

BENZIE COUNTY BOARD OF COMMISSIONERS

448 COURT PLACE – BEULAH, MI 49617 – (231) 882-9671

www.benzieco.net

MEETING AGENDA

May 23, 2023

Frank F. Walterhouse Board Room, Governmental Center, Beulah, Michigan

Join Meeting

Please click the link below to join the webinar:

www.youtube.com/@BenzieCounty

PLEASE TURN OFF ALL CELL PHONES OR SWITCH THEM TO VIBRATE

9:00 a.m.

CALL TO ORDER

ROLL CALL

INVOCATION AND PLEDGE OF ALLEGIANCE

TRIBUTES PRESENTED BY BOARD CHAIR:

National EMS week, May 21 – 27, 2023

APPROVAL OF AGENDA

APPROVAL OF MINUTES – Regular 5/9/23; Closed 5/9/23

PUBLIC HEARING: Hazard Mitigation Plan

PUBLIC COMMENT

FINANCE –

A) Approval of Bills

ELECTED OFFICIALS & DEPT HEAD COMMENTS

ACTION ITEMS –

A) Consider accepting the 2021/2022 audit

B) Adopt Benzie County Strategic Priorities and Goals, to include discussion requested by Commissioner Cunningham.

C) Consider adopting the Cyber Incident Policy

D) Consider adopting the Personnel File Policy

E) Consider adopting the Bomb-Swatting Threat Policy

F) Consider adopting the Fraud Policy

G) Consider adopting the Tobacco-Smoke Free Policy

H) Consider adopting the Adoption and Administration Policy

I) Consider adopting the Disciplinary Action Policy

J) Consider adopting the Nepotism Policy

K) Consider entering into a contract for Equalization Fieldwork services.

L) Approve copy machines and service agreements with Netlink for Sheriff's Office

M) Approve 2% tribal grant application for full body scanner

COMMISSIONER REPORTS –

COUNTY ADMINISTRATOR'S REPORT – Katie Zeits

STUDY SESSION - 5/9/23 - None

COMMITTEE APPOINTMENTS -

UNFINISHED BUSINESS –

NEW BUSINESS –

PRESENTATION:

9:30 a.m. Closed Session to discuss strategy and negotiation of the FOPLC Deputy collective bargaining unit, as authorized by MCL 15.268(c).

10:00 a.m. Terry VanderCook, Networks Northwest, present annual report, and services provided to Benzie County

PRESENTATION OF CORRESPONDENCE

PUBLIC COMMENT

ADJOURNMENT

Times Subject to Change

PUBLIC COMMENT

Purpose: The Benzie County Board of Commissioners is a public policy setting body and subject to the Open Meetings Act (PA 267 of 1976). The Board also operates under a set of “Benzie County Board Rules (section 7.3)” which provides for public comment during their meetings. It continually strives to receive comment from the residents of the county and reserves two opportunities during the monthly scheduled meeting for you the public to voice opinions, concerns and sharing of any other items of common interest. There are however, in concert with meeting conduct certain rules to follow.

Speaking Time: Agenda items may be added or removed by the board but initially at least two times are devoted to Public Comment. Generally, however, attendees wishing to speak will be informed how long they may speak by the chairman. All speakers are asked to give their name, residence and topic they wish to address. This and the statements/comments will be entered into the public record (minutes of the meeting). Should there be a number of speakers wishing to voice similar opinions, an option for a longer presentation may be more appropriate for the group and one or more speakers may talk within that time frame. The Board will not be accepting public comment via zoom/online.

Group Presentations – 15 minutes
Individual Presentations – 3 minutes

Board Response: Generally, as this is an “Comment” option, the board will not comment or respond to presenters. Silence or non-response from the board should not be interpreted as disinterest or disagreement by the board. However, should the board individually or collectively wish to address the comments of the speaker(s) at the approval of the Chair and within a time frame previously established, responses may be made by the board. Additionally, the presenter may be in need of a lengthier understanding of an issue or topic and may be referred to a committee appropriate to address those issues.

Public Comment is very important in public policy settings and is only one means for an interchange of information or dialogue. Each commissioner represents a district within the county, and he/she may be individually contacted should greater depth or understanding of an issue be sought. Personal contact is encouraged and helpful to both residents and the board.

Commissioner Contacts:

District	I – Bob Roelofs (Almira East of Reynolds Road).....	231-645-1187
District	II - Art Jeannot (Almira Twp West of N. Reynolds Road, Platte Twp, Lake Twp East of Sutter Rd, and Inland Twp section 1-6, section 7 lying west of Maple City Hwy, north of US-31)	231-920-5028
District	III – Karen Cunningham (Crystal Lake, Frankfort and Lake Twp, at Sutter Road going West)	231-822-4067
District	IV – Rhonda Nye (Benzonia Twp, except for sections 31, 36 and 35 East of Case Road).....	231-510-8804
District	V – Tim Markey (Homestead and Benzonia Twp sections 31, 36 and 35 West of Case Road).....	231-822-4066
District	VI - Evan Warsecke (Colfax, Inland except sections 1-6, section 7 lying west of Maple City Hwy and North of US-31).....	231-822-4065
District	VII - Gary Sauer (Blaine, Gilmore, Joyfield, Weldon)	231-651-0647

January 3, 2023



Tribute to National Emergency Medical Services Week **May 21-27, 2023**

With compassion, determination, and skill, EMS providers embody the best of our Nation. Paramedics and emergency medical technicians provide aid after medical emergencies and disasters and ease our suffering in countless ways. The unwavering commitment of Benzie County EMS to public service often comes at the cost of their own physical well-being, mental health, and precious time with loved ones.

Emergency medical services are a vital public service to the people and our community. The members of Benzie County's EMS teams are ready to provide lifesaving care to those in need 24 hours a day, seven days a week. It is known that access to quality emergency care dramatically improves the survival and recovery rate of those who experience sudden illness or injury and the staff of Benzie County EMS have grown to fill a gap by providing important, out of hospital care, including preventative medicine, follow-up care, and access to telemedicine.

During Emergency Medical Services Week, we share our appreciation for the selfless EMS professionals who provide lifesaving services every day and risk their lives each time they answer the call of service. Our Nation and our County owe a tremendous debt of gratitude to these heroes and their loved ones.

I, Bob Roelofs, Board of Commissioners Chair of Benzie County, do hereby give this tribute to Benzie County EMS in celebration of Emergency Medical Services Week, May 21-27, 2023, and I call upon all government officials, parents, teachers, school administrators, caregivers, business leaders, non-profit organizations, and the people of Benzie County to observe this week and thank their Benzie County EMS Personnel for their service to our community.

Dated this 23rd day of May 2023.



Bob Roelofs, Board Chair

THE BENZIE COUNTY BOARD OF COMMISSIONERS

May 9, 2023

The Benzie County Board of Commissioners met in a regular session on Tuesday, May 9, 2023, in the Frank Walterhouse Board of Commissioners Room, 448 Court Place, Government Center, Beulah, Michigan.

The meeting was called to order by Chair Bob Roelofs.

Present were: Commissioners Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke

The invocation was given by Commissioner Roelofs and the Pledge of Allegiance was recited.

Tributes presented by Board Chair:

Chair Roelofs presented a tribute to the Benzie County Law Enforcement and Corrections Officers. Throughout our nation's history Law Enforcement and Corrections Officers have never wavered in the face of crisis or tragedy. During uncertain times Law Enforcement and Corrections Officers bravely face challenges and continue to protect and serve the citizens of Benzie County. On behalf of Benzie County, we proudly recognize the members of the Benzie County Sheriff's office for their dedication to our community. As Board Chair I hereby give tribute to the Benzie County Sheriff's Office in celebration of Corrections Officers Appreciation Week May 7 – 13, 2023, and in celebration of National Police Officers Week May 15 – 21, 2023. Thank you to the Benzie County Sheriff Office for their service to our community.

Sheriff Rosa thanked everyone for recognizing their efforts. Also, want to thank his employees for what they do every day. Benzie County Sheriff's Office has received a Certificate of Achievement for 100% compliance with Local Corrections Officer In-Service training requirements for 2022. We are also here to recognize Deputy Richard Beilfuss for Corrections Officers week. He is always on time, ready to go, and works circle around me and most people. He treats inmates with compassion and dignity, and is respectful to all community members.

Agenda:

Motion by Warsecke, seconded by Markey, to approve the agenda as presented. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Minutes:

Motion by Sauer, seconded by Nye, to approve the regular session minutes of April 11, 2023 as presented. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

9:09 a.m. Public Comment

Mary Haan, Homestead Township, wants to clarify that a recipient for the ARPA funds could be an individual. She read an article on assistance to small business. Recipients can use funds for capital expenditures for small business. Asking for ARPA money for two 60-pound machines for her laundromat.

Jed Maker, Friends of the Betsie Valley Trail, stated that they have divided the project to pave the trail from Beulah to Thompsonville, into 3 phases. They are applying for the Sparks Grant in the amount of \$400,000. The deadline for this award is June 26, 2023. What we need is an applicant. Friend of the Betsie Valley Trail cannot be the applicant. We are asking for Benzie County to be the applicant and be the administrator of the grant.

COMMISSIONERS

Page 2 of 6

May 9, 2023

9:16 a.m. Public Comment closed.

FINANCE

Bills: Motion by Warsecke, seconded by Jeannot, to approve payment of the bills from April 7, 2023, through May 4, 2023, in the amount of \$895,563.48, as presented. Roll call. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

ELECTED OFFICIALS & DEPARTMENT HEAD COMMENTS

Doug Durand, Benzie Senior Resource Director, provided a written report.
Brianne Lindsay, Equalization Director, provided a written report.

ACTION ITEMS

Consider Resolution 2023-005 adopting ballot language for County Road millage: Matt Skeel was present to answer any questions. Motion by Sauer, seconded by Cunningham, to adopt Resolution 2023-005 Authorizing Millage Election for Benzie County Roads and Highway Maintenance and Repair Millage Renewal and Restoration Proposal and Certifying Ballot Language. Roll call. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Consider adopting Per Diem Policy: Motion by Sauer, seconded by Warsecke, to adopt the Per Diem Policy and rescind all related Per Diem policies. Roll call. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Consider adopting Secondary Employment Policy: Motion by Warsecke, seconded by Jeannot, to adopt the Secondary Employment Policy, reaffirming collective bargaining agreement language and rescinds related policies. Roll call. Ayes: Cunningham, Jeannot, Markey, Roelofs, Sauer and Warsecke Nays: Nye Motion carried.

9:32 a.m. Closed Session: 1) Estate of Shane Sena-Richey. 2) Collective Bargaining Negotiations

Motion by Roelofs, seconded by Sauer, to enter into closed session to discuss settlement in connection with Estate of Shane Sena-Richey v Benzie County, Sgt Sierra Bates, and Deputy Brian Hastings, as authorized by MCL 15.268(e), and to immediately follow with closed session to discuss strategy in connection with collective bargaining strategy, as authorized by MCL 15.268(c). Roll call. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

10:14 a.m. Re-entered Open Session

Motion by Markey, seconded by Cunningham, to follow the advice and recommendations of counsel. Roll call. Ayes: Cunningham, Jeannot, Markey, Roelofs, Sauer and Warsecke Nays: Nye Motion carried.

Maner Costerisan Audit Presentation:

Aaron Stevens, CPA, CGRM for Maner Costerisan, provided a handout and presented the Benzie County Audit results for year ending September 30, 2022.

Community Action Agency Presentation regarding programming: Kerry Baughman, Leah Moskovitz, and Tish Stave provided a written handout and presented how the Northwest Michigan Community Action Agency serves the 10-county region, which included Benzie County.

COMMISSIONERS

Page 3 of 6

May 9, 2023

10:57 a.m. Break

11:04 a.m. Reconvene

Consider allocating \$15,000 to 23/24 Drug Court Program from Opioid Funds: Motion by Jeannot, seconded by Nye, to allocate up to \$20,000 to the Benzie County Drug Court Program, with funds available from the Opioid Settlement Funds. Roll call. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Approve and accept Scrap Tire Grant Agreement: Motion by Warsecke, seconded by Sauer, to accept the Scrap Tire grant award in the amount of \$12,000 authorizes the Chair to sign the Scrap Tire Cleanup Grant Agreement with the Michigan Department of Environment, Great Lakes, and Energy, and approves the necessary budget amendments, payment and reimbursement related to grant award. Roll call. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Consider authorizing summer road patrol contracts with Lake Township, Village of Beulah, and Crystal Beach Cottager's Association: Sheriff Rosa was present to answer any questions. Motion by Nye, seconded by Markey to approve the Sheriff Patrol Agreements with Lake Township, the Village of Beulah, and the Crystal Beach Cottager's Association for the 2023 summer months, subject to approval as to form by legal counsel, and authorizes the Chair to sign. Roll call. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Consider disbanding the EMS Advisory Committee and move forward with County Public Safety Entities workgroup: Motion by Markey, seconded by Nye, to disband the EMS Advisory Committee and thanks each volunteer who served on this committee since its inception, it further directs staff to meet quarterly with public safety entities to enhance communication and collaboration among agencies. Roll call. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Consider disbanding the Housing Committee and authorize agreement with Community Action Agency: Kerry Baughman, Leah Moskovitz, and Tish Stave were present to answer any questions. Motion by Jeannot, seconded by Nye, to disband the Housing Committee and authorize a document of understanding with the Northwest Michigan Community Action Agency, subject to approval as to form by legal counsel, and authorizes the Chair to sign. Roll call. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Consider establishing an ad hoc committee to determine repayment of an ambulance bill: Katie Zeits, County Administrator, and Tom King, EMS Director will review the documents related to the ambulance bill in question and bring a recommendation back to the Board of Commissioners.

Approve service agreement for EMS training services: Tom King was present to answer any questions. Motion by Markey, seconded by Warsecke, to authorize a Memorandum of Understanding with the Benzie County Fire and EMS Association to provide for Emergency Medical Technician training in Benzie County, such document subject to approval as to its form by legal counsel, and authorizes the Chair to sign. Roll call. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

COMMISSIONERS

Page 4 of 6

May 9, 2023

Approve and accept 2023 Marine Safety Program Grant: Sheriff Rosa was present to answer any questions. Motion by Warsecke, seconded by Markey, to accept the Marine grant award in the amount of \$10,100, authorizes the Chair to sign the 2023 Marine Safety Program (FEDERAL Funding) Grant Agreement with the Michigan Department of Natural Resources and approves the necessary budget amendments for payment and reimbursement related to grant award. Roll call. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Commissioner Warsecke recommended that all the Commissioners submit a written report for the packet instead of verbal reports being given at the meeting.

Commissioner Nye stated she has done it both ways. Went back to verbal reports for the people who attend the meetings but does not oppose either way.

