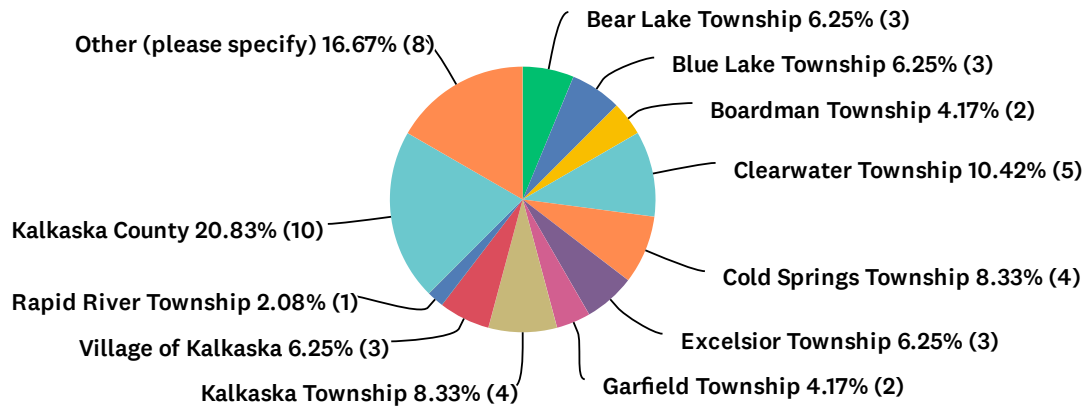


Q1 Please indicate the local jurisdiction you represent in Kalkaska County.

Answered: 48 Skipped: 0



ANSWER CHOICES	RESPONSES	
Bear Lake Township	6.25%	3
Blue Lake Township	6.25%	3
Boardman Township	4.17%	2
Clearwater Township	10.42%	5
Cold Springs Township	8.33%	4
Excelsior Township	6.25%	3
Garfield Township	4.17%	2
Kalkaska Township	8.33%	4
Village of Kalkaska	6.25%	3
Oliver Township	0.00%	0
Orange Township	0.00%	0
Rapid River Township	2.08%	1
Springfield Township	0.00%	0
Kalkaska County	20.83%	10
Other (please specify)	16.67%	8
TOTAL		48

#	OTHER (PLEASE SPECIFY)	DATE
1	Michigan State Police	11/29/2021 12:52 PM

Kalkaska County Hazard Mitigation Community Survey

2	Road Commission	11/29/2021 11:29 AM
3	Private and Public land within the county.	11/29/2021 8:59 AM
4	Kalkaska Conservation District	11/26/2021 11:41 AM
5	Both Coldsprings and Excelsuor Twp.s	11/24/2021 3:19 PM
6	we work in several jurisdictions in Kalkaska County	11/10/2021 3:14 PM
7	Antrim County	11/9/2021 8:43 AM
8	Entire County	11/8/2021 11:42 AM

Q2 What is your role/organizational representation within Kalkaska county (i.e. citizen, type of local government employee, elected official, etc.)?

Answered: 48 Skipped: 0

#	RESPONSES	DATE
1	President of CETA	1/10/2022 11:21 AM
2	Manager	12/28/2021 3:57 PM
3	Elected Official	12/15/2021 9:33 AM
4	Elected official	12/14/2021 9:40 PM
5	County Clerk / Administrator	12/14/2021 4:19 PM
6	County Drain Commissioner and member of the County Damage Assessment Team.	12/14/2021 1:02 PM
7	Supervisor	12/9/2021 2:57 PM
8	Township Planning and Zoning Administrator	12/8/2021 3:35 PM
9	Clearwater Township Planning Commission, Vice-Chair	12/5/2021 10:56 AM
10	county commissioner	12/3/2021 12:39 PM
11	President, Bear Lake Association	12/2/2021 10:09 AM
12	Elected Official - Treasurer	12/2/2021 7:15 AM
13	Supervisor	12/2/2021 3:43 AM
14	elected official, clerk	12/1/2021 9:31 AM
15	citizen, township planning commission, townshiip zoning board of appeals	11/30/2021 12:20 PM
16	Citizen	11/30/2021 12:07 PM
17	Elected Official	11/29/2021 8:37 PM
18	Township elected official	11/29/2021 4:59 PM
19	County Law Enforcement	11/29/2021 2:19 PM
20	Michigan State Police providing policing to Kalkaska County.	11/29/2021 12:52 PM
21	Village Manager	11/29/2021 12:27 PM
22	Elected Official - County Commissioner	11/29/2021 11:40 AM
23	local government	11/29/2021 11:29 AM
24	Forest Fire Supervisor with the Department of Natural Resources. State Gov.	11/29/2021 8:59 AM
25	Fire chief	11/29/2021 7:27 AM

