not self regulation). Fresh water is a scarce resource and we must develop / enforce new regulations to protect our underground aquifers / lakes and rivers. When did it become okay to irrigate corn? Who regulates this practice? As you can tell, I'm tired of agriculture getting a free pass with regards to our fresh water.</p>
19	<p>consistent buffering plan will help but holding systems more effective</p>
20	<p>Crystal/Loon Lakes</p> <p>Lake Ida (Amboy)</p>
21	<p>The bluff setback for structure construction needs to be revised to take into account the height of the bluff and the steepness of the slope. For example, a 30-ft setback doesn't do a lot of good when the starting point is the top edge of a nearly-vertical bluff that is inherently unstable. If you have a 100 ft tall bluff, and a stable slope is 2:1 (Horizontal to Vertical), the starting point for the setback should be $100 \times 2 = 200$ feet from the base of the bluff. Just an idea. Or make developers acknowledge the precarious nature of the lots they are trying to sell along high bluffs or (even worse) high bluffs on the outside bend of a river.</p>
22	<p>lakes around Lake Crystal and county ditches</p>
23	<p>Major areas of wetlands were lost 30 to 50 years ago when cattail marshs were drained and are now farmed. It would be good to see some of these restored. With the price of farmland this restoration will not likely happen.</p>
24	<p>All the lake around Lake Crystal are horrible as everyone knows. I would like to see more info out out as to what officials believe the problems are. Keep up the good work!</p>
25	<p>The LeSueur River east of St. Clair needs a holding area to avert more frequent flooding in St. Clair. Certainly, an area near the bridge just east of St. Clair is conducive to this effective, low-cost remedy.</p>
26	<p>I am concerned about the quality of the lake crystal watershed. We need help to clean it up.</p>
27	<p>Store more water and filter runoff before it gets to lakes and rivers. Also protect drinking water supplies should be number one priority.</p>

Number	Response Text
28	Treatment of city storm water and upgrading city sanitary sewer systems especially in the older parts of town.
29	Drainage from farm land into ditch 56 which runs into Crystal and Loon Lakes
30	Crystal Lake algae bloom and overall water quality. Leading with ditch 56 management.
31	Concerned about Crystal Lake and Loon Lake.
32	Crystal Lake in Lake Crystal is the nastiest lake in Blue Earth County! I feel sorry for those that live right on it. It would be a much more enjoyable lake if it could be used without coming out of it needing to be disinfected! It's gross! There is too much chemical contaminants from nearby farming that is being allowed to run off into steams that run into the lake, as well as other lakes too!
33	As for buffers a small one is needed for sluffing otherwise water does not run uphill
34	Crystal Lake
35	Don't mow the only public pedestrian area on the point at Robinson Park in Lake Crystal. It is used very often throughout the summer when mowed. Must contend with goose dropping, which is a concern early to mid summer.
36	Crystal lake in lake crystal needs help!-
37	Silt on the bottom of Southern MN Lakes. County ditches that drain to recreational lakes.
38	I live in Lk Crystal and there is a lot of concern of the Crystal Lake Quality... Personally I think there should be more regulation on the beautiful green plush lawns around the lake... They are fertilized by Green Care or whomever... Do they ever check how much fertilizer is being put down?? AND there are some lawns that use the lake water to water their lawns... ? Just seems like a small (or large) place to look into..... Thank You!!
39	City run off into crystal lake. City lawns are fertilized too much. Plus the dirt and sludge reduce water clarity!!!
40	I have a concern of the water quality on Crystal, Loon, and Lily Lakes in Lake Crystal
41	Until the land use issues are corrected the water quality issues will remain unresolved.
42	Crystal Lake, Lake Crystal
43	Crystal lake
44	Crystal Lake and Loon Lake
45	Crystal lake needs to be cleaned up
46	Lakes in Lake Crystal
47	I grew up swimming in our lakes in Lake Crystal, and it saddens me that I cannot make the same memories with my children.
48	Crystal lake
49	Get the rich people on the lake side of Humphrey Street in Lake Crystal to stop using lawn services who use chemicals and poison the lake!
50	Crystal Lake
51	I would love to see Crystal Lake be cleaned up and beautiful again. We are making progress, but can always use more help.
52	Please concentrate more of the funding in blue earth county on crystal and Loon lake. Thank you.
53	Crystal Lake

Number	Response Text
54	I'm extremely concerned that there is no regulation or even records of farm tile. Every year I see more and more tile going in. Every year, the flooding/water run off gets worse and worse, causing more pollution and more damage. I am specifically concerned about drainage ditch 56 in Lake Crystal and would like to see that rerouted so it no longer runs into the lakes. My father was born in the 1920s and grew up here in the 1930s. He used to tell us kids stories about how clean and clear Crystal Lake was, and how deep it was and spring fed. It's a shame we are killing all of our lakes and streams with big ag.
55	Please help fund the project to clean up the lakes in Lake Crystal. It would greatly help the health and well being of the residents and wild life but it would also help the local economy by bringing more people to our shores to fish all season.
56	Loon and crystal lakes as well as Minneopa creek are in terrible condition.
57	Lake Crystal is NASTY
58	Thank you for all you are doing to improve water quality. Very much appreciated. Keep it up, spread the word. Thank you!!!
59	Crystal lake and Loon Lake in Lake Crystal
60	I am concerned with the quality of Crystal lake. While recent efforts seemed to be helping there is a long way to go to make that lake usable again. It would be wonderful if more funding could go to help improve that lake.
61	Consistent enforcement of laws and ordinances is needed. I fish on many lakes in this county and others near by and lake shore development is impacting the water. There are too many lawns and patios being built next to the lakes. There does not appear to be consistent enforcement of laws for zoning.
62	Crystal Lake in Lake Crystal has blue algae blooms.
63	Lake Crystal should be a higher priority for the County. Jared Bach of the SWCD and his staff have been extremely active in our community. More County funding is needed to support the extensive volunteer efforts taking place within the community by the Crystal Waters Project. Question 10 is unclear. Is the rating for how it is being managed in BE County or how effective are the practices in general?
64	Agriculture practices are destroying the lakes and rivers and ground water will soon become a major related issue.
65	Measures should be taken to control algae bloom in lakes in MN
66	Crystal Lake in Lake Crystal.