Commissioner Sauer opposes being forced to do it to save time. Feels that reporting at the meeting allows the individual attending or on YouTube to hear their reports. Will do this if I have to.

Commissioner Jeannot stated that he has been doing this for several years. He has had people from the public approach him, that he does not even know, that comments on his reports in the packet. A written report memorializes it and I do not have to worry about being misquoted. Can go either way with it.

This matter will be continued in a month.

COMMISSIONER REPORTS

Chair Roelofs attended two Ad Hoc Housing Committee meetings, Ad Hoc EMS Advisory Board meeting, met with Mr Berge regarding mediation, Veterans Affairs meeting, and Almira Township clean up day.

Comm Jeannot provided a written report prior to the meeting and provided an additional report regarding the MAC Finance and General Governance Committee, Almira Township meeting, Inland Township meeting and Traverse City Tourism's Bureaus event.

Comm Cunningham provided a written report. Requested that everyone take the MI Infrastructure survey, the link is contained in her written report.

Comm Nye attended the Ad Hoc Housing Committee meeting, AD Hoc EMS Advisory Board meeting, Agenda Review meeting, Benzie School Board meeting, Benzonia Township meeting, Centra Wellness meeting, MAC Health and Human Services meeting, several meetings involving the Village of Beulah and their sewer system, Frankfort Community Land Trust groundbreaking, Joint Court meeting, Benzie Leelanau Health Department Personnel and Finance meeting, Land Bank meeting, and West Benzie Joint Planning Commission meeting.

Comm Markey attended Centra Wellness meeting, LEPC meeting, Ad Hoc EMS Advisory Board meeting, Benzie Senior Resource meeting, and Village of Honor meeting.

Comm Warsecke attended the Parks and Recreation meeting.

Comm Sauer attended the Road Commission meeting, MAC Conference, Maples meeting, Benzie Leelanau Health Department meeting, and Betsie Valley Trail meeting.

COMMISSIONERS

Page 5 of 6

May 9, 2023

COUNTY ADMINISTRATOR'S REPORT – Katie Zeits reported that she met with Parole/Probation regarding expanding their area. Rose had her baby so she will be out for a while. Sherry Taylor is helping while Rose is off. Scheduling budget meetings with departments. The bid opening for the expansion project is this Friday. Meeting with the State of Michigan on June 1, 2023, regarding Equalization corrective action plan wrap-up. Interviewing for the open position in Equalization. Working on updating policies and bringing forward for approval. There will be a MERS event on June 8, 2023, at the Government Center for all staff. A representative will be here to speak with. Planning a summer cookout with the employees, the week of June 19th. Reported on standard 8, regarding the MIDC increases.

STUDY SESSION - None

COMMITTEE APPOINTMENTS - None

UNFINISHED BUSINESS - None

NEW BUSINESS - None

PRESENTATION OF CORRESPONDENCE

- Letter from Susan Micinski (Sunkissed Hills Development)
- Crystal Lake Elevation
- Little Platte Lake Elevation
- Benzie-Leelanau District Health Department Agenda May 1, 2023
- Alger County Resolution 2023-06 – Urging Repair of the Cornwall Creek Flooding Dam
- Alger County Resolution 2023-07 – Instruct Representatives to oppose all firearms control legislation.
- Alger County Resolution 2023-08 – Declaring Alger County a Constitutional Second Amendment Sanctuary County
- Alger County Resolution 2023-09 – Supporting Dark Store Legislation
- Houghton County Resolution 23-10 – Affirming Support of all Constitutional Rights, including but not Limited to, the Right of the People to Keep and Bear Arms; also to Adequately Fund Mental Health Services.
- Livingston County Resolution 2023-04-063 – Support of the Second Amendment of the US Constitution and the Michigan Constitution.

12:18 p.m. Public Comment

Josh Stoltz, Executive Director for Grow Benzie, is here to plant a seed for next month. Have been talking with Katie about early childhood, and several advances with Grow Benzie and their Strategic Plan. They will be coming back to the Board of Commissioners next month regarding APRA funds.

Don Schafer, Benzonia Township stated that a written report is a memorization of documents for longevity. From a legal standpoint it is very important and it is a good resource for the public to refer to. But we must remember that people understand and learn by two methods, hearing and seeing, and remember that it is not only people in the room.

12:23 p.m. Public Comment closed.

COMMISSIONERS

Page 6 of 6

May 9, 2023

Motion by Markey, seconded by Warsecke, to adjourn at 12:24 p.m. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Bob Roelofs, Chair

Tammy Bowers, Benzie County Clerk

INDEX

1. Approve the agenda as presented.
2. Approve the regular session minutes of April 11, 2023, as presented.
3. Approve payment of the bills from April 7, 2023, through May 4, 2023, in the amount of \$895,563.48, as presented.
4. Adopt Resolution 2023-005 Authorizing Millage Election for Benzie County Roads and Highway Maintenance and Repair Millage Renewal and Restoration Proposal and Certifying Ballot Language.
5. Adopt the Per Diem Policy and rescind all related Per Diem policies.
6. Adopt the Secondary Employment Policy, reaffirming collective bargaining agreement language and rescinds related policies.
7. Enter into closed session to discuss settlement in connection with Estate of Shane Sena-Richey v Benzie County, Sgt Sierra Bates, and Deputy Brian Hastings, as authorized by MCL 15.268(e), and to immediately follow with closed session to discuss strategy in connection with collective bargaining strategy, as authorized by MCL 15.268(c).
8. Follow the advice and recommendations of counsel.
9. Allocate up to \$20,000 to the Benzie County Drug Court Program, with funds available from the Opioid Settlement Funds.
10. Accept the Scrap Tire grant award in the amount of \$12,000 authorizes the Chair to sign the Scrap Tire Cleanup Grant Agreement with the Michigan Department of Environment, Great Lakes, and Energy, and approves the necessary budget amendments, payment and reimbursement related to grant award.
11. Approve the Sheriff Patrol Agreements with Lake Township, the Village of Beulah, and the Crystal Beach Cottager's Association for the 2023 summer months, subject to approval as to form by legal counsel, and authorizes the Chair to sign.
12. Disband the EMS Advisory Committee and thanks each volunteer who served on this committee since its inception, it further directs staff to meet quarterly with public safety entities to enhance communication and collaboration among agencies.
13. Disband the Housing Committee and authorize a document of understanding with the Northwest Michigan Community Action Agency, subject to approval as to form by legal counsel, and authorizes the Chair to sign.
14. Authorize a Memorandum of Understanding with the Benzie County Fire and EMS Association to provide for Emergency Medical Technician training in Benzie County, such document subject to approval as to its form by legal counsel, and authorizes the Chair to sign.
15. To accept the Marine grant award in the amount of \$10,1000, authorizes the Chair to sign the 2023 Marine Safety Program (FEDERAL Funding) Grant Agreement with the Michigan Department of Natural Resources and approves the necessary budget amendments for payment and reimbursement related to grant award.

Art Jeannot
Commissioner Report
May 9, 2023

Participated in 9 meetings on behalf of the County since our April 11th meeting.

- **4/20 – Northwest MI Community Action Agency**
 - Discussed the full year 2022 audit. The audit was without exceptions. The agency uses less than 3% of their revenue for administrative expenses. This is far below industry averages.
 - **4/21 – EDC/BRA**
 - Cherry Capital gave an update on broadband initiative. Emphasis continues to be on unserved and underserved neighborhoods. The committee requested that other providers in the “consortium agreement” be included in future updates.
 - Representatives from Crystal Downs gave a presentation on their efforts at Sutter Rd. We acknowledged the presentation and reminded the presenters that the decisions will come from the Benzie County Road Commission and MDOT.
 - EDC member Dan Barcheski (Vice Chair) provided the board a draft of a white paper to continue the discussions on the future of our EDC. I am hopeful we devote more of our time in future meetings to discuss this important task.
 - **4/24 to 4/26 – MAC Legislative Conference**
 - I joined Gary Sauer, Karen Cunningham and Katie Zeits at the conference. Approximately 350 people were in attendance. Several breakout sessions were held. I attended 5 sessions. Sessions regarding FOIA and attendance and participation in meetings were of high importance to me. The seminar was a great opportunity for building my network. I anticipate you will get additional input from other attendees.
 - Gary Sauer was recognized for his completion of the County Commissioner Academy during the conference.
 - Senator Bumstead was recognized for being Legislative Advocate of the year.
- A black and white photograph showing a group of approximately seven people standing together for a group photo. They are dressed in professional or semi-formal attire. The background is slightly out of focus, showing what appears to be an indoor setting with some equipment or displays.
- - **5/4 – Ad Hoc Committee regarding Housing Committee**
 - I participated in a follow up discussion to review the need to continue the Housing Committee in its present form. A presentation and recommendation will be on the agenda for our meeting.
 - **5/4 – Lake Township**
 - The Township approved \$100k for the Point Betsie Lighthouse project. An energized discussion took place regarding Sutter Rd. The Board did not take any action.
 - **5/5 – MAC Finance and General Governance Committee**
 - I will share any relevant information with you at our meeting.
 - **5/8 – Almira Township**
 - I will share any relevant information with you at our meeting.
 - **5/8 – Inland Township**
 - I represented Evan at the meeting for the first 40 minutes. I will share any relevant information with you at our meeting.
 - **Other - Attended Traverse City Tourism’s Bureaus event on April 19th at Five Shores in Beulah.**

- **5/5 – MAC Finance and General Governance Committee**
 - Stewart Sanders and Ann Manning discussed in detail the role of the Registrar of Deeds. I benefited from this presentation and will be following up with Paula Eberhart. Discussions included why we micro film versus image documents, office being merged with another department, protecting data in a world where we have technology breaches and modernizing the department.
 - GAP funding for underfunded pension plans.
- **5/8 – Almira Township**
 - I will share any relevant information with you at our meeting.
- **5/8 – Inland Township**
 - I represented Evan at the meeting for the first 40 minutes. I will share any relevant information with you at our meeting.
- **Other - Attended Traverse City Tourism's Bureaus event on April 19th at Five Shores in Beulah.**



May 23

Commissioner Cunningham, District 3

kcunningham@benzieco.net

231.822.4067

Attended/Presented

- 14 Apr MAC Environmental Regulatory Committee: Planning and Zoning for Solar Energy Systems
Prof Charles Gould. Offering a guide for local gov't, have as part of Master Plans. Solar offers
1. Pollinator habitat 2. Crop micro climate 3. Bifacial panels 4. Sheep grazing
5. **Conserving /viable farms**
- 18 Apr Frankfort City Council: new Frankfort Chamber location/previously Monumental Finds building.
Crystal Lake Board: will be broadcasting meetings soon.
- 19 Apr Benzie Chamber
MAC Dir. Stephen Currie, lunch
Frankfort City/work study/ lake incubator
Point Betsie Light House
- 24-26 Apr MAC conf/ Lansing: sessions; Land Banks, Dams, elections, plenary sessions.
- 27 Apr Airport Authority: gliders will be back after 4 July, for one week.
- 2 May Kinship Coalition: planning a Benzie meeting in June, purpose to establish a monthly support
meeting. Writing a description for a "liaison".
- 6 May Point Betsie: Open House 6 May, 10am- 4pm.

Community

FEAS groundbreaking.

Grow Benzie biochar demonstration. Veterans Inspiring Veterans Art Show board. Met at The Maples. Met with farmers. Interview on WCCW/VIV Art Show.

Assorted meetings and emails with constituents, as it relates to county information, concerns and strategies.

MI Infrastructure survey. "Seeking resilient input." link:

<https://forms.office.com/pages/responsepage.aspx?id=h3D71Xc3rUKWaoku9HII0URLghCLLTVGs6msvMgvZkRUOVFMMjA5Rkl0SVgzU0Y1R0ZIMUJYOVl2OC4u>

BENZIE COUNTY CLERK
448 COURT PLACE
BEULAH, MICHIGAN 49617

Destroy Date: _____

May 9, 2023

Closed Sessions:

In Re: Settlement in connection with the Estate
of Shane Sena-Richey v Benzie County Sgt Sierra
Bates, and Deputy Brian Hastings.

In Re: Strategy in connection with collective bargaining
strategy

Memorandum



To: Board of Commissioners

From: Katie Zeits, County Administrator *Katie Zeits*

Date: May 17, 2023

Subject: **Public Hearing for Hazard Mitigation Plan**

Benzie County has been working with Networks Northwest for some time to update its hazard mitigation plan. On Tuesday, Stephanie Marchbanks of Networks Northwest and Emergency Management Coordinator Rebecca Hubers will be present to answer any questions the Board may have.

Due to the large size of this plan, below is a link to download the current final draft of the Benzie County Hazard Mitigation

Plan: https://drive.google.com/open?id=1SAiwwEXc85VDvxcjhLKnLhV6te6jl4bs&authuser=stephanie.marchbanks%40networksnorthwest.org&usp=drive_fs This updated version is also on the project webpage at <https://www.networksnorthwest.org/community/natural-hazard-mitigation/benzie-county.html>

Following the public hearing for the plan, the Board should vote to send the draft plan to the Michigan State Police and FEMA for their review and approval.

Recommendation:

That the Board of Commissioners approves the draft Hazard Mitigation Plan for review by the Michigan State police and FEMA.