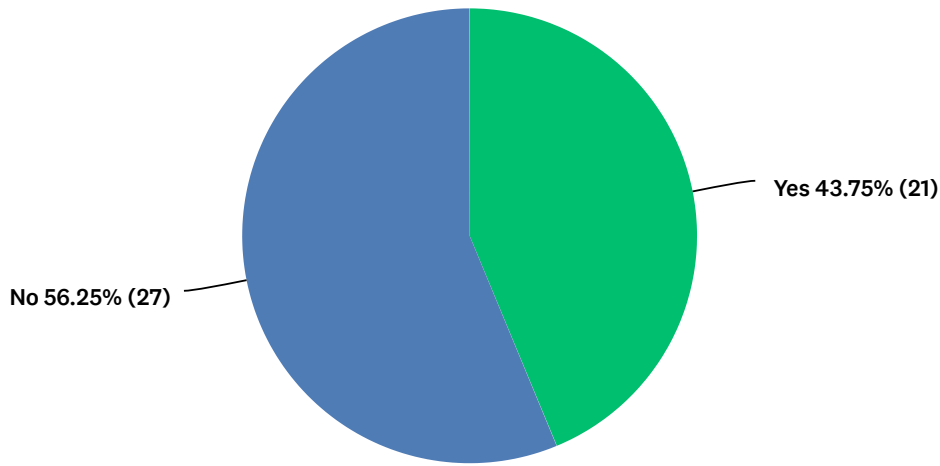
Kalkaska County Hazard Mitigation Community Survey

26	Municipal EMS	11/26/2021 11:58 AM
27	District manager, responsible for day-to-day activities of the District.	11/26/2021 11:41 AM
28	Yes	11/25/2021 1:34 PM
29	Township Trustee	11/24/2021 4:02 PM
30	Fire Chief	11/24/2021 3:19 PM
31	Kalkaska Township Fire Chief	11/24/2021 3:19 PM
32	Kalkaska Commission on Aging	11/24/2021 3:15 PM
33	Fire Department - Captain	11/24/2021 3:14 PM
34	Citizen	11/24/2021 3:00 PM
35	Township Clerk	11/16/2021 10:02 AM
36	Director of non-profit whose service are covers major portions of Kalkaska County	11/10/2021 3:14 PM
37	Michigan State Police - Law Enforcement	11/9/2021 11:16 AM
38	Adjacent County EM	11/9/2021 8:43 AM
39	Public Transportation Director	11/9/2021 7:57 AM
40	Road commission	11/8/2021 6:19 PM
41	Supervisor	11/8/2021 4:08 PM
42	Trustee	11/8/2021 1:49 PM
43	Cold springs Township Supervisor	11/8/2021 1:10 PM
44	village council	11/8/2021 12:33 PM
45	Fire Chief Twp Trustee	11/8/2021 12:16 PM
46	District Health Dept. #10	11/8/2021 11:42 AM
47	Township Clerk	11/8/2021 11:26 AM
48	Supervisor	11/8/2021 11:22 AM

Q3 Are you familiar with the county's Natural Hazard Mitigation Plan?

Answered: 48 Skipped: 0

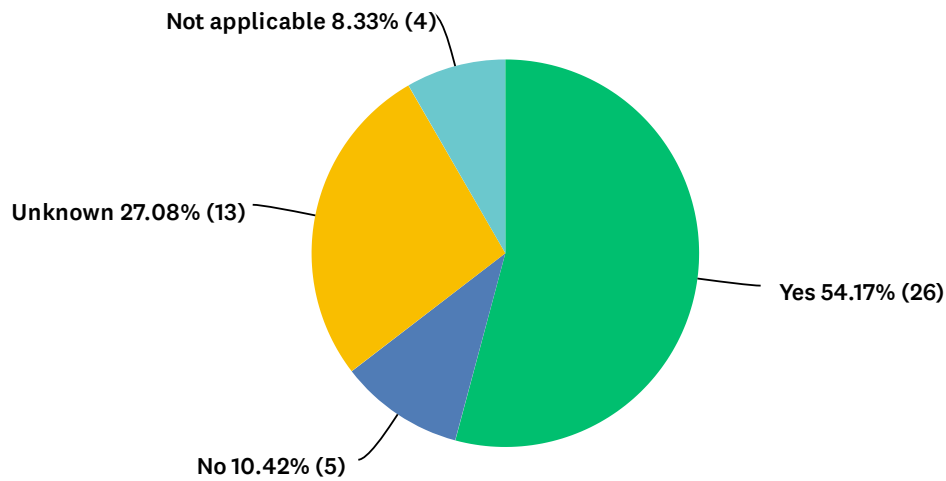
Kalkaska County Hazard Mitigation Community Survey



ANSWER CHOICES	RESPONSES	
Yes	43.75%	21
No	56.25%	27
TOTAL		48

Q4 Does the community you represent have an adopted Master Plan?

