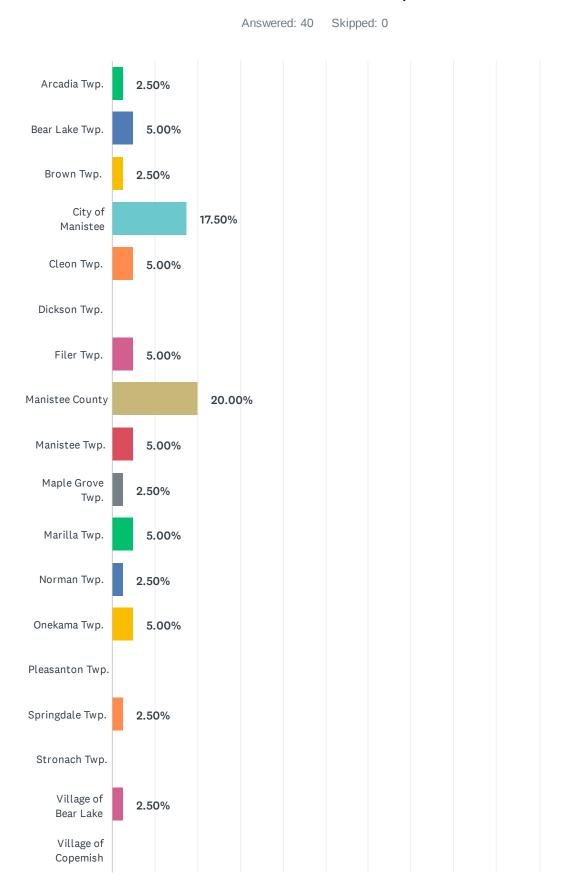
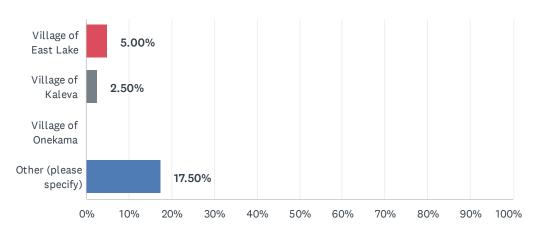
## Q1 Please identify the jurisdiction you represent in Manistee County (may select more than one).





ANSWER CHOICES	RESPONSES	
Arcadia Twp.	2.50%	1
Bear Lake Twp.	5.00%	2
Brown Twp.	2.50%	1
City of Manistee	17.50%	7
Cleon Twp.	5.00%	2
Dickson Twp.	0.00%	0
Filer Twp.	5.00%	2
Manistee County	20.00%	8
Manistee Twp.	5.00%	2
Maple Grove Twp.	2.50%	1
Marilla Twp.	5.00%	2
Norman Twp.	2.50%	1
Onekama Twp.	5.00%	2
Pleasanton Twp.	0.00%	0
Springdale Twp.	2.50%	1
Stronach Twp.	0.00%	0
Village of Bear Lake	2.50%	1
Village of Copemish	0.00%	0
Village of East Lake	5.00%	2
Village of Kaleva	2.50%	1
Village of Onekama	0.00%	0
Other (please specify)	17.50%	7
Total Respondents: 40		

#	OTHER (PLEASE SPECIFY)	DATE
1	Manistee County 911	1/5/2022 8:42 AM
2	Michigan State Police - Manistee County	1/4/2022 3:40 PM
3	Manistee Conservation District	12/16/2021 2:49 PM
4	I live in Norman, but do not represent Norman Township	12/4/2021 4:23 PM
5	Manistee Blacker Airport	12/3/2021 2:47 PM
6	Medical Care Facility	12/3/2021 2:07 PM
7	Munson Manistee	12/3/2021 11:35 AM