Benzie County, Michigan Natural Hazard Mitigation Plan

2023

DRAFT 05/16/2023

ACKNOWLEDGEMENTS

The Benzie County Natural Hazard Mitigation Plan is prepared for Benzie County, Michigan and all the jurisdictions within it. Each jurisdiction is invited to be a continuing participant in future regular review and updates of the Plan. This plan is the culmination of an interdisciplinary and interagency planning effort that required the participation, technical assistance and expertise of individuals within the following agencies and organizations:

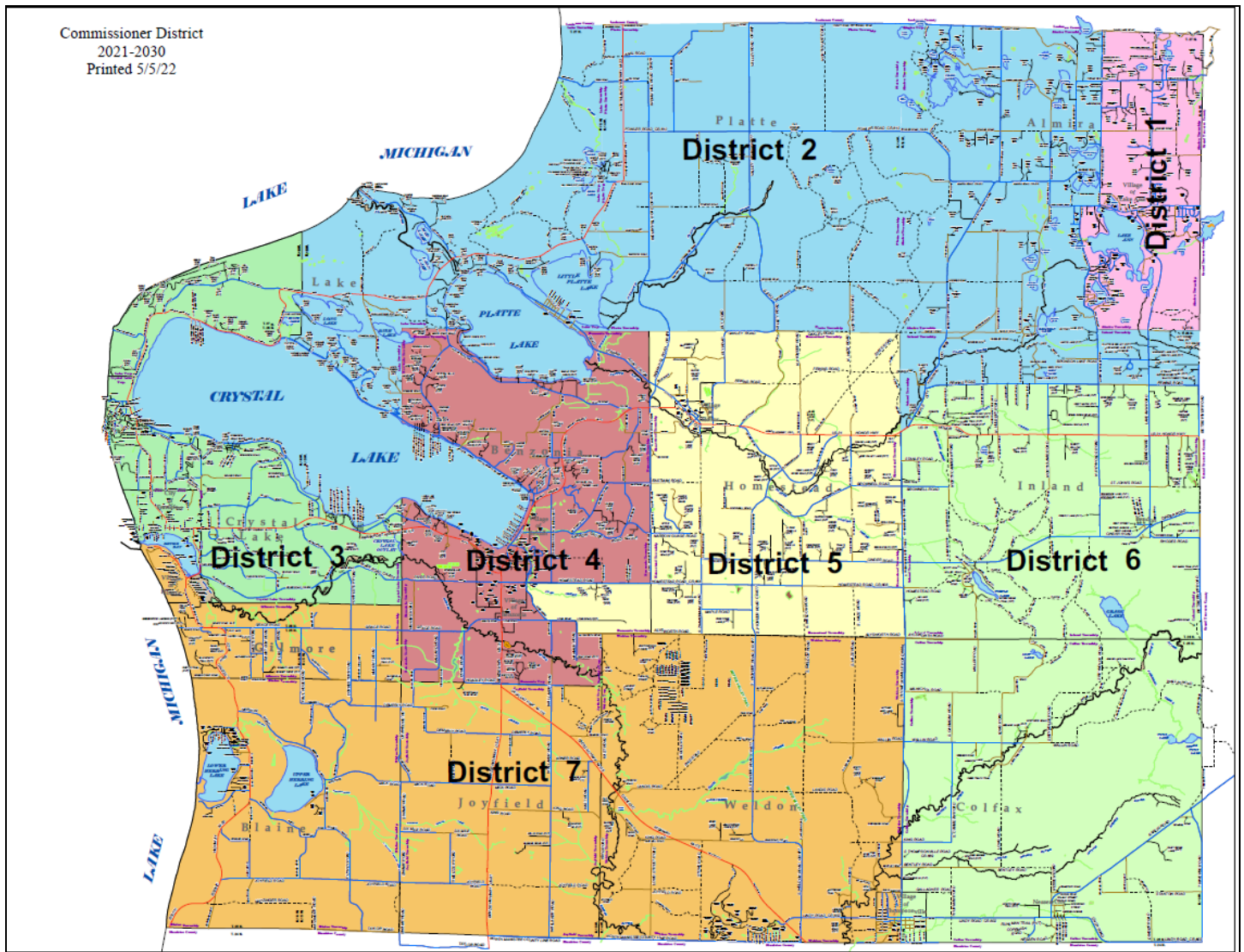
Organization	Representative
Benzie County Board of Commissioners (see page 7 for a District Coverage Map)	Bob Roelofs, District 1
	Art Jeannot, District 2
	Karen Cunningham, District 3
	Rhonda Nye, District 4
	Tim Markey, District 5
	Evan Warsecke, District 6
	Gary Sauer, District 7
Benzie County Government	Katie Zeits, Administrator
	Tom Longanback, Equalization Director (former)
	Jim Zimmerman, Building Inspector
	Chad Hollenbeck, Benzie Bus Operations Manager
	Rebecca Hubers, Emergency Management Coordinator
	Tom King, EMS Director
	Cory Ellis, 911 Central Dispatch Director
	Michael Draeger, Deputy Director/Dispatch Supervisor
	David Hanchett, Benzie Community Emergency Response Team
	Kyle Rosa, Sheriff
Benzie County Road Commission	Gregory T. Hubers, Undersheriff
	Matt Skeels, Manager
Benzie-Leelanau District Health Department	Mike Johnson, Shop Foreman/Facility Mgr.
	Bobbi Scott, Emergency Preparedness Coordinator
Benzie Conservation District	Eric Johnston, Director of Environmental Health
	Tad Peacock, Executive Director
Almira Township	Mark Roper, Supervisor
	Tammy Clous, Clerk
	Mandy Gray Rineer, Trustee
	Lori Florip, Trustee
	Matt Therrien, Trustee
	Brad Drury, Fire Chief
Benzonia Township	Jason Barnard, Supervisor & Zoning Administrator
	Diana Heller, Clerk
	Karen Burns, Treasurer
	Jim Sheets, Trustee
	Sheila Priest, Trustee
	Steve Adams, Fire Chief
Blaine Township	Paul E. Crandall, Supervisor
	Cyndi Sauer, Treasurer
	Marjorie Rohn, Clerk
	Chuck Beale, Trustee
	Walter Rohn, Trustee

Organization	Representative
Colfax Township	
Crystal Lake Township	Amy Ferris, Supervisor
	Judy VanMeter, Clerk
	Sue Sullivan, Clerk (former)
	Sandra Halliday, Deputy Clerk
	Brooke Trentham Popp, Treasurer
	Richard Nielsen, Trustee
	William Northway, Trustee
	Gregory Wright, Planning Commission Chair
Gilmore Township	Carl Noffsinger, Supervisor
	Shannon Spencley, Clerk
	Robin Rommell, Treasurer
	Douglas Holmes, Trustee
Homestead Township	Tia Kurina-Cooley, Supervisor
	Karen Mallon, Clerk
	Shannon Purchase, Trustee
	Mike Mead, Trustee
	Pat Delorme, Treasurer
	Bess Butler, Trustee (former)
	Doreen Strang, Community Member
Inland Township	David Davis, Supervisor
	Paul Beechraft, Supervisor (former)
	Rose Wirth, Clerk
	Therese Zielinski, Treasurer
	Linda Wilson, Treasurer (former)
	Mary Miller, Trustee
	Sheri Poulisse, Trustee
Joyfield Township	Matthew Emery, Supervisor
	Jim Evans, Trustee
	Dodie Putney, Clerk
	Mark Evans, Trustee
	Patricia Daugherty, Treasurer
	Ed Kowalski, Community Member
Lake Township	Anna Grobe, Supervisor
	Kyle Orr, Trustee
	Sally Casey, Trustee
	Maryanne Goodman, Treasurer
	Dotty Blank, Clerk
Platte Township	Paul Solem, Supervisor
	Alison Michalak, Clerk
	Cynthia Gottschalk, Treasurer
	Daniel Haswell, Trustee
	Robert Bollenberg, Trustee

Organization	Representative
Weldon Township	Ron Hitesman, Supervisor
	Sally Bobek, Treasurer
	Fran Griffin, Clerk
	Sue Meredith, Trustee
	Scott Williams, Trustee
	Craig Meredith, Zoning Administrator
City of Frankfort	Joshua Mills, Superintendent
	JoAnn M. Holwerda, Mayor
	Daniel Walenta, Mayor Pro-Tem
	Brady Olsen, Councilmember
	Mary Ann Short, Councilmember
	MacKenzie Stratton, Councilmember
	Christine Spence, Clerk/Treasurer
	Mike Cederholm, Fire Chief
	Rob Lozowski, Police Chief
Village of Benzonia	Timothy Flynn, President
	Maridee Cutler, Clerk
	Toni Flynn, Treasurer
	Chris Pritchard, Superintendent
	Sara Kirk, Zoning Administrator
	Hazel Heyn, Trustee
	John Hafer, Trustee
	Bob French, Trustee
	Alexandra Herryman, Trustee
	Theresa Moss, Trustee
	Shane Myers, Trustee
	Jeri Van DePerre, President
Village of Beulah	Dan Hook, President Pro-Tem
	Mark Heniser, Trustee
	Phil Downs, Trustee
	Annie Browning, Trustee
	Margaret Lumm, Treasurer
	Dawn Olney, Clerk
	Jeff Cypert, Superintendent
	Jennifer S. Wilkins, President
Village of Elberta	Emily Votruba, Trustee
	Ken Holmes, President Pro-Tem
	Ryan Fiebing, Trustee
	Norma Corwin, Clerk/Treasurer
	Teri Reisner, Deputy Clerk
	Ken Bonney, DPW Superintendent
	Mike Cederholm, Fire Chief

Organization	Representative
Village of Honor	Jeff Sandman, President
	Bill Ward, President Pro-Tem
	Maryanne Goodman, Treasurer
	Deb Reed, Clerk
	Cheri K. Sessions, Deputy Clerk
	Jake Leone, Street Administrator/Maintenance
	Dallas Denoyer, Trustee
	Dennis Sternburgh, Trustee
	Andrew Smith, Trustee
Village of Lake Ann	Dan Hawkins, President
	Craig Timm, President (former)
	Christi Grant-Wagner, Trustee
	Tammy Clous, Clerk
	Mandy Gray-Rineer, Treasurer
	Nick Beckwith, Trustee
	Kyle Belton, Trustee/Streets Administrator
Village of Thompsonville	Eugene Allen, President
	Mary Wixson, Clerk
	Deidra Pomranky, Treasurer
	Florence Smith, Trustee
	Brent Johnson, Trustee
	Chelsea Willis, Trustee
	Fran Griffin, Trustee
	Michael Draeger, Fire Chief
Grand Traverse Band of Ottawa and Chippewa Indians	Jolanda Murphy, Public Safety Department Manager
Manistee/Benzie Michigan Dept. of Health and Human Services	Joleen Peck, Dept. Analyst E.
	Jennifer Savage, Director
Michigan Department of Natural Resources	Steve Cameron, Forest Fire Supervisor
	Lt. Joe Molnar, Law Enforcement District, Customer Service Center
Michigan State Police	Lt. Frank Keck, 7th District Assistant Commander
	Lt. Matthew McCaul (Retired)
	Lt. Michael deCastro, Region 7 District Coordinator, EMHSD
	F/LT Steve Porter, Commander of MSP Traverse City Post
	Lt. Travis House, Commander of MSP Cadillac Post
	Trooper Trevor Baesch, MSP Gaylord Post
American Red Cross - N. MI Chapter	Meghan Powers, Disaster Program Manager
Smeltzer Orchard Company	Tim Brian, President
Graceland Fruit	Cody Allen, Human Resources Coordinator
Paul Oliver Memorial Hospital	Fred Craigin, Manager - Safety, Security and Emergency Management

Benzie County Commissioner District Map, 2022



Prepared for: Benzie County Board of Commissioners

Prepared by: Benzie County Office of Emergency Management and the Benzie County Local Emergency Planning Team with assistance from:



Networks Northwest
PO Box 506
Traverse City MI 49685-0506
Telephone: 231.929.5000
www.networksnorthwest.org

TABLE OF CONTENTS

I. Introduction.....	10
II. Planning Process.....	12
III. Community Profile	17
IV. Hazard Identification and Assessments.....	29
V. Goals and Objectives.....	77
VI. Mitigation Strategies and Priorities	78
VII. Implementation.....	81
APPENDIX A: MAPS	83
APPENDIX B: COMMUNITY SURVEY RESULTS	84
APPENDIX C: 2015 NATURAL HAZARDS MITIGATION PLAN STRATEGIES AND COMMENTS.....	85
APPENDIX D: MEETING DOCUMENTATION	86

I. INTRODUCTION

Hazard mitigation is defined as any action taken before, during, or after a disaster or emergency to permanently eliminate or reduce the long-term risk to human life and property from natural, technological and human-related hazards. Mitigation is an essential element of emergency management, along with preparedness, response and recovery.

Mitigation allows repairs and reconstruction to be completed after an incident occurs in such a way that does not just restore the damaged property as quickly as possible to pre-disaster conditions. It also ensures that such cycles are broken, that post-disaster repairs and reconstruction take place after damages are analyzed, and that sounder, less vulnerable conditions are produced. Through a combination of regulatory, administrative, and engineering approaches, losses can be limited by reducing susceptibility to damage. When successful, hazard mitigation will lessen the impact of a disaster on people, property, the environment and economy, and continuity of services through the coordination of available resources, programs, initiatives, and authorities.

A *hazard*, in the context of this plan, is an event or physical condition that has potential to cause fatalities; injuries; damage to personal property, infrastructure, or the environment; agricultural product loss; or interruption of business or civic life. The Benzie County Natural Hazard Mitigation Plan focuses on *natural* hazards such as heat, drought, wildfires, flooding, shoreline erosion, dangerous currents, thunderstorms, tornados, high winds, hail, extreme winter weather, and invasive species. An exception is that it will also consider these technological and human-related hazards: dam failure and public illness outbreak. The following natural hazards were not included in the analysis for this Hazard Mitigation Plan: earthquakes, space weather, and subsidence. According to information presented about these hazards in Michigan State Police's 2019 Michigan Hazard Analysis, there is very little risk of these events occurring in Northwest Michigan.

The main objective of the Benzie County Natural Hazard Mitigation Plan is to permanently eliminate or reduce long-term risks to people and property from natural hazards so that county assets such as transportation, infrastructure, commerce, and tourism can be sustained and strengthened. This can be accomplished through collaborative efforts/activities amongst agencies within the county to protect the health, safety, and economic interests of the residents and businesses through planning, awareness, and implementation.

Through the development of this Plan, a broad perspective was taken in examining multiple natural hazard mitigation activities and opportunities in Benzie County. Each hazard was analyzed from a historical perspective, evaluated for potential risk, and considered for possible mitigation.

Since the 2015 Plan's adoption period, the county and municipalities have made progress on the following key endeavors to address their previously identified mitigation strategies. Appendix C provides a list of all mitigation strategies included in the Benzie County 2015 Natural Hazards Mitigation Plan, along with their current status and how they may have been integrated into local planning mechanisms.

- Ongoing: Enforcement of soil erosion control permitting to prevent soil erosion during construction
- Ongoing: Enforcement of building codes (permits and inspections based on State Building Code) for new construction; this includes MI EGLE floodplain verification with new builds and structural additions
- Ongoing: tree trimming by power companies
- Achieved: "Work on a multi-hazard warning plan". Benzie County now offers CodeRED free of charge to interested residents. The CodeRED system is used to send emergency notifications, from evacuations notices to missing child alerts. Residents and businesses located within Benzie County are encouraged to sign up for CodeRED to be sure they receive timely emergency notifications and other important information and instructions when alerts are issued.

Section VI of this plan provides a current list of hazard mitigation strategies for each natural hazard identified. Strategies were developed based on discussions with local officials and a review of FEMA best practices for hazard mitigation. Mitigation strategies are intended to be action items completed during the 5-year timeframe in which the plan is active.

Recognizing the importance of reducing community vulnerability to natural hazards, Benzie County is actively addressing the issue through the development and implementation of this plan. This process will help ensure that Benzie County remains a vibrant, safe, enjoyable place in which to live, raise a family, continue to conduct business, and maintain a tourist base. The Plan serves as the foundation for natural hazard mitigation activities and actions within Benzie County, and will be a resource for building coordination and cooperation within the community for local control of future mitigation and community preparedness around the following goals (Table 1):

Table 1: 2023 Benzie County Hazard Mitigation Planning Goals

Goal 1: Increase local participation in natural hazard mitigation.