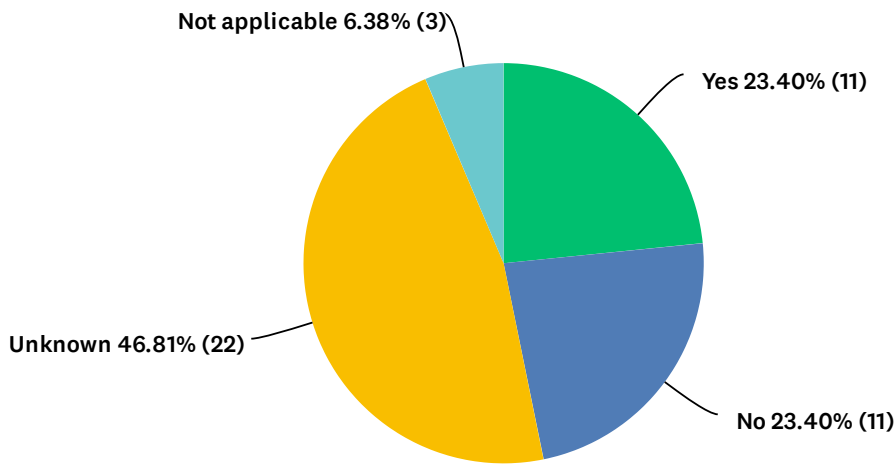
Answered: 48 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	54.17%	26
No	10.42%	5
Unknown	27.08%	13
Not applicable	8.33%	4
TOTAL		48

Q5 Does the community you represent have an adopted Capital Improvements Plan?

Answered: 47 Skipped: 1

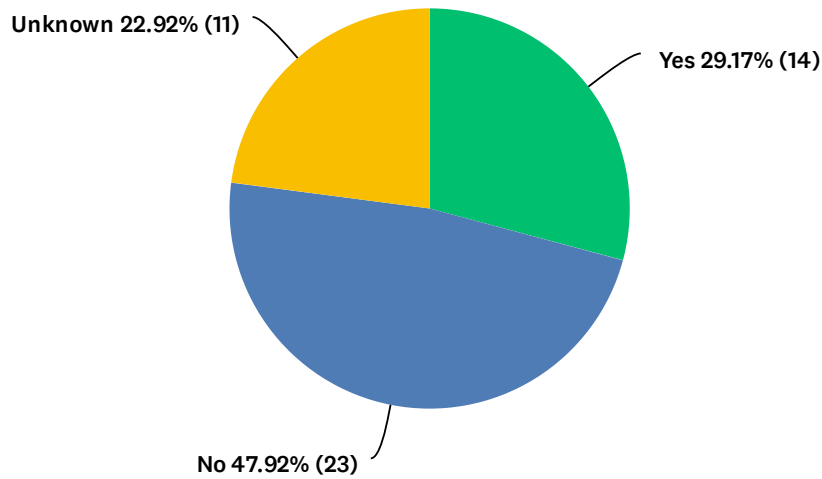


ANSWER CHOICES	RESPONSES	
Yes	23.40%	11
No	23.40%	11
Unknown	46.81%	22
Not applicable	6.38%	3
TOTAL		47

Q6 Has the community you represent experienced a significant natural hazard event within the last 10 years?

Answered: 48 Skipped: 0

Kalkaska County Hazard Mitigation Community Survey



ANSWER CHOICES	RESPONSES
Yes	29.17% 14
No	47.92% 23
Unknown	22.92% 11
TOTAL	48

Q7 If so, what was the nature of the event?