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

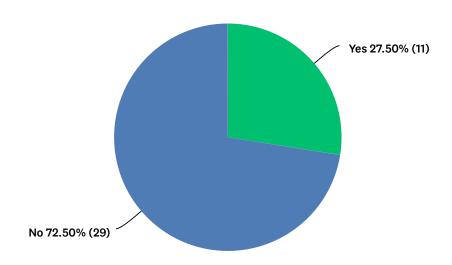
Answered: 39 Skipped: 1

#	RESPONSES	DATE
1	Village employee	2/4/2022 10:13 AM
2	elected official	1/10/2022 10:43 AM
3	elected official	1/6/2022 9:27 AM
4	Township Supervisor	1/5/2022 12:39 PM
5	general law township, supervisor	1/5/2022 9:54 AM
6	Manistee County Emergency Management Coordinator/Manistee 911 Deputy Director	1/5/2022 9:50 AM
7	Township CLerk	1/5/2022 9:04 AM
8	Manistee County 911 Director	1/5/2022 8:42 AM
9	Medical Director - Manistee County Medical Control Authority	1/5/2022 8:38 AM
10	Elected official	1/4/2022 5:04 PM
11	Fire chief Norman township Fire	1/4/2022 4:10 PM
12	Trustee	1/4/2022 4:03 PM
13	Law Enforcement Administrator	1/4/2022 3:40 PM
14	City Council	1/4/2022 2:56 PM
15	Business	12/22/2021 9:40 AM
16	Elected official Township Treasurer	12/17/2021 1:51 PM
17	local government	12/16/2021 2:49 PM
18	Law enforcement	12/14/2021 6:46 PM
19	township clerk	12/11/2021 11:37 AM
20	Planning Commission	12/8/2021 6:19 PM
21	District Health Dept. #10	12/8/2021 1:03 PM
22	Public Works Director	12/7/2021 4:00 PM
23	Village clerk for village of Kaleva	12/7/2021 10:24 AM
24	Clerk	12/6/2021 4:06 PM
25	Maple Grove Township Supervisor	12/6/2021 1:15 PM
26	Citizen; Planning and Zoning Administrator, Manistee County Planning Department	12/6/2021 9:36 AM
27	Cleon Township Clerk	12/6/2021 9:07 AM
28	TES Filer City Station	12/6/2021 8:47 AM
29	Treasurer	12/5/2021 6:33 PM
30	citizen	12/4/2021 4:23 PM
31	Citizen	12/3/2021 11:08 PM

32	Treasurer	12/3/2021 4:02 PM
33	Airport Director	12/3/2021 2:47 PM
34	Medical Care Facility Administrator	12/3/2021 2:07 PM
35	citizen	12/3/2021 1:55 PM
36	American Red Cross Disaster Program Manager	12/3/2021 12:16 PM
37	Manager Safety, Security and Emergency Management	12/3/2021 11:35 AM
38	Township Supervisor	12/3/2021 11:09 AM
39	Elected official.	12/3/2021 10:54 AM

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

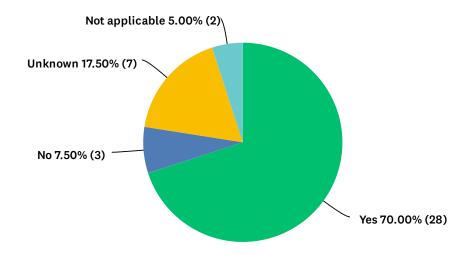
Answered: 40 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	27.50%	11
No	72.50%	29
TOTAL		40

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

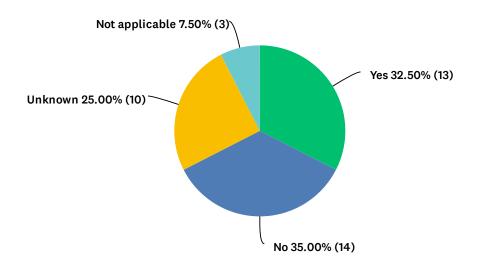
Answered: 40 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	70.00%	28
No	7.50%	3
Unknown	17.50%	7
Not applicable	5.00%	2
TOTAL		40

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

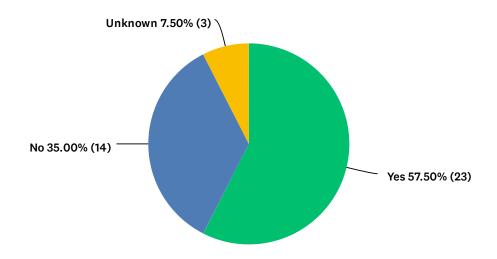
Answered: 40 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	32.50%	13
No	35.00%	14
Unknown	25.00%	10
Not applicable	7.50%	3
TOTAL		40

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

Answered: 40 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	57.50%	23
No	35.00%	14
Unknown	7.50%	3
TOTAL		40

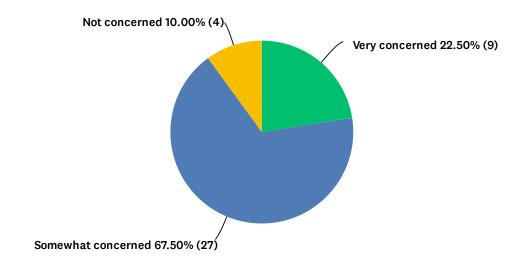
## Q7 If so, what was the nature of the event?