Goal 2: Integrate natural hazard mitigation considerations into the County's comprehensive planning process.

Goal 3: Utilize available resources and apply for funding for natural hazards mitigation projects.

Goal 4: Develop and complete natural hazards mitigation projects in a timely manner.

II. PLANNING PROCESS

The Stafford Act, as amended by the Disaster Mitigation Act of 2000, shifted the Federal Emergency Management Agency's (FEMA) scope of work to promoting and supporting prevention, or what is referred to as hazard mitigation planning. FEMA requires government entities to have a natural hazard mitigation plan in place and updated on a 5-year cycle as a condition for applying for grant funding related to natural hazard mitigation and remediation. Benzie County has a history of mitigation planning and adopted past Natural Hazard Mitigation Plans in 2007 and 2016. The adoption of the 2022 plan will reaffirm the eligibility of the county, as well as those local municipalities who participated in the planning process and adopted the county's plan, for federal funding.

The update of the County's plan was led by the Natural Hazards Task Force comprised of the County's Local Emergency Planning Committee (LEPC). Team members consist of first responders and local, regional, and state public entities that ensure the readiness of County entities by recommending equipment purchases, training and exercises, and public education on preparedness issues. Networks Northwest staff assisted with the creation of the updated plan by providing meeting facilitation, conducting an online survey, and writing the plan. The Task Force generally met every month, in-person, at the Benzie County Governmental Center in the Village of Beulah.

Representatives of all of the following types of stakeholders were invited to participate - via email invitation, phone calls, meeting attendance/presentation, or mailed letters - in the planning process: local and regional agencies involved in hazard mitigation activities; agencies that have the authority to regulate development; neighboring communities; representatives of businesses, academia, or other private organizations; and representatives of nonprofit organizations, including community-based organizations that work directly with and/or provide support to underserved communities and socially vulnerable populations, among others. Please refer to the Acknowledgements section in the beginning of this plan for a list of participants and Appendix D for meeting documentation.

The following is an outline of events for the development of the 2023 Benzie County Natural Hazard Mitigation Plan:

- An online public survey was made available from October 4, 2021 to February 4, 2022 to obtain input on community experiences, concerns and priorities regarding natural hazard mitigation in Benzie County. Table 2 indicates who participated in the survey. A copy of the survey results are included in Appendix B.

Responses to Question 3-5 asked about participants' knowledge of local planning efforts including the current hazard mitigation plan (61% indicated they were unfamiliar with the plan), local master plans (84% yes they have an adopted Master Plan), and a local Capital Improvements Plan (CIP) (45% indicated yes, they have a CIP).

Questions 6 and 7 asked participants if there had been significant natural hazards in the past and to identify them. 35% said yes, they have experienced a significant natural hazard in the last 10 years. The following are descriptive responses to these questions:

- County-wide events
 - "Snowmageddon" snowstorm of 2012.
 - Straight line winds of August 2, 2016
 - Pandemic
- Lakeshore erosion and flooding due to high water levels in Lake MI
 - Lake MI Coastline communities: Blaine Twp., Gilmore Twp., Village of Elberta, City of Frankfort, Crystal Lake Twp., Lake Twp.
- Flooding and erosion brought on by high groundwater tables and/or high lake levels
 - City of Frankfort
 - Crystal Lake Twp.
 - Homestead Twp. (also river ice over with large backup)
 - Blaine Twp. (flooding and loss of shoreline along shores of Lower Herring Lake)
- Snow and wind storms causing significant tree damage
 - City of Frankfort

Questions 8 and 9 asked about community concerns for future natural hazard events and the types of natural hazard events that are likely to have the largest impact. 74% of participants are "somewhat concerned" about a future natural hazard impacting the community. When asked what type of hazard participants were most likely to cause the largest impact responses included the following: Flooding/High Lake Levels (mentioned 20 times), Illness/Pandemic (19), Wildfire (18), High Winds (7), Severe Winter Weather/Heavy Snow/Snow Storms (4), Tornado (3), Erosion/Lakeshore Erosion (3), Landslide (1) "We live at the base of an unstable hill filled with springs" [location not mentioned]. Concerns of a loss of power was mentioned 5 times.

Questions 10 asked about community concerns regarding existing infrastructure and what forms of investment might be required to mitigate impacts to infrastructure from natural hazards. Of the responses, aging bridges, dams and securing power were mentioned the most frequently. Other responses included shoreline hazards such as flooding and shoreline erosion; keeping roads clear to aid in transportation needs during an emergency/power outage (i.e., getting people to shelters). Specific areas with infrastructure concerns mentioned include:

- Village of Elberta: The M-22 Causeway over the Betsie River in Elberta was mentioned specifically five times, due to the concern of another flooding/ potential washout situation if/when lake water levels rise again like they did in 2019 and 2020.
- Blaine Township: "Somewhat concerned about structural integrity of the dam in Lower Herring Lake [adjoining Lake Michigan]. Hasn't been a functioning dam in years, but if waters receded a lot it may be something to watch."
- City of Frankfort: "Critical infrastructure concerns include the water and sanitary sewer distribution systems"; dams and rivers in the event of a flood
- The Platte and Betsie River both run through the county. The BCRC maintains 17 bridges (not counting the bridges maintained by MDOT). Losing a major bridge could have long term negative impacts to the county.
- Weldon Township: "We have a bridge that was...removed and we have hoped that it would be replaced. We have residents that live on the other side of the river. Any emergency vehicles now have to go way out of their way to get to any residents or forest area on the other side of the former bridge location (Haze Road)."
- Village of Beulah: Potential services failure due to pressures from seasonal tourists; "sustained power outages will have a significant impact on our ability to sustain major DPW responsibilities"
- Crystal Lake Township: further bluff erosion/ shoreline erosion

Questions 12 and 13 asked if participants were familiar with requests for assistance for mitigation projects in the past. 52% were unknown as to whether or not requests have been made. Similarly, Question 13 asked if those mitigation projects were granted:

- Village of Thompsonville: "Replacing the bridge after the dam on the Betsie River went out"
- Village of Beulah: "The Village requested and received a grant to do significant work on the village water/sewer system. [It] is working well right now but, for how long will this be true, with all of our out-of-town visitors?"
- "Funds were received for private property flooding – land purchase" (along Lake MI in Crystal Lake Twp.?)
- Village of Lake Ann: Guardrail replacement project, Federal Safety Grant
- "Control water run-off from storm events" (Unknown community)

Questions 13 and 14 asked participants if they had considered mitigation strategies (52% said unknown), but some answered with strategies they would like to explore:

- Benzie County: "Joint planning and/or training with the utilities companies to help them restoring power to our citizens could be beneficial." Pursue FEMA mitigation grants.
- Village of Beulah: "I am concerned about our freshwater environment – Crystal Lake, the Betsie and Platte Rivers, and, not to mention Lake Michigan."
- City of Frankfort: "Better establish a resilient shoreline to overcome high water cycles that create erosion concerns. Install check valves on storm discharge locations."
- Crystal Lake Township: "Fire, further effects of pandemic"
- Grand Traverse Band Tribe: Underground utilities, erosion and floods
- American Red Cross: [Disaster] preparedness.

Question 15 asked if there was any additional information to be considered for the County's Natural Hazard Mitigation Plan:

- City of Frankfort: Natural resiliency strategies to critical areas of our shoreline
- Village of Elberta: High water level – flooding information
- Grand Traverse Band Tribe: Underground infrastructure for continual power and erosion control along waterways

The final question, Question 16, asked survey-takers to respond with their contact information if they wish to be involved with the plan process. Several responses included a name, email address, and phone number to contact those who are interested. Many indicated no, they are not interested or they do not have the time.

Table 2: Survey Responses

Local Unit	Title/Role (If Identified)
Benzie County	Central Dispatch/Deputy Director/ECS Supervisor; Sheriff and Undersheriff; Emergency Management Coordinator; EMS Director; District 2 Commissioner; District 7 Commissioner, Road Commission Manager
City of Frankfort	Chief of Police; City Superintendent (Chief Administrative Officer)
Village of Beulah	Trustees; Chair of Parks and Rec; Chair of Law and Finance;
Village of Elberta	President
Village of Lake Ann	President
Village of Thompsonville	Fire Chief
Almira Township	Clerk, Zoning Administrator
Benzonia Township	Treasurer
Blaine Township	Supervisor, Clerk, Trustee/Planning Commissioner
Crystal Lake Township	Supervisor, Treasurer, Planning Commission Chair
Homestead Township	Supervisor, Fire Chief, Trustee, Treasurer
Inland Township	Supervisor, Treasurer
Lake Township	Supervisor
Weldon Township	Planning Commission Chair, Clerk, Treasurer
Grand Traverse Band of Ottawa and Chippewa Indians Tribe	Tribal Member; Emergency Manager, Tribal Public Safety

- On March 21, 2022, Networks Northwest staff met with the Manager of the Benzie County Road Commission to discuss problems areas with road infrastructure related to natural hazards, as well as plans for road/bridge repairs.
- LEPC and/or LPT meetings where the Natural Hazard Mitigation Plan update work was discussed:
 - June 21, 2021
 - July 1, 2021
 - September 20, 2021
 - October 18, 2021
 - January 18, 2022
 - March 21, 2022
 - April 18, 2022
 - June 20, 2022
 - July 18, 2022
 - August 15, 2022
 - October 27, 2022
 - January 17, 2023
 - February 21, 2023
 - March 20, 2023
 - April 17, 2023
 - May 15, 2023
- Rebecca Hubers, Benzie County Emergency Management Coordinator, attended regular meetings of local units of government in Benzie County to obtain input on hazard concerns and feedback on the draft plan and mitigation strategies. Ms. Hubers attended these meetings at various times between February and July 2022, and November 2022 and February 2023. Refer to Appendix D for meeting minutes.
- A Notice of Availability was published in the *Benzie County Record Patriot* newspaper on April 26, 2023 that the County's draft Natural Hazard Mitigation Plan was available for review, and welcomed feedback before or at the scheduled public hearing held on May 23, 2023 (Figure 3). A link to a copy of the plan in its draft form was published openly on the County's website and Networks Northwest's website. Following the public hearing, the County Board of Commissioners recommended the draft plan be submitted to Michigan State Police and FEMA for their review and approval.

During development of the plan, all Benzie County municipalities were provided the opportunity to participate in the online community survey, participate in scheduled meetings, and comment on draft plan materials. A letter was mailed, via certified mail, and emailed, from Networks Northwest to all Benzie County local government offices on April 19, 2023.

The letter provided notification of the public hearing on the draft plan, a website address to access the plan, and requested local government review and feedback.

The draft plan was published openly on the Benzie County “news” webpage, as well as on the project page on Network Northwest’s website (Figures 1 and 2). The public was encouraged to review the draft plan and invited to submit suggestions, questions or comments. Written comments were received via email during the draft review period, as well as verbal comments provided from the public and county planning commissioners during the public hearing and County Planning Commission meeting on March 7, 2023. Appendix D provides relevant meeting and public input documentation.

Additionally, representatives from county and regional agencies that share jurisdictional boundaries with Benzie County were invited to participate in the LEPC planning meetings and were able to view and comment on the draft plan by accessing it from the hazard mitigation project page of Networks Northwest’s website. Those agency staff members are:

- Gregg Bird, Grand Traverse County Emergency Management Coordinator
- Jolanda Murphy, Public Safety Department 2 Manager and Emergency Manager, Grand Traverse Band of Ottawa and Chippewa Indians
- Matt Ansorge and Kelly LaCross, Leelanau County Office of Emergency Management
- Alvin Rischel, Manistee County Deputy Director/Emergency Management Coordinator
- Randy Boike, Wexford County Emergency Management Coordinator
- Robert Carson, Regional Director of Community Development, Networks Northwest

Below are images of the websites providing the available draft plan for review and a copy of the published public hearing notice.

Figure 1: Public Review/Hearing Announcement on Benzie County’s Webpage (accessed 4/20/23)



Figure 2: Networks Northwest Project Webpage (accessed 5/11/23)

https://www.networksnorthwest.org/community/natural-hazard-mitigation/benzie-county.html

Networks Northwest
Talent / Business / Community

TALENT BUSINESS COMMUNITY DATA ABOUT US CAREERS

BENZIE COUNTY

Notice of Availability of Draft Hazard Mitigation Plan and Public Meeting for Input on the Draft Hazard Mitigation Plan

A public hearing for the plan will be held on May 23, 2023 at 9:00 AM as part of the Benzie County Board of Commissioner's regular meeting. The meeting will be at the Frank Walterhouse Board of Commissioners Room, Benzie County Government Center, 448 Court Place, Beulah, Michigan 49617. Upon review of the plan, Board of Commissioners shall recommend it be sent to Michigan State Police Homeland Security Division for review/preliminary approval and then on to FEMA for their review and approval. Once FEMA has approved the plan, it will be brought before all local government boards for adoption.

Public comments are requested either in person or by representative at the public meeting or at PO Box 506, Traverse City MI 49685, or by email at stephanie.marchbanks@networksnorthwest.org.

Current Drafts for Review:

[2/21/2023 Draft Plan](#) and [10/19/22 Strategies Table](#)

Hazard Maps (Appx. A of the plan)

- [Environmental Features](#)
- [Infrastructure](#)
- [Hazard Areas](#)
- [Vulnerable Populations and Hazard Areas](#)

Meeting Dates and Documentation

Hazard Mitigation work meetings will be posted here as they become

ABOUT US >

GOVERNMENTS >

FRAMEWORK FOR OUR FUTURE >

PROJECTS >

GROWTH & INVESTMENT >

TRANSPORTATION >

RECREATION >

NATURAL HAZARD MITIGATION >

- Antrim County
- Benzie County**
- Charlevoix County
- Emmet County
- Grand Traverse County
- Kalkaska County
- Leelanau County
- Manistee County
- Missaukee County
- Wexford County
- Grand Traverse Band of Ottawa and Chippewa Indians
- Little River Band of Ottawa Indians

HOUSING >

NATURAL RESOURCES >

HEALTHY COMMUNITIES >

FOOD & FARMING >

ARTS AND CULTURE >

Figure 3. Benzie County Record Patriot Public Notice 4/26/23

AFFIDAVIT OF PUBLICATION

STATE OF MICHIGAN
County of Benzie

Crystal Van Buren, being duly sworn, deposes and says that she is one of the editors, publishers, representatives of the Benzie County Record Patriot, a newspaper published and circulated in said County of Benzie, and the annexed notice was duly printed and published in the said newspaper on the following dates:

April 26, 2023

Crystal Van Buren
Crystal Van Buren

Subscribed to and sworn to me this 26th day of April 2023.