Answered: 28 Skipped: 20

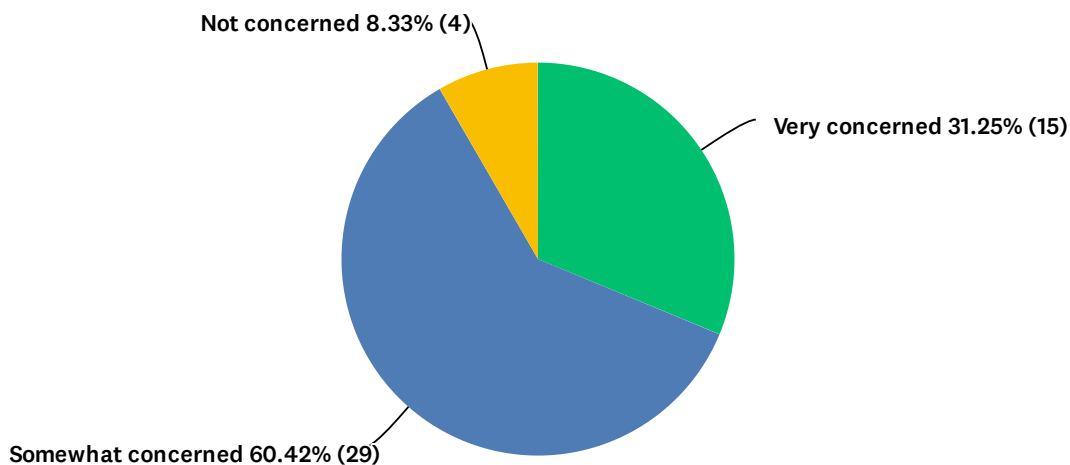
#	RESPONSES	DATE
1	Na	1/10/2022 11:21 AM
2	Windstorm 2016	12/28/2021 3:57 PM
3	Significant and extended power outage due to a winter storm	12/15/2021 9:33 AM
4	Na	12/14/2021 9:40 PM
5	N/A	12/8/2021 3:35 PM
6	Possibly insect infestation such as emerald ash beetle, or Oak wilt, and other threats that have killed various types of trees. deforestation rate	12/5/2021 10:56 AM
7	None	12/2/2021 3:43 AM
8	2015 extreme winds that took down major amount of trees and electric lines	11/30/2021 12:20 PM
9	None	11/30/2021 12:07 PM
10	Fire and Flooding	11/29/2021 11:40 AM
11	trees	11/29/2021 11:29 AM
12	Wildfires across the state	11/29/2021 8:59 AM
13	NA	11/26/2021 11:58 AM
14	Flooding	11/26/2021 11:41 AM

Kalkaska County Hazard Mitigation Community Survey

15	Na	11/25/2021 1:34 PM
16	Straight line winds and 5 to 7 inches of rain fall in 3 hrs	11/24/2021 4:02 PM
17	N/A	11/24/2021 3:19 PM
18	Tornados, forest fires	11/24/2021 3:19 PM
19	Does COVID apply? If not, then I don't know.	11/24/2021 3:15 PM
20	NA	11/24/2021 3:00 PM
21	Tornado	11/16/2021 10:02 AM
22	Unknown	11/9/2021 11:16 AM
23	Straight line winds, tornadoes	11/9/2021 8:43 AM
24	N/A	11/8/2021 1:10 PM
25	Straight line winds	11/8/2021 12:16 PM
26	Winter Storms Pandemic	11/8/2021 11:42 AM
27	Snowstorm with electricity outage for 5 days.	11/8/2021 11:26 AM
28	Unknown	11/8/2021 11:22 AM

Q8 How concerned are you about future natural hazard events impacting your community?

Answered: 48 Skipped: 0



ANSWER CHOICES	RESPONSES	
Very concerned	31.25%	15
Somewhat concerned	60.42%	29
Not concerned	8.33%	4
TOTAL		48

Q9 What type of natural hazard events are likely to have the largest impact on your community, for example fire, flood, drought, illness outbreak, etc.?