Answered: 24 Skipped: 16

#	RESPONSES	DATE
1	N/A	2/4/2022 10:13 AM
2	Flooding	1/10/2022 10:43 AM
3	We lost a valued park and beach access because of the increased water levels of Lake Michigan.	1/5/2022 12:39 PM
4	damage and loss of property due to high water events	1/5/2022 9:54 AM
5	Sieche	1/5/2022 9:50 AM
6	Seiche high water	1/5/2022 8:42 AM
7	We've had bad storms, High winds etc. Covid-19	1/5/2022 8:38 AM
8	Major thunderstorm with straight line winds and heavy rain, about 2009 Frequent high winds and sewer overflow from heavy rains Shoreline erosion, river walk erosion	1/4/2022 5:04 PM
9	Wild land fire	1/4/2022 4:10 PM
10	Flooding, Wind storms, Covid-19	1/4/2022 3:40 PM
11	Weather	1/4/2022 2:56 PM
12	Straight line wind storms (considered an abnormal weather event) took place in late summer 2021. Flooding events partly tied to effects from climate change occurred in 2019 and 2020. Erosion of dunes along Lake Michigan, while a normal part of the ecology of dune ecosystems, may be accelerated due to climate change impacts and has raised concerns in terms of being "hazardous" due to the proximity of structures being so close to eroding dunes along Lake Michigan.	12/16/2021 2:49 PM
13	N/A	12/8/2021 6:19 PM
14	Covid 19	12/8/2021 1:03 PM
15	Meteo Sunami, Straightline winds, Flooding, Winter Storms	12/7/2021 4:00 PM
16	Power outage due to snow	12/6/2021 9:07 AM
17	7/21/2016 ~12" of rain caused localized flooding	12/6/2021 8:47 AM
18	High water	12/5/2021 6:33 PM
19	Greater than 100 year flood event (Pine Creek).	12/4/2021 4:23 PM
20	High water	12/4/2021 9:12 AM
21	winter weather and erosion	12/3/2021 1:55 PM
22	Wildfire, Flood, Lakeshore flooding, straight-line winds, Multi-Family Fires	12/3/2021 12:16 PM
23	Chemical event, Active Shooter, other	12/3/2021 11:35 AM
24	High water levels on Lake Michigan and connecting water ways.	12/3/2021 10:54 AM

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

Answered: 40 Skipped: 0



ANSWER CHOICES	RESPONSES	
Very concerned	22.50%	9
Somewhat concerned	67.50%	27
Not concerned	10.00%	4
TOTAL		40