Denise M. Favreau
Notary Public: Denise M. Favreau
State of Michigan, County of Benzie
My Commission Expires: July 16, 2028
(Acting in the county of Benzie)

NOTICE OF AVAILABILITY of
Draft Hazard Mitigation
Plan and
Public Meeting for Input on
the
Draft Hazard Mitigation Plan

Benzie County is in the process of updating its Hazard Mitigation Plan in accordance with the Disaster Mitigation Act of 2000. There will be a public meeting following the public review period at 9:00 am on May 23, 2023. The meeting will be at the Frank Walterhouse Board of Commissioners Room, Benzie County Government Center, 448 Court Place, Beulah, Michigan 49617. Public comments are requested either in person by a representative at the public meeting; by mail at PO Box 506, Traverse City MI 49685; or by email at stephanie.marchbanks@networksnorthwest.org. The draft plan is available for review on Benzie County's website and Networks Northwest's website.

III. COMMUNITY PROFILE

Land Use/ Land Cover

Benzie County is located in Northwest Lower Michigan, and is bordered by Lake Michigan to the west, Leelanau County to the north, Grand Traverse County to the east, Wexford County to the southeast, and Manistee County to the south. The Environmental Features Map in Appendix A illustrates the locations of the county's roads, water bodies and jurisdictions.

The smallest county in Michigan, Benzie County is approximately 316 square miles containing pristine lakes and rivers, rolling hills and fields, thick forests, orchards, and 60 miles of Lake Michigan shoreline. The State has designated Critical Dune Protection Areas and High Risk Erosion Areas along portions of the coastline in the county, as shown in Figures 2 through 4. The county is divided into nineteen communities, including twelve townships, six villages, and the City of Frankfort. About 4%, or 19 square miles of the county is located within the Grand Traverse Bay watershed. The highest elevation point is 1,161 feet at an unnamed location in Colfax Township (44.25935, -85.830033).

Benzie County plays an important role in the region's tourist activity. Its six villages and the small City of Frankfort provide a blend of beachfront, walkable downtowns, historic character, and small town charm. Sleeping Bear Dunes National Lakeshore, partly located in the northwest portion of the county, is a national attraction; and Crystal Mountain is a popular, well-known ski/outdoor resort destination that attracts visitors year round.

There are 135 lakes scattered across the county. Eleven of the inland lakes provide public access including Ann, Betsie, Crystal, Herendeene, Little Platte, Loon, Lower Herring, Pearl, Platte, Stephens, Turtle, and Upper Herring. Many of the lakes are of significant size, the largest being Crystal Lake, which is also the ninth largest inland lake in Michigan. Significant rivers and streams include the Betsie River, Platte River, Otter Creek, and Herring Creek, which all flow westward into Lake Michigan. All of these waters are valued for their fisheries, recreational opportunities and beauty.¹

The 2017 USDA Census of Agriculture indicates the county had 18,516 acres of land in farms, for a total of 197 farms. This represents a 9% increase in the number of farms and a 10% decrease in the acreage of farms since the 2012 USDA Census of Agriculture. About 78% of the market value (\$7,868,000) of agricultural products sold in the county is from crops. Forage (hay/hayage), tart cherries, corn for grain, cultivated Christmas trees and apples comprised the top five crops in acreage in the county. Benzie County ranks 53 out of 83 counties in the Michigan for agricultural crop sales.

The predominant land cover type is "forested", followed by "wetlands" and "open water" (Table 3). Developed land cover is found predominantly in and around the City of Frankfort and local villages.

Table 3: Land Cover by Type, Benzie County

Source: Networks Northwest

Classification	Acres	Percent
Developed (High Intensity)	131.6	0.1
Developed (Med. Intensity)	710.02	0.3
Developed (Low Intensity)	5,198.07	2.1
Developed (Open Space)	10,459.47	4.2
Forested (Deciduous, Evergreen and Mixed Forest)	124,081.78	50.3
Wetlands (Woody and Emergent Herbaceous)	28,071.56	11.3
Open Water	27,243.39	11
Herbaceous/Grassland	25,260.60	10.2
Agriculture (Cultivated Crops, Hay/Pasture)	17,028.25	6.9
Shrub/Scrub	6,110.98	2.5
Barren Land	2,530.41	1
Totals	246,826.13	99.9

The 2015 Hazard Mitigation Plan indicated that 146,900 acres, or 67.1%, of the county's land cover was comprised of forested lands, and 15.7% was comprised of wetlands. Current land cover data indicates these percentages have decreased since 2015. While development in the county has remained fairly steady in the past decade, it has been noted that the type of new development is changing. Office and industrial development has largely stopped, commercial

¹ Benzie County 2017 Master Plan, https://www.benzieco.net/departments/planning_commission/documents.php#outer-1455

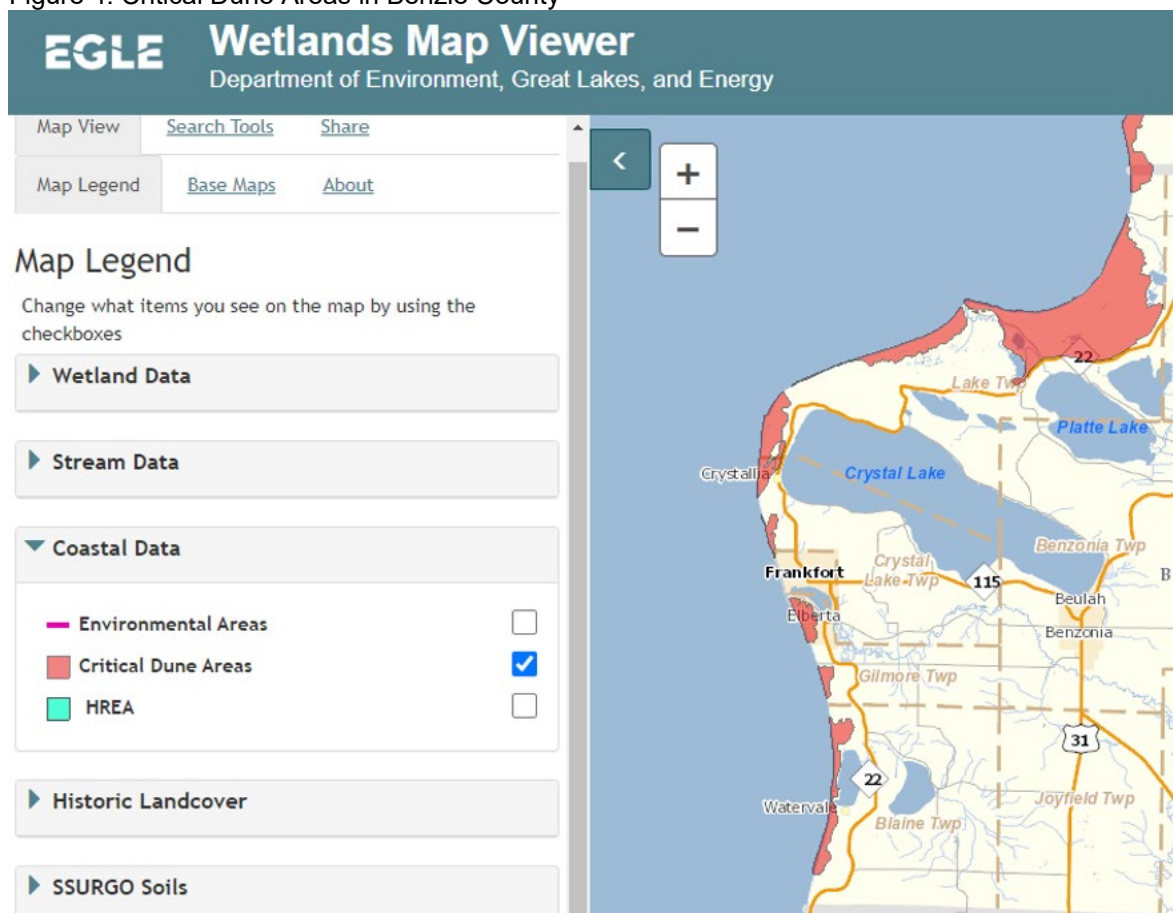
development has slowed, but residential development is occurring as quickly as plans can be approved. Housing of all types and prices is in demand, but many communities desire smaller units and multiple family units. This type of housing is especially important for the senior population and will likely be in demand for many years. The Environmental Features Map in Appendix A shows the intensity of development in the county as well as natural features.

Many of Benzie County's Lake Michigan Shoreline areas contain State-designated and regulated Critical Dune Areas (Figure 4) as well as High Risk Erosion Areas (Figures 5 and 6).

Critical Dune Areas (CDAs) are a combination of coastal barrier dunes, land that has dune-like features, and unique plant communities. Regulatory authority goes to the water's edge. The CDAs include public lands and private properties where developmental, silvicultural, and recreational activities are regulated and a permit is required under Part 353, Sand Dunes Protection and Management, of the NREPA. The law balances the benefits of protecting, preserving, restoring and enhancing the diversity, quality, functions, and value of the critical dunes with the benefits of economic development, multiple uses, and public access. A permit is required for activities that significantly alter the CDA, such as the construction of a house or garage, building a road or driveway, installing a septic system, installing retaining walls, and sand removal. Currently EGLE administers Part 353 for all CDAs in Benzie County.

High-Risk Erosion Areas (HREAs) are shorelines of the Great Lakes where the land is receding at a rate of one foot or more per year for a minimum of 15 years. Recession rates change over time as water levels fluctuate and coastal conditions change. Along these shorelines, new structures are required to meet setbacks for their protection from a changing shoreline. When structures are not in danger, the shoreline does not need to be altered to protect the structure. A permit is required for construction of a structure on any portion of a designated High-Risk Erosion Area parcel regardless of how far the project is from the lakeshore. Common activities requiring a permit include construction of a house, garage, or addition, substantial reconstruction of an existing home, the installation of a septic system, covered porches, or a commercial building. HREAs are regulated by the Administrative Rules of Part 323, Shorelands Protection and Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Currently EGLE administers Part 323 for all HREAs in Benzie County.

Figure 4: Critical Dune Areas in Benzie County



Source: <https://www.mcgi.state.mi.us/wetlands/mcqiMap.html#>

Figure 5: High-Risk Erosion Areas in Blaine and Gilmore Townships

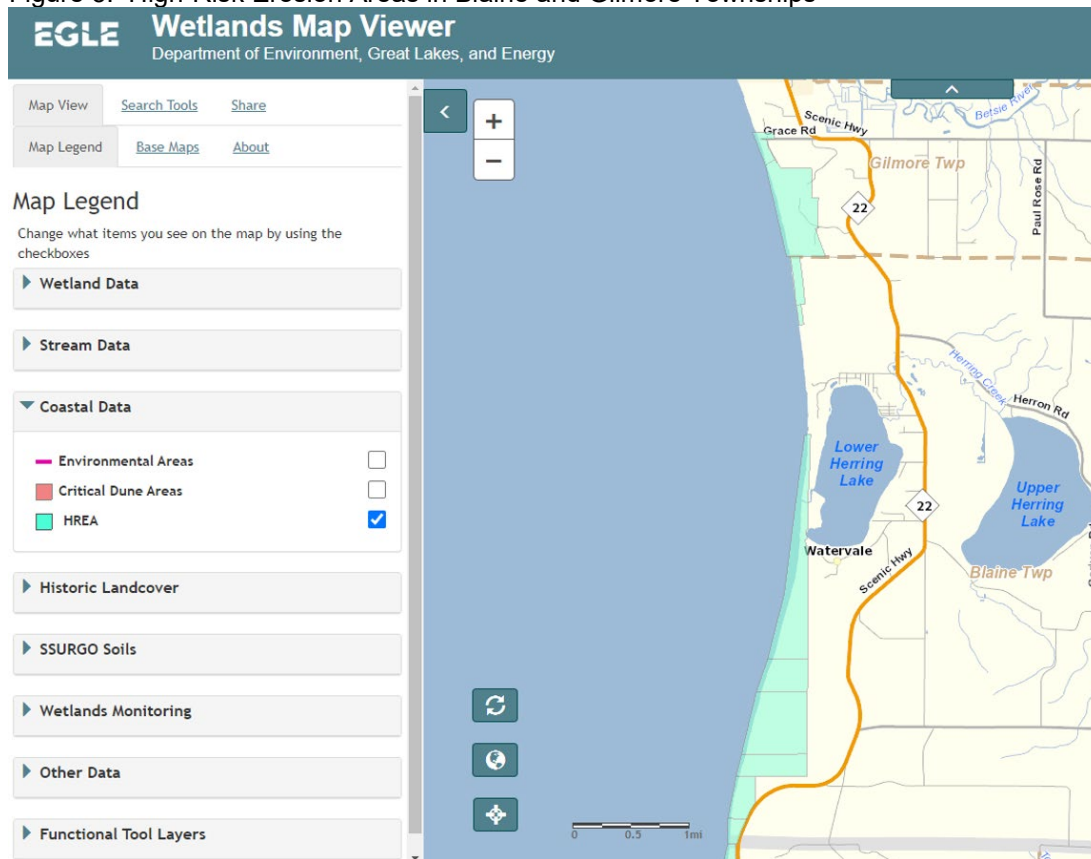
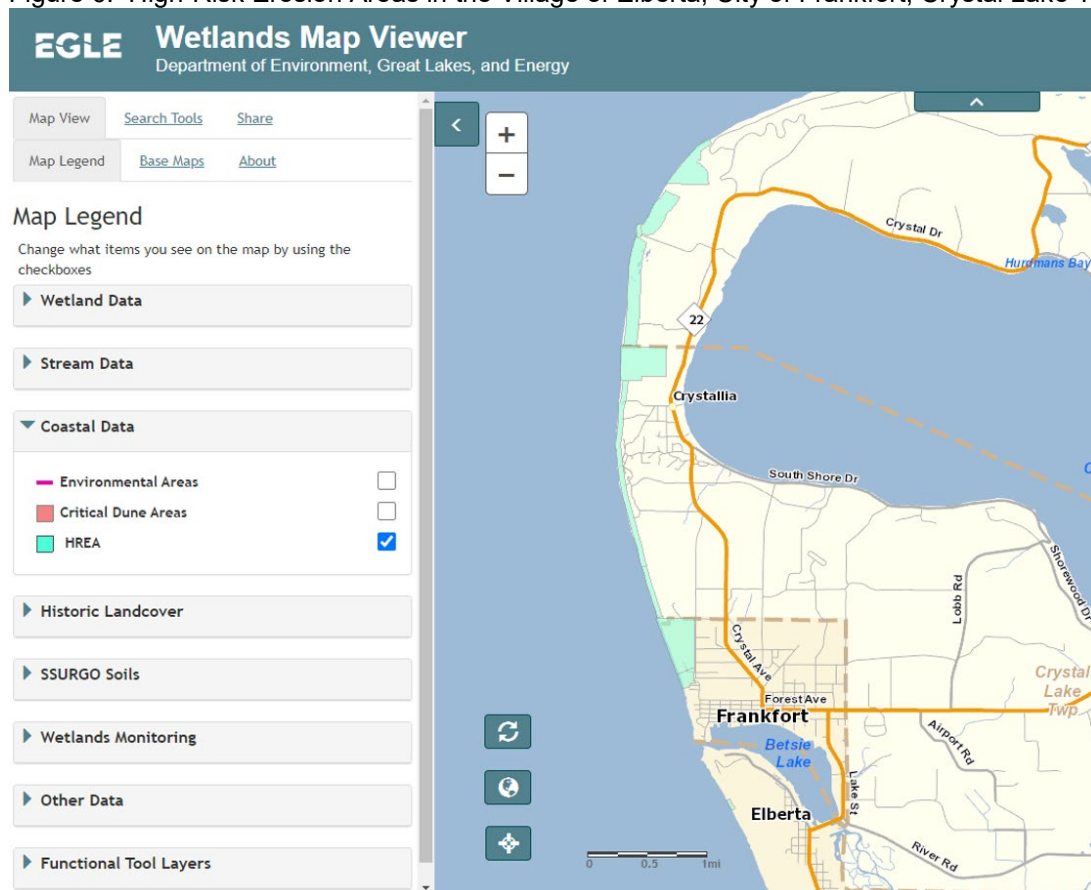


Figure 6: High-Risk Erosion Areas in the Village of Elberta, City of Frankfort, Crystal Lake Twp. and Lake Twp.