Answered: 48 Skipped: 0

#	RESPONSES	DATE
1	Fire	1/10/2022 11:21 AM
2	Weather events.	12/28/2021 3:57 PM
3	I'm mostly concerned with Rugg Pond, Boardman River outside of Kalkaska Village limits, water tower.	12/15/2021 9:33 AM
4	Tornado or wind damage	12/14/2021 9:40 PM
5	blizzards, forest fire, pandemics,	12/14/2021 4:19 PM
6	From my county functions, flooding is my primary concern. There are many low areas in the county that are prone to localized flooding, particularly during the Spring snow melt. Covid has made clear that significant illness breakout is also a county wide concern.	12/14/2021 1:02 PM
7	Forest Fire	12/9/2021 2:57 PM
8	Fire	12/8/2021 3:35 PM
9	Fire is always at risk in our forests. We have a pond collecting a huge amount of silt, (Rugg Pond) will need attention soon.	12/5/2021 10:56 AM
10	fire, flood	12/3/2021 12:39 PM
11	tornadoes, fire, pandemic	12/2/2021 10:09 AM
12	Fire/ Illness	12/2/2021 7:15 AM
13	Fire,flood	12/2/2021 3:43 AM
14	fire, illness outbreak	12/1/2021 9:31 AM
15	fire, flood, drought, illness, wind, snow, ice, and more	11/30/2021 12:20 PM
16	Tornado	11/30/2021 12:07 PM
17	Tornado's - Forest Fires	11/29/2021 8:37 PM
18	Fires and weather related incidents	11/29/2021 4:59 PM
19	Wildfire and snow storm to eliminate electrical power in the county.	11/29/2021 2:19 PM
20	Illness and outbreak have been the most significant and recent hazardous event that I can recall.	11/29/2021 12:52 PM
21	illness outbreak or tornado/blizzard	11/29/2021 12:27 PM
22	Fire, Flood, Tornado, Any Event that caused Electrical Gride Failure	11/29/2021 11:40 AM
23	winds	11/29/2021 11:29 AM
24	Wlldfires	11/29/2021 8:59 AM
25	Weather	11/29/2021 7:27 AM
26	Snow Storms	11/26/2021 11:58 AM
27	flooding, forest fire, wind storms, drought, global pandemic	11/26/2021 11:41 AM
28	Fire	11/25/2021 1:34 PM
29	Wind, heavy rain fall, ice storm loss of power grid and wild land fires	11/24/2021 4:02 PM

Kalkaska County Hazard Mitigation Community Survey

30	Fire, drought, illness, weather related	11/24/2021 3:19 PM
31	Wind events, large snowfalls, wildfires	11/24/2021 3:19 PM
32	Rugg Pond concerns with the dam, illness outbreaks, power outages for area seniors, especially in the winter	11/24/2021 3:15 PM
33	Tornado Wild land fire	11/24/2021 3:14 PM
34	Fire	11/24/2021 3:00 PM
35	Flood, Tornado, Fire	11/16/2021 10:02 AM
36	Flood	11/10/2021 3:14 PM
37	Illness outbreak, gas/oil leaks, cell tower infrastructure takeover/destruction	11/9/2021 11:16 AM
38	fire, epidemic, tornado/winds	11/9/2021 8:43 AM
39	Weather related. Winter Storm/Blizzard Tornado	11/9/2021 7:57 AM
40	If the heat goes out and the snow gets deep the old county road garage could collapse, the loss of multiple plow trucks in the winter could be devastating.	11/8/2021 6:19 PM
41	Unknown	11/8/2021 4:08 PM
42	Storm damage	11/8/2021 1:49 PM
43	Contaminated well water	11/8/2021 1:10 PM
44	fire and illness	11/8/2021 12:33 PM
45	Ice storm Loss of electric grid	11/8/2021 12:16 PM
46	Winter Storm/Power Outage Illness Outbreak Fire	11/8/2021 11:42 AM
47	Storms	11/8/2021 11:26 AM
48	All the above	11/8/2021 11:22 AM

**Q10 Does your community have concerns about infrastructure (dams, bridges, utilities, etc.) and the potential for a hazardous event in the future?
Please describe.**

Answered: 41 Skipped: 7

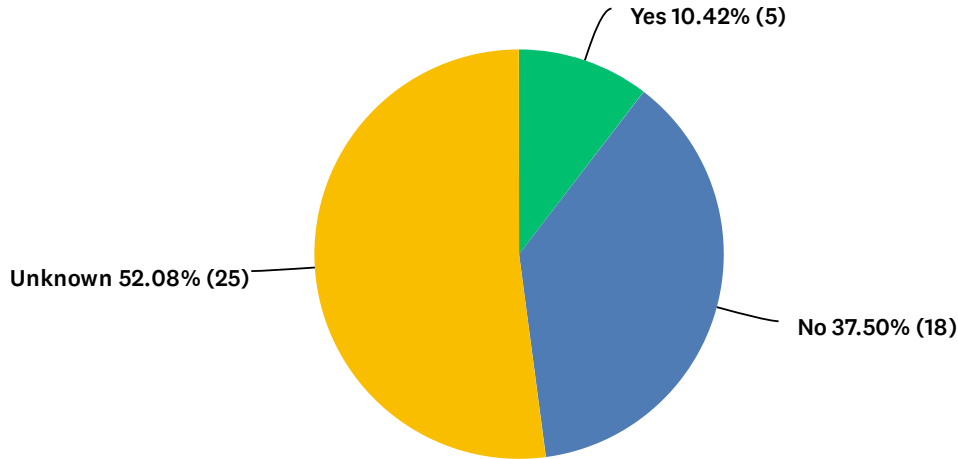
#	RESPONSES	DATE
1	No	1/10/2022 11:21 AM
2	Softness of infrastructure to attack.	12/28/2021 3:57 PM
3	Yes, concerns over Rugg Pond dam.	12/15/2021 9:33 AM
4	No	12/14/2021 9:40 PM
5	power outages but mostly lack of broadband to communicate with people	12/14/2021 4:19 PM
6	Electric lines,	12/9/2021 2:57 PM
7	Unknown	12/8/2021 3:35 PM
8	We have multiple roads that have consistent water damage with heavy rain. (Zimmerman Road, Gillet Road) Bridges are old and sketchy on Rapid City Road and the rapid river, as well as Crystal Beach Road crossing the Torch River	12/5/2021 10:56 AM
9	some	12/3/2021 12:39 PM