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

Answered: 40 Skipped: 0

#	RESPONSES	DATE
1	High winds	2/4/2022 10:13 AM
2	illness outbreak	1/10/2022 10:43 AM
3	high winds, flooding, possibly fires	1/6/2022 9:27 AM
4	Lake Michigan water levels for our Municipal Veterans Marina and shoreline access.	1/5/2022 12:39 PM
5	high winds and high water	1/5/2022 9:54 AM
6	High Winds, Flooding, Wild Fires	1/5/2022 9:50 AM
7	All of the above. Depending the severity	1/5/2022 9:04 AM
8	High Winds Flood	1/5/2022 8:42 AM
9	Storms and flooding	1/5/2022 8:38 AM
10	High winds, flood, heavy rain, future pandemics, heavy snowfall	1/4/2022 5:04 PM
11	Wild land fire	1/4/2022 4:10 PM
12	fire & winds	1/4/2022 4:03 PM
13	Flooding, winds, illness	1/4/2022 3:40 PM
14	high winds and floods	1/4/2022 2:56 PM
15	high winds, flood	12/22/2021 9:40 AM
16	High winds, illness outbreak, flood	12/17/2021 1:51 PM
17	High-intensity storms with drought periods between these storms during parts of the summer (i.e., erratic weather patterns), flooding events, and accelerated erosion beyond normal dune erosion, are all concerns.	12/16/2021 2:49 PM
18	Flooding	12/14/2021 6:46 PM
19	fires	12/11/2021 11:37 AM
20	Fire, drought, high winds, electrical outage, dam failure, pollution of waterways, pandemic results	12/8/2021 6:19 PM
21	Power Outage/Winter Storm Illness Outbreak	12/8/2021 1:03 PM
22	High Winds, Flooding	12/7/2021 4:00 PM
23	High winds	12/7/2021 10:24 AM
24	fire, high winds, illness, loss of water to our wells, village storm water drain collapse.	12/6/2021 4:06 PM
25	High Winds, drought, illness	12/6/2021 1:15 PM
26	High winds, flooding, illness outbreak, extreme heat/cold events	12/6/2021 9:36 AM
27	high winds?	12/6/2021 9:07 AM
28	Ice, high winds, illness outbreak	12/6/2021 8:47 AM
29	future high water, high winds	12/5/2021 6:33 PM

30	Forest fire, high winds, blizzard, flood/major rain.	12/4/2021 4:23 PM
31	High water events	12/4/2021 9:12 AM
32	fire, high winds, illness	12/3/2021 11:08 PM
33	Fire, winds, flood, drought, illness and outbreaks.	12/3/2021 4:02 PM
34	fire, high winds, flooding, lightning	12/3/2021 2:47 PM
35	Illness outbreak	12/3/2021 2:07 PM
36	wild fires, dam breeches, erosion, winter weather	12/3/2021 1:55 PM
37	fire, wildfire, flood, straight-line winds, long-term power outage.	12/3/2021 12:16 PM
38	Weather related, Illness outbreak	12/3/2021 11:35 AM
39	Ice storms, high winds/tornados, wildfires, flood.	12/3/2021 11:09 AM
40	Flood and erosion from high Lake Michigan levels.	12/3/2021 10:54 AM

# Q10 Does your community have concerns about infrastructure (dams, bridges, utilities, etc.) withstanding a natural hazard event in the future? Please describe.

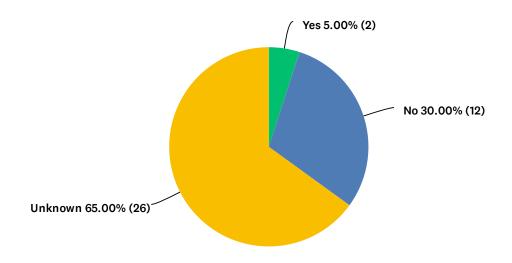
Answered: 35 Skipped: 5

#	RESPONSES	DATE
1	Unable to answer	2/4/2022 10:13 AM
2	Yes. Flood impacting septic systems surrounding the lake	1/10/2022 10:43 AM
3	The biggest issues would be related to power outages due primarily high winds, which would affect the operation of our water and sewer infrastructure.	1/6/2022 9:27 AM
4	Yes	1/5/2022 12:39 PM
5	none at present time	1/5/2022 9:54 AM
6	We are always concerned of a possible dam failure as we have 2 in the county.	1/5/2022 9:50 AM
7	If the Dams failed or the bridges over the river failed	1/5/2022 8:42 AM
8	Tippy Dam and the several bridges across the rivers	1/5/2022 8:38 AM
9	Yes. Utilities, road washouts, downstream from dam, shoreline erosion, aging bridges	1/4/2022 5:04 PM
10	Tippy Dam	1/4/2022 4:10 PM
11	Unknown	1/4/2022 3:40 PM
12	yes	12/22/2021 9:40 AM
13	Utilities	12/17/2021 1:51 PM
14	Yes. Flooding events in combination with erratic weather patterns tied to storms can impact dams and bridges, culverts (particularly those that are improperly sized based on current specifications), and homes. Also dune erosion that exceeds normal historic dune erosion can impact homes and other structures that are close to Lake Michigan.	12/16/2021 2:49 PM
15	Aging infrastructure, such as sewers, bridges ect	12/14/2021 6:46 PM
16	The only dam was Thompsonville dam which was privately owned and blew out many years ago.	12/11/2021 11:37 AM
17	Would like broadband services. We are greatly underserved.	12/8/2021 6:19 PM
18	Yes	12/8/2021 1:03 PM
19	Yes, High Wind events can impact trees, utilities and communication, shoreline flooding and erosion. Heavy rainfalls can exceed capacity of storm water systems and our sanitary sewers can be impacted by illicit connections.	12/7/2021 4:00 PM
20	No	12/7/2021 10:24 AM
21	utilities	12/6/2021 4:06 PM
22	From my experience with MI bridge data, bridges in MI are generally out of date and due for improvement. I would imagine the bridges in the City of Manistee are due for improvement.	12/6/2021 9:36 AM
23	no	12/6/2021 9:07 AM
24	utilities	12/6/2021 8:47 AM
25	no	12/5/2021 6:33 PM
26	Electric and telephone utilities.	12/4/2021 4:23 PM