Source: <https://www.mcgi.state.mi.us/wetlands/mcgiMap.html#>

Population

Benzie County is the 8th most populated county in the ten county region of Northwest Lower Michigan (Table 4) and is the ranked 66 out of 83 counties in the state for population.² The 2019 American Community Survey (ACS) estimated the county population to be 17,615 people. A comparison of the 2010 and 2019 ACS data indicates a 1% decrease in county population from 2010, when the population was an estimated 17,705 persons (Table 5). The estimated 2019 population per square mile is approximately 1.8 people.

Benzie County is comprised of twelve (12) townships, six (6) villages, of the City of Frankfort. Between 2010 and 2019, the county lost an estimated 90 persons, resulting in a -1% decrease in population. All of the villages, the City of Frankfort and the Townships of Platte, Blaine, Gilmore, Homestead and Benzonia lost population (shown in **red**, Table 5). Inland, Crystal Lake and Joyfield Townships were among the communities that saw the most significant increases in population (shown in **green**, Table 5).

Almira Township, located in the northeast portion of the county and containing the Village of Lake Ann, is the most populated community with an estimated 3,665 persons. Note that the population estimates for the villages are shown separately for informational purposes; however, those population count estimates are incorporated into the totals presented for the township in which they are located.

The second most populated community is Benzonia Township, which contains the villages of Beulah and Benzonia, at an estimated 2,735 persons. The third most populated community is Inland Township, at 2,374 persons.

Table 4: 2019 Estimated Regional Population by County, State

Jurisdiction	Population
Missaukee County	15,028
Kalkaska County	17,585
Benzie County	17,615
Leelanau County	21,652
Antrim County	23,206
Manistee County	24,457
Charlevoix County	26,188
Emmet County	33,104
Wexford County	33,256
Grand Traverse County	92,181
State of Michigan	9,965,265

Source: US Census, 2019 ACS 5-Year Estimates

² https://www.michigan-demographics.com/counties_by_population

Table 5: Population Change by Municipality, 2010 & 2019

Municipality	2010 Estimated Population	2019 Estimated Population	Numeric Change	Percent Change	% of Total Population	Jurisdiction Status*
Village of Elberta	283	165	(118)	-41.70%		P
Village of Lake Ann	307	196	(111)	-36.16%		P
Village of Beulah	491	203	(288)	-58.66%		P
Village of Honor	266	222	(44)	-16.54%		P
Village of Thompsonville	488	481	(7)	-1.43%		P
Platte Township	392	380	(12)	-3%	2%	P
Blaine Township	697	493	(204)	-41%	3%	P
Weldon Township	596	630	34	5%	4%	P
Colfax Township	603	663	60	9%	4%	P
Gilmore Township	893	690	(203)	-29%	4%	P
Joyfield Township	694	836	142	17%	5%	P
Lake Township	778	844	66	8%	5%	P
City of Frankfort	1,427	1,059	(368)	-35%	6%	P
Crystal Lake Township	928	1,162	234	20%	7%	P
Homestead Township	2,352	2,084	(268)	-13%	12%	P
Inland Township	1,934	2,374	440	19%	13%	P
Benzonia Township	2,818	2,735	(83)	-3%	16%	P
Almira Township	3,593	3,665	72	2%	21%	P
Benzie County	17,705	17,615	(90)	-1%	100%	P
State of Michigan	9,952,687	9,965,265	12,578	0.1%		

Source: US Census, 2010 and 2019 5-Year ACS Estimates. *2023 Hazard Mitigation Plan Participant Status: P = Participant or N = Non-Participant

Like many northwest Michigan communities, Benzie County experiences an influx of seasonal residents and tourists during the summer months. However, the US Census Bureau's Decennial Census and the American Community Survey only consistently and comprehensively track the permanent population. The 2022 *Seasonal Population Study for Northwest Lower Michigan* analyzed the 2020 seasonal population for ten counties in northwest Michigan. All ten counties in the Networks Northwest service area were included in the study: Antrim, Benzie, Charlevoix, Emmet, Grand Traverse, Kalkaska, Leelanau, Manistee, Missaukee, and Wexford. The study collected data for permanent and part-time residents and overnight visitors in accommodations and short-term rentals by County. Northwest Lower Michigan's permanent base population is 310,802 and expands by 118% to its largest seasonal population of 676,052 in July.

With a permanent population of 17,970, Benzie County is one of the smallest counties in the region in population. However, in the month of July, when accounting for the second-home owners and overnight visitors, Benzie County becomes the third-most populous county in the region. As indicated in Table 6, Benzie County's base population increases by as much as 138.9% in July (17,970 to 59,278). On average, the county's population grows by 33.6%, or 6,036 people, throughout the year.

Table 6: Benzie County Seasonal Population

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg.
Permanent Population	17,970	17,970	17,970	17,970	17,970	17,970	17,970	17,970	17,970	17,970	17,970	17,970	17,970
Overnight / Part-Time Population	10,142	9,564	10,763	10,853	31,259	41,308	42,935	42,844	32,525	32,725	11,421	11,729	24,006
Total Population	28,112	27,534	28,733	28,823	49,229	59,278	60,905	60,814	50,495	50,695	29,391	29,699	41,976
Difference	7,828	8,406	7,207	7,117	13,289	23,338	24,965	24,874	14,555	14,755	6,549	6,241	6,036
% Change	43.6%	46.8%	40.1%	39.6%	74.0%	129.9%	138.9%	138.4%	81.0%	82.1%	36.4%	34.7%	33.6%

Source: 2022 Seasonal Population Study for Northwest Lower Michigan, Networks Northwest

Age, Race & Disability

Understanding the age distribution and median age of Benzie County can help identify social, economic, and public service needs in the community. The county's total estimated 2019 population is broken into age cohorts (analyzing which proportions of a municipality's population are in which stages of life). This gives a nuanced view of the makeup of a community. Figure 7 indicates the cohort group with the largest population is the 45 to 64 year old group, followed by those in 20-44 year old group and then closely by the 65-84 year old group. As shown in Figure 8, the median age (the midpoint where half the population is younger and half the population is older) of Benzie County is older (50.2 years) than the State (39.7 years). The county, like the State, is aging, but at a faster rate. The youngest community in the county is Almira Township with a median age of 37.9 years; the oldest community in the county is Lake Township with a median age of 65.8 years (Figure 9).

Figure 7: Benzie County Population by Age Cohort, 2019

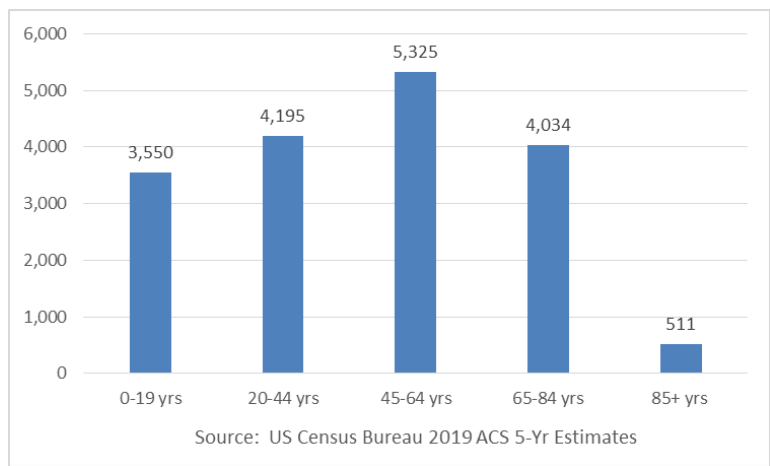


Figure 8: Median Age Trend, 2000, 2010, and 2019

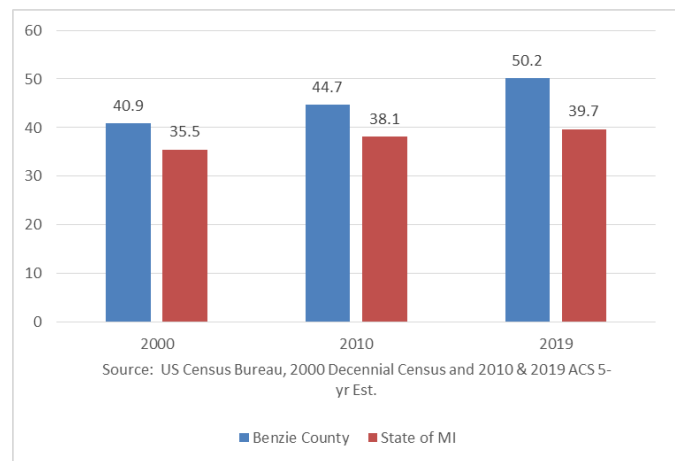
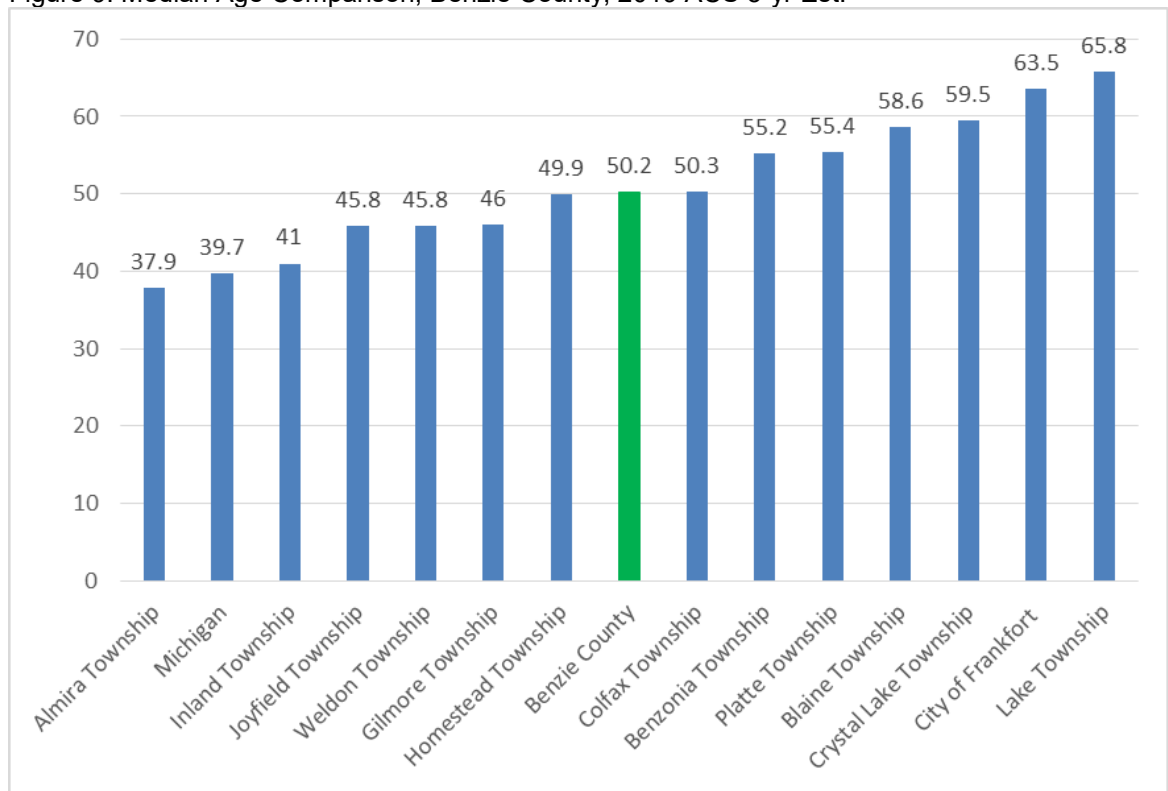


Figure 9: Median Age Comparison, Benzie County, 2019 ACS 5-yr Est.



The racial makeup of Benzie County is predominantly white (96%) (Table 7). 2.5% of the population identifies as Hispanic or Latino; this may be representative of the agricultural industry in the county. 1.7% of the population is American Indian or Alaskan Native; this is higher than representation in the State as a whole. 0.4% of the population is Asian; 0.2% is Black; 0.1% is of some other race; 0.1% is Native Hawaiian or Other Pacific Islander; and 1.8% consists of two or more races.

Table 7: Racial Composition (2019 ACS 5-yr estimates)

	White	Black	American Indian or Alaskan Native	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	Some Other Race	Two or More Races
Benzie County	96%	0.2%	1.7%	0.4%	2.5%	0.1%	0.1%	1.8%
Michigan	75.0%	13.6%	0.5%	3.1%	5.1%	0.1%	0.1%	2.5%

Table 8 represents the number of persons with one or more disability and also those with a disability by age group. An estimated 2,607 (15%) of Benzie County residents have one or more type of disability. An estimated 54% of persons with one or more disabilities are aged 65 years or older.

Table 8: Persons with a Disability, 2019

Total Civilian Noninstitutionalized Population	17,340 persons
With one or more disability	2,607 (15%)
Age 0-17 with a disability	72 (2.2% of that age group)
18 to 64 years with a disability	1,127 (11.6% of that age group)
65 years and over with a disability	1,408 (31.6% of that age group)

Source: US Census, 2019 ACS 5-yr Estimates

Housing Characteristics and Development Trends

The average household size for Benzie County residents is 2.55 persons, which is slightly higher than the State's average of 2.46. Benzie County has an estimated 12,524 total households (Table 9). The Census defines a household as all the people who occupy a single housing unit, regardless of their relationship to one another. Benzonia Township has the largest percentage of housing units of all municipalities in the county (17%), followed by Almira Township (13%). About 49.3% of residential units were estimated to be built before 1980 (Table 10). The 2019 ACS also estimates that over 90% of the county's household units are 1-unit, detached structures, which are commonly referred to as single-family homes.