Kalkaska County Hazard Mitigation Community Survey

10	In areas of our township cell reception is very poor. For instance my phone works at home on the east side of the township but when I go into work at the township hall I can not make or receive calls or texts. A few weeks ago we had severe weather, many trees were down and power was out. I went into work, we have a generator. The Planning Commission was meeting that morning also. We had no phone service at the hall (through Spectrum) no internet, couldn't print anything off our computers due to the wireless set up that was down, but most importantly we had absolutely no way to communicate with anyone. If there would have been an emergency event we would have been unable to contact anyone for help. That is very scary!!	12/2/2021 7:15 AM
11	Bridges,pipeline	12/2/2021 3:43 AM
12	no	12/1/2021 9:31 AM
13	Yes, dams, utilities, roads,	11/30/2021 12:20 PM
14	No	11/30/2021 12:07 PM
15	Power Outages	11/29/2021 8:37 PM
16	Yes, as we want to ensure the local infrastructure will allow for response from various entities to a hazardous situation.	11/29/2021 12:52 PM
17	no	11/29/2021 12:27 PM
18	We have the Rugg Pond Dam that is being monitored and evaluated Annually	11/29/2021 11:40 AM
19	culvert washouts	11/29/2021 11:29 AM
20	We have 2 dams	11/29/2021 7:27 AM
21	Power grid	11/26/2021 11:58 AM
22	Yes; undersize culverts leading to road failure in floods, potential for homes lost to wildfire on eastern 1/2 of county	11/26/2021 11:41 AM
23	NA	11/25/2021 1:34 PM
24	Rugg Pond dam failure or overtopping in Rapid River Twp	11/24/2021 4:02 PM
25	?	11/24/2021 3:19 PM
26	County yes. Township no.	11/24/2021 3:19 PM
27	Rugg Pond dam. I believe the county is working on a plan for Rugg Pond though	11/24/2021 3:15 PM
28	No	11/24/2021 3:00 PM
29	County Road 571 Flooding	11/16/2021 10:02 AM
30	Several bridges in the county are listed as severe or poor road stream crossings. There are numerous privately-owned small dams that could fail.	11/10/2021 3:14 PM
31	Yes, utilities and cell towers	11/9/2021 11:16 AM
32	N/A	11/9/2021 8:43 AM
33	We leverage state and federal bridge funds as available	11/8/2021 6:19 PM
34	NA	11/8/2021 4:08 PM
35	No	11/8/2021 1:49 PM
36	Need for wifi improvements	11/8/2021 1:10 PM
37	dont know	11/8/2021 12:33 PM
38	Rugg Pond Dam	11/8/2021 12:16 PM
39	Unknown on specific infrastructure, but yes.	11/8/2021 11:42 AM
40	Utilities	11/8/2021 11:26 AM
41	Yes dam bridges	11/8/2021 11:22 AM

Q11 Has your community requested assistance for mitigation projects in the past?

Answered: 48 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	10.42%	5
No	37.50%	18
Unknown	52.08%	25
TOTAL		48

Q12 If so, was your request granted and what type of project did the request include?