27	No	12/4/2021 9:12 AM
28	Yes, roads and boat ramp areas	12/3/2021 4:02 PM
29	Without electric service, the Airport can't opperate	12/3/2021 2:47 PM
30	No	12/3/2021 2:07 PM
31	Tippy and Hodynpile Dams.	12/3/2021 1:55 PM
32	Unknown	12/3/2021 12:16 PM
33	None come to mind	12/3/2021 11:35 AM
34	Our township has the Hodenpyle Dam.	12/3/2021 11:09 AM
35	Shore line erosion.	12/3/2021 10:54 AM

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

Answered: 40 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	5.00%	2
No	30.00%	12
Unknown	65.00%	26
TOTAL		40

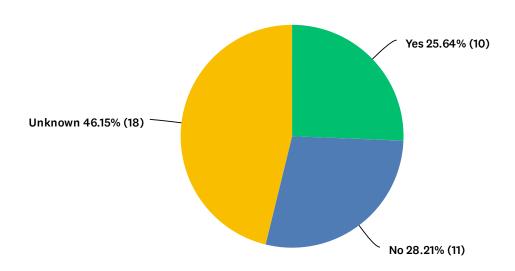
# Q12 If so, was your request granted and what type of project did the request include?

Answered: 11 Skipped: 29

#	RESPONSES	DATE
1	Unknown	2/4/2022 10:13 AM
2	Not granted. Sewer System	1/10/2022 10:43 AM
3	Unknown	1/5/2022 9:50 AM
4	unknown	1/5/2022 8:42 AM
5	unknown	1/5/2022 8:38 AM
6	Unknown	1/4/2022 3:40 PM
7	N/A	12/8/2021 6:19 PM
8	unknown	12/7/2021 4:00 PM
9	unknown	12/6/2021 8:47 AM
10	-	12/4/2021 4:23 PM
11	Unknown	12/3/2021 10:54 AM

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

Answered: 39 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	25.64%	10
No	28.21%	11
Unknown	46.15%	18
TOTAL		39

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

Answered: 16 Skipped: 24

#	RESPONSES	DATE
1	N/A	2/4/2022 10:13 AM
2	Collaborating with local entities	1/10/2022 10:43 AM
3	Currently working on updating our hazard mitigation	1/5/2022 9:50 AM
4	updating our hazard mitigation Plan	1/5/2022 8:42 AM
5	There are meetings with the staff from the dam about safety & response to crisis	1/5/2022 8:38 AM
6	Explore federal funding options for improving infrastructure. Adjust building codes for flood zones, adjust building codes for higher wind rating. Consider public purchase of damaged structures in flood zones and return them to their natural state	1/4/2022 5:04 PM
7	Evacuations in case of large scale wild land fire	1/4/2022 4:10 PM
8	Unkonwn	1/4/2022 3:40 PM
9	we have plans for flood disasters, and evcauation plans	12/22/2021 9:40 AM
10	Some landowners along Lake Michigan are hiring contractors to modify the slope of their dune, placing riprap, constructing sea walls, or taking other measures to address shoreline erosion on their specific parcel - In the future we would like to increase the frequency of educational events where the topic is the ecology and dynamics of the Great Lakes and shoreline ecosystems, as well as the importance of native plant communities, placement of structures, etc. We would also like to explore financial opportunities for landowners wanting to address shoreline erosion that is causing issues with their structures (such as homes collapsing into Lake Michigan). We would also like to explore and better understand options for landowners whose forests are leveled by abnormal windstorms - this might include options such as disaster relief provided by Farm Service Agency.	12/16/2021 2:49 PM
11	We do recognize and have discussed our lack of tech accessibility.	12/8/2021 6:19 PM
12	flood mitigation projects eliminating illicit connections and implementing a wet weather corrective action program annual tree removal and trimming	12/7/2021 4:00 PM
13	unknown	12/6/2021 8:47 AM
14	-	12/4/2021 4:23 PM
15	More space to spread out people in a congregate setting	12/3/2021 2:07 PM
16	Unknown	12/3/2021 10:54 AM