Table 9: Housing Units by Municipality, 2019

Municipality	2010 Housing Units	2019 Housing Units	Units Change	% of Total
Platte Township	284	246	-15%	2%
Colfax Township	359	399	10%	3%
Joyfield Township	389	416	6%	3%
Blaine Township	507	506	0%	4%
Gilmore Township	468	525	11%	4%
Weldon Township	644	718	10%	6%
City of Frankfort	1,057	991	-7%	8%
Inland Township	985	1,065	8%	9%
Homestead Township	1,230	1,172	-5%	9%
Crystal Lake Township	1,184	1,276	7%	10%
Lake Township	1,180	1,374	14%	11%
Almira Township	1,771	1,672	-6%	13%
Benzonia Township	2,011	2,164	7%	17%
Benzie County	12,069	12,524	4%	

Source: US Census, 2010 & 2019 ACS 5-Yr Estimates * The number of housing units for each village is incorporated into the totals for the respective township in which each village is located.

Table 10: Year Structure Built, 2019

Housing Units	Number	% of Total
Built 2010 or later	345	2.8%
Built 2000-2009	1,863	14.9%
Built 1980-1999	4,150	33.1%
Built 1960-1979	3,104	24.8%
Built 1940-1959	1,640	13.1%
Built 1939 or earlier	1,422	11.4%
Total Housing Units	12,524	

Source: US Census, 2019 ACS 5-Year Estimates

Housing Tenure, Table 11, summarizes the status of housing units, whether occupied or vacant, as well as the median housing value of owner-occupied units (\$185,500) and the median gross rent (\$699). Of the 12,524 total housing units, (90%) are occupied (indicating physically occupied, principal residence housing units).

Table 11: Housing Tenure, 2019

Total housing units	12,524	%
Occupied housing units	6,792	54%
Owner-occupied	6,093	90%
Median Housing Value	\$185,500	
Renter-occupied	699	10%
Median Gross Monthly Rent	\$702	
Vacant housing units	5,732	46%

Source: US Census, 2019 ACS 5-year Estimates

Economic Profile

The *2021 Comprehensive Economic Development Strategy (CEDS)* prepared by Networks Northwest is the product of a locally-based, regionally-driven economic development planning process to identify strategies for economic prosperity. The plan was prepared for the ten county region of northwest Lower Michigan. Table 12 provides a comparison of annual average wage for each county in the CEDS planning area for 2018. Kalkaska County has the highest average annual wage with \$ 50,971, followed by Grand Traverse County at \$44,562. Benzie County has the 8th highest average annual wage at \$33,908. As a western neighbor, it is not unexpected to have residents of Benzie County travel to Grand Traverse County for work.

Table 12: Average Annual Wage by County, 2018

County	Average Annual Wage
Antrim	\$33,081
Manistee	\$33,821
Benzie	\$33,908
Missaukee	\$35,917
Leelanau	\$36,833
Emmet	\$40,258
Wexford	\$40,586
Charlevoix	\$44,558
Grand Traverse	\$44,562
Kalkaska	\$50,971

Source: 2021 Comprehensive Economic Development Strategy (CEDS) prepared by Networks Northwest

The Economic Profile of Benzie County is further described in Table 13. The table provides the county's industry makeup divided into 20 different North American Industry Classification Sectors (NAICS) as well as industry's establishments, jobs, percent distribution, and annual average wage.

The industry with the largest percent distribution is **"Accommodation and Food Service"** at 27.2%, followed by **"Other (includes private, management of business, and unallocated)"** at 14.4% of jobs, and then followed by **"Retail Trade"** at 13.8%. The annual average wage for "Accommodation and Food Services" is \$22,005; for "Other" is not available; and for "Retail Trade" is \$25,294. **"Health Care, Social Assistance"** is the fourth largest industry with an average annual wage of \$47,075.

The industry with the highest annual average wage is **"Finance and Insurance"** at \$55,011, followed by **"Construction"** at \$48,217.

Table 13: Benzie County Economic Distribution by Industry, 2018

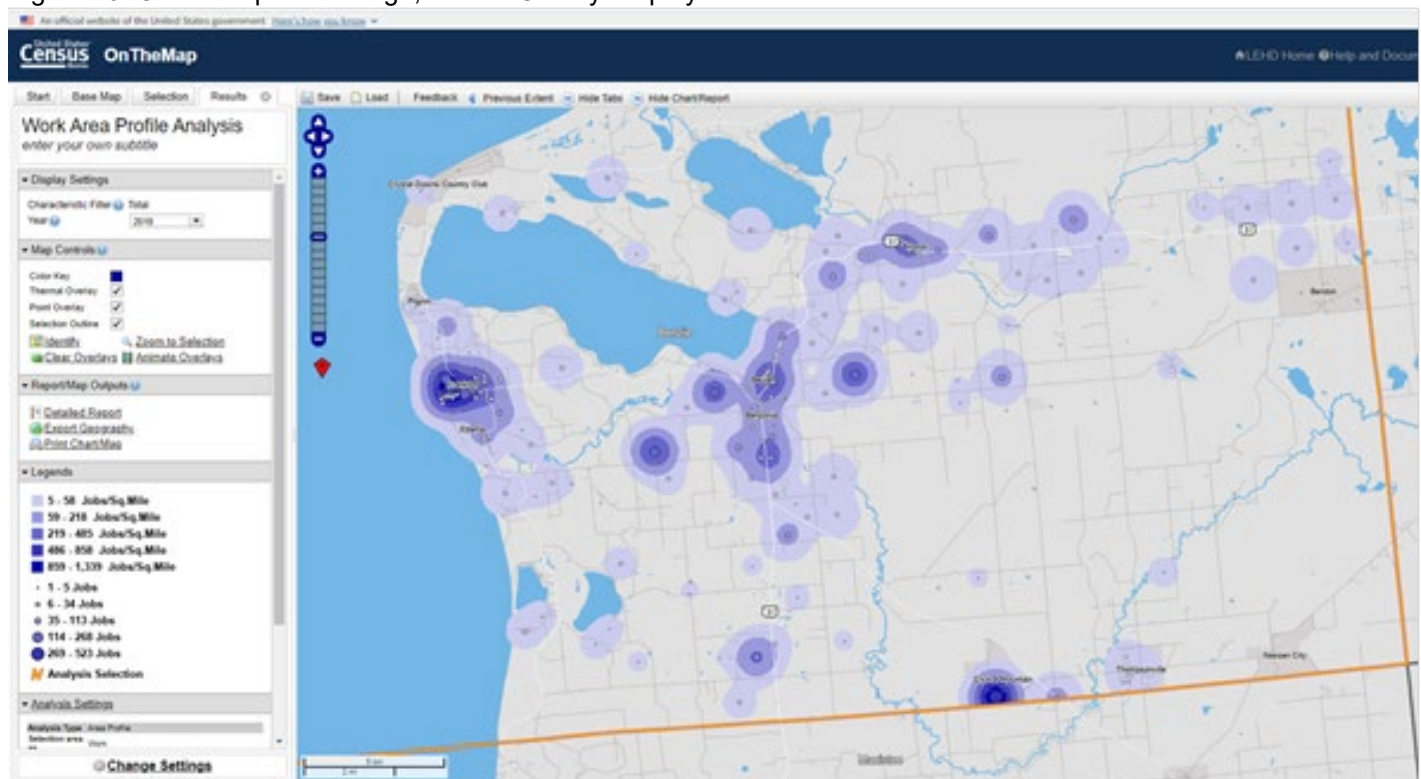
Industry	Establishments (2018)	Jobs (2018)	% Distribution of Jobs	Annual Average Wage
Total Covered Employment	445	4,297	100.00%	\$33,908
Agri., forestry, hunting	9	D	0.00%	D
Mining	1	D	0.00%	D
Construction	85	298	6.90%	\$48,217
Manufacturing	19	379	8.80%	\$43,086
Wholesale trade	4	D	0.00%	D
Retail trade	62	593	13.80%	\$25,294
Transportation, warehousing	14	49	1.10%	\$44,430
Utilities	2	D	0.00%	D
Information	10	28	0.70%	\$26,091
Finance and Insurance	17	158	3.70%	\$55,011
Real Estate, rental, leasing	15	43	1.00%	\$26,725
Professional, technical services	29	79	1.80%	\$27,778
Administrative, waste services	19	D	0.00%	D
Educational services	6	8	0.20%	\$19,870
Health care, social assistance	20	386	9.00%	\$47,075
Arts, entertainment, recreation	14	105	2.40%	\$25,180
Accommodation and food services	55	1,168	27.20%	\$22,005
Other services (except for Public admin.)	42	141	3.30%	\$25,955
Public administration	18	247	5.70%	\$36,572
Other Includes (private, utilities, management of business, and unallocated)	4	615	14.40%	N/A

Source: 2021 Comprehensive Economic Development Strategy, Networks Northwest

*D means limited industries of a sector that would disclose confidential information

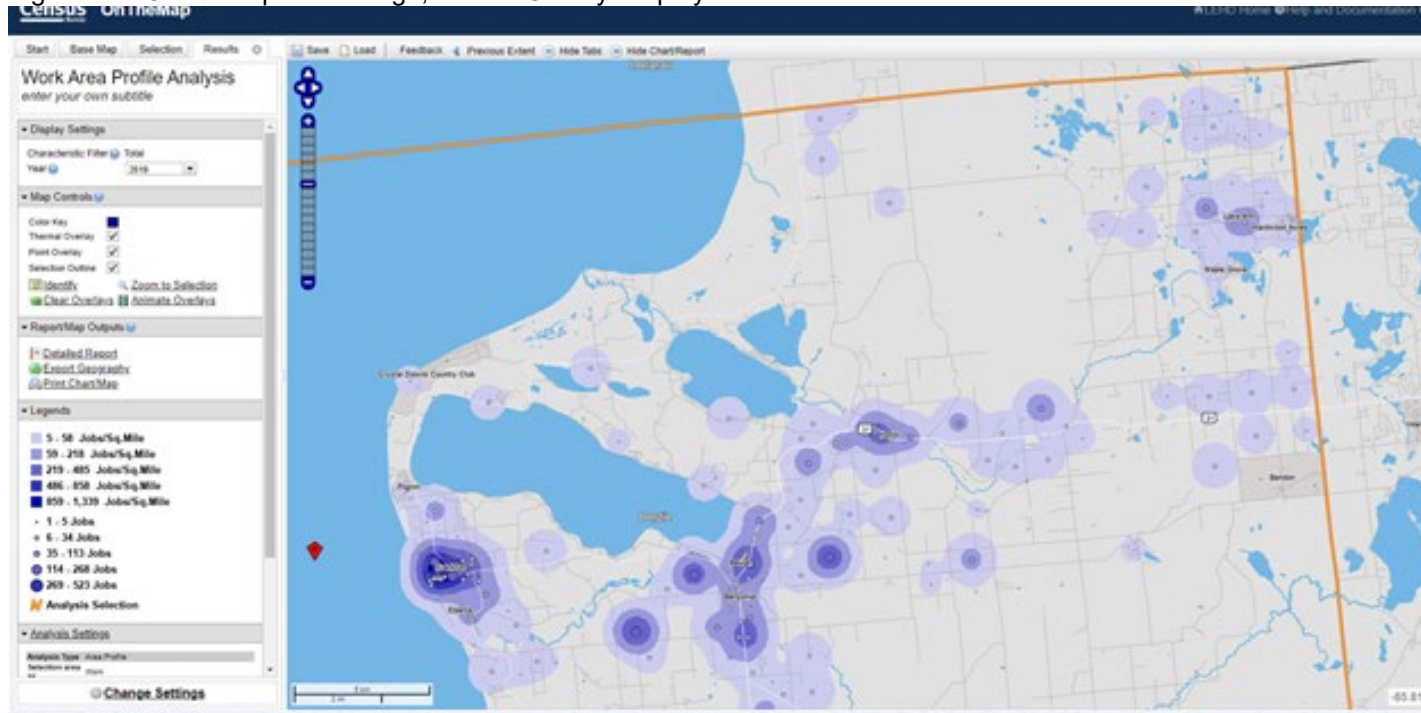
Additionally, OnTheMap, an online interactive tool available from the US Census Bureau, allows for viewing the estimated job density within the county. This website may be useful for emergency preparedness planning as related to response and potential impact to local economic activity areas. It appears the greatest density of jobs are located within the along the main roads of US-31 and M-115, linking the Villages of Honor, Beulah, Benzonia, Elberta, Thompsonville, and the City of Frankfort. The Village of Lake Ann in Almira Township is also an employment center, as well as Crystal Mountain Resort, located off of M-115 in Weldon Township. Figures 10 and 11 are screenshots of the interactive map when completing an area profile analysis for all workers in all jobs in the county in 2019.

Figure 10: OnTheMap Web Image, Benzie County Employment Areas



Source: US Census Bureau, OnTheMap

Figure 11: OnTheMap Web Image, Benzie County Employment Areas



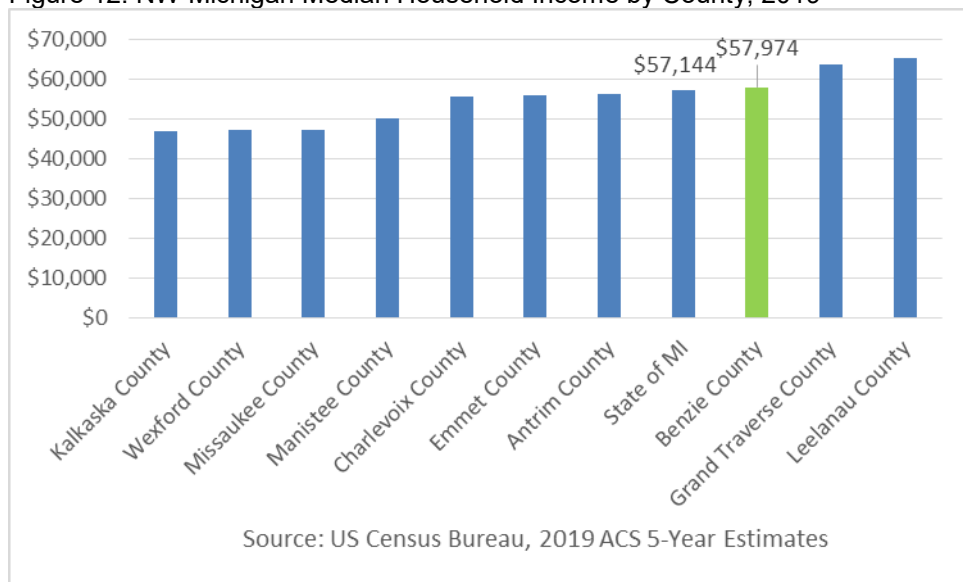
Source: US Census Bureau, OnTheMap

Figures 12 and 13 present a comparison of the median household income (MHI) across the ten county region, the State of Michigan, and local jurisdictions. Benzie County has a median household income of \$57,974, ranking third highest in the region, and also above that of the State. Almira Township, which is also county's most populated jurisdiction (Table 5), has the highest median household income at \$80,938 (Figure 6). The county's economic profile can be further described by considering the cost of housing, transportation, and other goods and services. The budgeting rule of thumb has been that a household should spend no more than 30 percent of its income on housing costs. Considering the MHI of Benzie

County over twelve months, a household is earning \$4,831 per month. The US Census 2019 5-year ACS estimates that the median gross monthly rent is \$702 in Benzie County, which equates to about 14.5% of the median household income.