Answered: 22 Skipped: 26

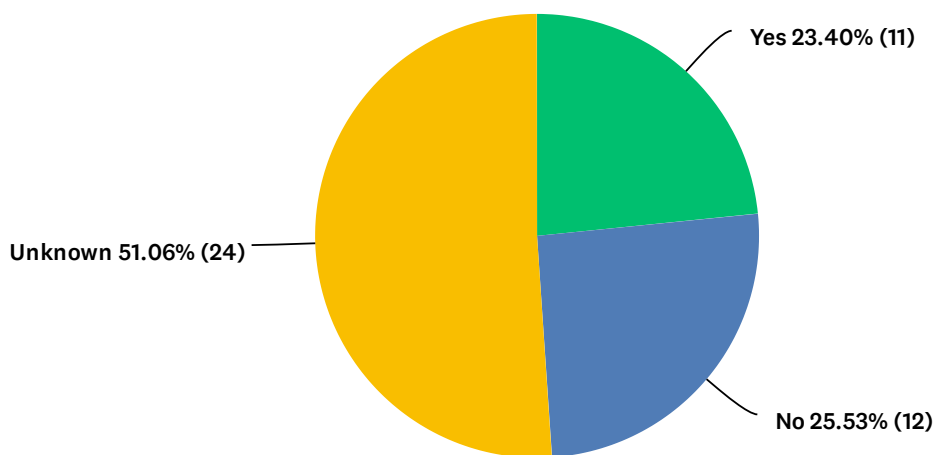
#	RESPONSES	DATE
1	N/a	1/10/2022 11:21 AM
2	FDCVT. Standby generator.	12/28/2021 3:57 PM
3	unknown	12/15/2021 9:33 AM
4	Na	12/14/2021 9:40 PM
5	N/A	12/8/2021 3:35 PM
6	I am fairly new on the planning commission. Less than one year.	12/5/2021 10:56 AM
7	No	12/2/2021 3:43 AM
8	unknown	11/30/2021 12:20 PM
9	No	11/30/2021 12:07 PM

Kalkaska County Hazard Mitigation Community Survey

10	The Rugg Pond	11/29/2021 11:40 AM
11	n/a	11/29/2021 11:29 AM
12	Power generation in Fife Lake	11/26/2021 11:58 AM
13	n/a	11/26/2021 11:41 AM
14	NA	11/24/2021 4:02 PM
15	N/A	11/24/2021 3:19 PM
16	Possibly with assistance putting together the plan before.	11/24/2021 3:15 PM
17	Bridge	11/24/2021 3:00 PM
18	None	11/9/2021 11:16 AM
19	State and federal safety funds are frequently used for unsafe road projects.	11/8/2021 6:19 PM
20	Dna	11/8/2021 12:16 PM
21	n/a	11/8/2021 11:26 AM
22	Unknown	11/8/2021 11:22 AM

Q13 Has your community considered mitigation strategies for potential or current hazards?

Answered: 47 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	23.40%	11
No	25.53%	12
Unknown	51.06%	24
TOTAL		47

Q14 If so, please identify potential strategies you would like to explore in the near future.

Kalkaska County Hazard Mitigation Community Survey

Answered: 23 Skipped: 25

#	RESPONSES	DATE
1	Hardening infrastructure, especially electrical.	12/28/2021 3:57 PM
2	Possibly apply for grant funds to repair the dam.	12/15/2021 9:33 AM
3	Safe place in case of ematgency	12/14/2021 9:40 PM
4	N/A	12/8/2021 3:35 PM
5	Water testing. Ground water testing	12/5/2021 10:56 AM
6	We lease 15 acres to Verizon who has a cell tower on the property which is on the east side of the township adjacent to our fire barn. T-Mobile added hardware two years ago on the tower and we receive a monthly check for the rent of T-Mobile on the tower. We have recently sent a letter to Verizon and T-Mobile to see if it would be possible to place some sort of booster on the west side of the township to improve cell reception and internet service. We own 3 small towers in three separate locations within the township. We bought the towers so the 186 Network (formerly Chain of Lake Internet) could place their apparatus on the towers so that we could leave dial up internet in the past. Those towers brought a lot of our residents the welcome technology out of dial up internet service. Some of our township was still not served by 186 Networks due to the topography of our land. We are ready and willing to partner with someone to provide better cell coverage. We have funds and a desire to commit but need help with partnering with a cell service provider.	12/2/2021 7:15 AM
7	No	12/2/2021 3:43 AM
8	severe weather lake evacuation, Drainage to accomodate extreme downpour or flooding	11/30/2021 12:20 PM
9	No	11/30/2021 12:07 PM
10	Internet availability	11/29/2021 4:59 PM
11	n/a	11/29/2021 11:29 AM
12	Wlldfire response, Initial attach plan, establishing a structural triage plan, identification of known hazards in the urban interface.	11/29/2021 8:59 AM
13	Identify and correct undersize culverts at road stream crossings.	11/26/2021 11:41 AM
14	Shelter for loss of power grid during winter months	11/24/2021 4:02 PM
15	?	11/24/2021 3:19 PM
16	?	11/24/2021 3:15 PM
17	Na	11/24/2021 3:00 PM
18	We will collaborate with Kalkaska County Emergency Management	11/9/2021 11:16 AM
19	We stretch funding for road repairs as far as we can.	11/8/2021 6:19 PM
20	?	11/8/2021 1:10 PM
21	Dna	11/8/2021 12:16 PM
22	Unknown	11/8/2021 11:26 AM
23	Unknown	11/8/2021 11:22 AM

Q15 Is there any additional information you would like us to consider as we update the county's Natural Hazard Mitigation Plan?