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

Answered: 19 Skipped: 21

#	RESPONSES	DATE
1	No	2/4/2022 10:13 AM
2	no	1/10/2022 10:43 AM
3	unknown	1/5/2022 9:50 AM
4	none	1/5/2022 8:42 AM
5	not that I can think of	1/5/2022 8:38 AM
6	Not sure of what is available	1/4/2022 4:10 PM
7	No	12/17/2021 1:51 PM
8	No.	12/11/2021 11:37 AM
9	Can't think of any at the moment.	12/8/2021 6:19 PM
10	No	12/8/2021 1:03 PM
11	no	12/7/2021 4:00 PM
12	No thanks	12/7/2021 10:24 AM
13	will each government entity be named? Is this just a blanket covering for the county?	12/6/2021 4:06 PM
14	When working on the Hazard Mitigation plan in Genesee County, the COVID pandemic had just begun. I know that it was a requirement to include pandemics/illness outbreak as a potential natural disaster and include it in the rankings.	12/6/2021 9:36 AM
15	none	12/6/2021 8:47 AM
16	-	12/4/2021 4:23 PM
17	No	12/3/2021 2:07 PM
18	If it is not already included, specific plans for a dam breech.	12/3/2021 11:09 AM
19	How can the Corps of Engineers help control erosion problems along the Lake MI shore line and connecting water ways?	12/3/2021 10:54 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: 25 Skipped: 15

#	RESPONSES	DATE
1	No	2/4/2022 10:13 AM
2	not at this time	1/10/2022 10:43 AM
3	no	1/6/2022 9:27 AM
4	Yes	1/5/2022 12:39 PM
5	I would consider future public engagement. D.R. Bjorkquist, supervisormanisteetownship@gmail.com	1/5/2022 9:54 AM
6	Yes	1/5/2022 9:50 AM
7	no	1/5/2022 9:04 AM
8	Jim Espvik 1527 E Parkdale Ave Manistee Mi 49660 jespvik@manisteecountymi.gov 231-723-2843 office 231-690-2911 Cell	1/5/2022 8:42 AM
9	no	1/5/2022 8:38 AM
10	Jack VanderBie 231-510-2939 140firechiefjack@gmail.com	1/4/2022 4:10 PM
11	I would be glad to help where a law-enforcement representative is needed.	1/4/2022 3:40 PM
12	Possibly	12/17/2021 1:51 PM
13	We are happy to provide technical assistance, but are currently at capacity in terms of serving on committees.	12/16/2021 2:49 PM
14	Not at this time, but am glad that governmental units are being asked to think about these things and to develop plans to address issues.	12/8/2021 6:19 PM
15	Bret Haner bhaner@dhd10.org	12/8/2021 1:03 PM
16	yes	12/7/2021 4:00 PM
17	No	12/7/2021 10:24 AM
18	Yes	12/6/2021 1:15 PM
19	Andy Bradford 1115 Red Apple Road Manistee, Mi 49660 (231)-299-5604	12/6/2021 8:47 AM
20	-	12/4/2021 4:23 PM
21	No, thank you.	12/3/2021 2:07 PM
22	yes	12/3/2021 12:16 PM
23	Time permitting Fred Craigin Manager Safety, Security and Emergency Management fcraigin@mhc.net 231-398-1395	12/3/2021 11:35 AM
24	I am unable to add any more community service to my plate at this point.	12/3/2021 11:09 AM
25	Gschwaiger@ManisteeCountyMI.gov	12/3/2021 10:54 AM