Answered: 23 Skipped: 25

Kalkaska County Hazard Mitigation Community Survey

#	RESPONSES	DATE
1	Above.	12/28/2021 3:57 PM
2	Not that I'm aware of at this time.	12/15/2021 9:33 AM
3	No	12/14/2021 9:40 PM
4	N/A	12/8/2021 3:35 PM
5	I would like to see a combined effort to harden our grid, and communication resources.	12/5/2021 10:56 AM
6	I don't believe so.	12/2/2021 7:15 AM
7	No	12/2/2021 3:43 AM
8	x	11/30/2021 12:20 PM
9	No	11/30/2021 12:07 PM
10	Internet availability for hazard notification	11/29/2021 4:59 PM
11	Others can be added when discussed in more detail.	11/29/2021 8:59 AM
12	not at this time	11/26/2021 11:41 AM
13	Not at this time	11/24/2021 4:02 PM
14	I'm not sure. Mike Thompson is doing a great job knowing what should be considered for the county. I'll yield to his expertise.	11/24/2021 3:15 PM
15	No	11/9/2021 11:16 AM
16	Forest fires and tornadoes are our biggest exposure.	11/8/2021 6:19 PM
17	No	11/8/2021 4:08 PM
18	Not at this time.	11/8/2021 1:10 PM
19	none	11/8/2021 12:33 PM
20	.	11/8/2021 12:16 PM
21	No	11/8/2021 11:42 AM
22	We have been discussing using A.R.P.A. monies to set up our hall as a shelter.	11/8/2021 11:26 AM
23	Unknown	11/8/2021 11:22 AM

Q16 Are you interested in serving on the advisory team or being involved in future public engagement events for the plan update? Please share your contact information so we may include you on future invitations.

Answered: 30 Skipped: 18

#	RESPONSES	DATE
1	Yes.	12/28/2021 3:57 PM
2	No	12/14/2021 9:40 PM
3	County CLerk/Administrator 605 N Birch Street Kalkaska, MI 49646	12/14/2021 4:19 PM
4	sphillips@kalkaskacounty.org	12/14/2021 1:02 PM
5	No	12/8/2021 3:35 PM

Kalkaska County Hazard Mitigation Community Survey

6	jleffew.plan.clearwater@gmail.com	12/5/2021 10:56 AM
7	no	12/3/2021 12:39 PM
8	Christine Almose 231-587-9593 home you already have my email bltreas@torchlake.com	12/2/2021 7:15 AM
9	Yes	12/2/2021 3:43 AM
10	not at this time	12/1/2021 9:31 AM
11	x	11/30/2021 12:20 PM
12	No	11/30/2021 12:07 PM
13	Not at this time	11/29/2021 8:37 PM
14	Aaron Popa (231)258-9191 manager@kalkaskavillage.com	11/29/2021 12:27 PM
15	Possibly	11/29/2021 8:59 AM
16	Yes	11/26/2021 11:58 AM
17	Mark Randolph mark.randolph@macd.org	11/26/2021 11:41 AM
18	No	11/24/2021 3:19 PM
19	Sure. I think Mike plans on keeping me informed as well. I'm not sure I have time to be on the advisory team, but I'm happy to help how I can. email is jmagee@kalkaskacounty.org	11/24/2021 3:15 PM
20	No thank you	11/24/2021 3:00 PM
21	Yes Gayenell Gentelia clerk@coldspringstwp.com 231-587-8633	11/16/2021 10:02 AM
22	No	11/9/2021 11:16 AM
23	No	11/8/2021 6:19 PM
24	No	11/8/2021 4:08 PM
25	231 590 2822	11/8/2021 1:10 PM
26	contact....mrl509@sbcglobal.net	11/8/2021 12:33 PM
27	Not at this time	11/8/2021 12:16 PM
28	Bret Haner bhaner@dhd10.org	11/8/2021 11:42 AM
29	No thank you.	11/8/2021 11:26 AM
30	Yes paul.erickson82@live.com 231 564 2203	11/8/2021 11:22 AM