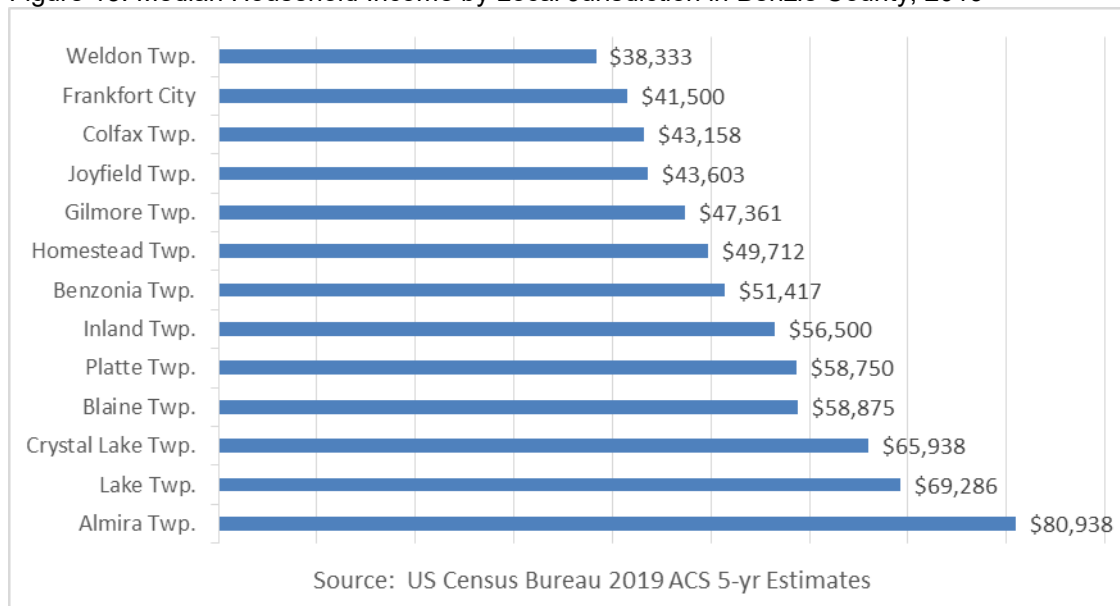
However, according to the 2019 Northwest Michigan Target Market Analysis³ (conducted by LandUseUSA on behalf of Housing North and Networks Northwest), rents are far higher in Benzie County than what many renters can afford. While the affordable rent for a renter earning the mean wage in the county is \$800, the affordable rent for a full-time minimum wage worker earning \$9.45 an hour is \$491. And anecdotally, the demand for housing is driving prices higher still. Home prices are also increasing where the cost to purchase a home is often as much as \$200/square foot or more.

Figure 12: NW Michigan Median Household Income by County, 2019



Source: US Census, 2019 ACS Estimate

Figure 13: Median Household Income by Local Jurisdiction in Benzie County, 2019



The following tables describe the population with the lowest incomes. It is estimated that in 2019, 9.5 percent of all people in the county lived at or below the poverty level (Table 14). The Census describes poverty thresholds differently based on the size of the family and the number of related children living together, as illustrated in Table 15.

³ <https://www.housingnorth.org/target-market-analysis>

Table 14: Benzie County Poverty Estimates, 2019

Poverty	Statistics
All families living below the poverty level	226 (5%)
Families with related children under age 18, in poverty	156 (11.4%)
All persons living below the poverty level	1,650 (9.5%)

Source: US Census, 2019 ACS Estimate

Table 15: 2019 Federal Poverty Level Guidelines

Persons in family/household	Poverty guideline
1	\$12,490
2	\$16,910
3	\$21,330
4	\$25,750
5	\$30,170
6	\$34,590
7	\$39,010
8*	\$43,430

*For families/households with more than 8 persons, add \$4,420 for each additional person.

Financial hardship is further described in the United Ways of Michigan report entitled *ALICE in Michigan: A Financial Hardship Study*. ALICE, which is an acronym for Asset Limited, Income Constrained, Employed, are those households with income above the Federal Poverty Level, but below the basic cost of modern living, such as housing, child care, food, health care, technology and transportation. The ALICE threshold is described as, “the average income that a household needs to afford the basic necessities... for each county in Michigan. Households earning below the ALICE Threshold include both ALICE and poverty-level households” (ALICE, 2019). Table 16 identifies the number of ALICE and poverty households for the county and each municipality. These households likely would not have reserve savings to cover an emergency, such as impacts to their personal property from a natural hazard event.

Table 16: United Ways of Michigan ALICE Report Findings, 2019⁴

Benzie County Jurisdiction	Total Households	% of Total HH that are in Poverty & ALICE
BENZIE COUNTY	6,792	29% (State Avg. is 25%)
Almira Twp.	1,286	20%
Benzonia Twp.	1,049	44%
Blaine Twp.	225	30%
Crystal Lake	248	55%
Colfax Twp.	460	37%
Frankfort City	468	49%
Gilmore Twp.	285	46%
Homestead Twp.	786	44%
Inland Twp.	880	39%
Joyfield Twp.	305	48%
Lake Twp.	404	27%
Platte Twp.	146	43%
Weldon Twp.	250	55%

⁴ Michigan Association of United Ways. *ALICE in Michigan: A Financial Hardship Study*. 2021. <https://www.unitedforalice.org/county-profiles/michigan>

IV. Hazard Identification and Assessments

Vulnerability Assessment

Natural hazard impact on the community can be understood by evaluating vulnerabilities for commonly agreed upon assets. A community's assets are defined broadly to include anything that is important to the character and function of a community and can be described very generally in the following categories:

- People
- Economy
- Built environment
- Natural environment

Vulnerable populations include the economically disadvantaged, elderly, homeless, and persons with a disability. Those that live unsheltered or in homeless encampments, assisted living facilities, mobile home parks, or isolated subdivisions are more susceptible to hazardous events. Vulnerable populations that consist of mobile homes and campgrounds/RV parks are represented on the *Vulnerable Populations and Hazard Areas Map* in Appendix A. Those locations included on the map were specifically discussed during public input sessions. The State Equalized Value of the approximate area of these properties, based on the US Census Bureau's 2019 ACS 5-year estimates and Benzie County Equalization data, is as follows:

- Campgrounds: \$3,622,117
- Mobile homes: \$199,741

The natural environment is the primary feature residents choose to live and vacation in northwest Michigan. Benzie County is home to abundant forest lands, inland lakes and streams, unique sand dune areas, Lake Michigan shoreline and all of the wildlife within that are integral to the identity of the community. While natural resources are abundant, they are vulnerable to all types of hazards. Northwest Lower Michigan is also home to many sensitive wildlife populations that require specific climates and habitats to survive. Damaged, destroyed, or changing natural environments may decrease the chances for certain species' survival.

Additionally, countywide critical infrastructure is represented on the Critical Infrastructure Map, shown in Appendix A. Benzie County Office of Emergency Management and community stakeholders identified the critical facilities and infrastructure shown on the base map. The Critical Infrastructure Points Map is in Appendix A. Table 17 is a summary of critical infrastructure points in Benzie County.

Table 17: Critical Facilities and Infrastructure

Total # of Facilities	Facility Type
5	Commercial <ul style="list-style-type: none">• Agricultural and Food Product Distribution (1) – Graceland Fruit in Frankfort• Ag. Processing, Packaging and Production (2) – Graceland Fruit and Smeltzer Orchard Co. in Frankfort• Entertainment or Media Facility (1) – The Cherry Bowl Drive-In in Honor• Public Assembly (1) - The Garden Theatre in Frankfort
2	Communications <ul style="list-style-type: none">• Information Services (1) – Benzie Central Dispatch in Beulah• Regulatory, Oversight, or Industry Organization (1) – Radio Tower in Beulah
11	Emergency Services <ul style="list-style-type: none">• Emergency Management (1) – Office of Emergency Mgmt. in Beulah• Emergency Medical Services (EMS) (2) – Station 2 in Beulah and Station 3 in Frankfort• Fire and Emergency Services (6) – Townships of Almira, Inland, Homestead, Benzonia; Village of Thompsonville; City of Frankfort• Law Enforcement (2) – Frankfort Police and Benzie County Sheriff's Office

1	Energy <ul style="list-style-type: none"> Natural Gas (1) – Jordon Development Pipeline, Thurman Rd., Thompsonville
20	Government Facilities <ul style="list-style-type: none"> Dam Project (1) – Homestead Dam in Benzonia Dam Flood Damage Reduction System (2) – Crystal Lake Outlet in Frankfort; Grass Lake Dam in Thompsonville. Government Storage or Preservation Facility (1) – MDNR Platte River Fish Hatchery in Beulah Military Facility (1) – USCG Station in Frankfort Personnel-Oriented Government Facility (1) – Benzie County Govt. Center in Beulah Service-Oriented Government Facility (8) – USPS Service Centers Treated Water Distribution Control Center (5) – City of Frankfort and Villages of Beulah, Benzonia, Elberta, and Thompsonville Wastewater Facility (1) – City of Frankfort
3	Healthcare <ul style="list-style-type: none"> Extended Care Facility (1) – Maples LTC in City of Frankfort Healthcare and Public Health (1) – Benzie-Leelanau Health Dept. in Benzonia Hospital (1) – Paul Oliver Memorial Hospital in City of Frankfort
7	School <ul style="list-style-type: none"> K-12 School Facilities (7) <ul style="list-style-type: none"> Benzie Central Schools Middle/High School, Benzonia BCS Lake Ann Elementary, Interlochen BCS Crystal Lake Elementary, Benzonia BCS Bus Garage, Benzonia Frankfort-Elberta Schools Middle/HS and Elementary School, Frankfort New Covenant Christian Academy, Interlochen
5	Transportation <ul style="list-style-type: none"> Aviation (2) – Frankfort Dow Memorial Airport Maritime (1) – Point Betsie Lighthouse in Frankfort Mass Transit (1) – Benzie Bus in Beulah Road (1) – Benzie County Road Commission in Honor

Source: Benzie County Emergency Services

Historical Analysis

The Historical Analysis of Benzie County weather-related hazards uses information on impacts and losses from previous hazard events to predict potential impacts and losses during a similar event. Because of the frequency of these events, communities are more likely to have experience with and data on impacts and losses. Additionally, there have been seven (7) federal-or state-declared incidents that have involved Benzie County (Table 18). These are included in the hazard analysis for individual event types.

Table 18: Presidential and Governor Declared Disasters or Emergencies for Benzie County

Date of Declaration	Type of Incident	Affected Area	Type of Declaration/ Fed ID#
March 2020	COVID-19; Pandemic	Statewide & National	State of Emergency, National Emergency (3455), and Governor and Presidential Declared Major Disaster (4494)
1/29/2019	Extreme Cold	Statewide	Governor Declared Emergency
5/7/2013	Flooding	Benzie and other counties; Some homes along the Crystal Lake Outlet Creek were flooded, along with several homes on Rhodes Road, Demerly Road and Wallaker Road. Some of these homes were not in flood plains.	Governor Declared Disaster
9/4/2005 and 9/7/2005	Hurricane (Katrina) Evacuation	Statewide (Declared due to the emergency conditions in the State of Michigan, resulting from the influx of evacuees from states impacted by Hurricane Katrina beginning on August 29, 2005.)	Governor Declared Disaster and Presidential Declared Emergency (3225)
1/26-27/1978	Blizzard, Snowstorm	Statewide	Presidential Declared Emergency (3057); Governor Declared Disaster
3/2/1977	Drought	Benzie and 43 other counties	Presidential Declared Emergency (3035)
4/5/1956	Tornado	4 Counties: Benzie, Leelanau, Manistee and Ottawa	Presidential Declared Major Disaster (53)

Sources: FEMA <https://www.fema.gov/data-visualization/disaster-declarations-states-and-counties> and Michigan State Police [2019 Michigan Hazard Analysis \(MHA\) pub. 103](#)

Hazard Descriptions

Benzie County is vulnerable to a wide range of natural hazards. Hazard events have the potential to impact local residents, economic drivers in the community, critical infrastructure and the built environment, and the natural environment. The Benzie County Emergency Services Department is challenged with managing these threats to protect life and property. This plan includes a profile for each natural hazard event the county is likely to face. Each profile includes the location, extent, previous occurrences, probability of future events, and vulnerability assessment.

- Location is the geographic areas within the planning area that are affected by the hazard, such as a floodplain. The entire planning area may be uniformly affected by some hazards, such as drought or winter storm. Location may be described in narrative and/or through map illustrations.
- Extent is the strength or magnitude of the hazard. Extent can be described in a combination of ways depending on the hazard.
- Previous occurrences describe the history of previous hazard events within the county. This information helps estimate the likelihood of future events and predict potential impacts. The extent of historic events may be included when the data is available. Data is collected from the National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information data center (NCEI).
- Probability of future events is the likelihood of the hazard occurring in the future and can be described in a variety of ways. Probability may be defined using historical frequencies or statistical probabilities.
- Vulnerability assessment accounts for the types and numbers of existing and future buildings, infrastructure, population, and/or critical facilities located in the identified hazard areas and provides an estimate of the potential dollar losses to vulnerable assets identified. Historical records of property damage, crop damage, injuries and deaths were also evaluated.

Data for natural hazard events in Benzie County was compiled from several different sources. Weather event data was collected primarily from the NOAA utilizing the following websites:

- Climate <https://www.weather.gov/wrh/Climate?wfo=apx> – Historical local observed weather data; Climate prediction and variability; local high impact event summaries
- NOAA Storm Event Database <https://www.ncdc.noaa.gov/stormevents/> - Data on record from 1950 to 2022; however, information for various events is limited and non-contiguous. The database provides local storm reports, damage reports, and recorded event descriptions. The following event types researched for Benzie County include the following (event types in italics are those listed in the Storm Event Database):
 - Dangerous Currents (i.e., *Rip Current*)
 - Dense Fog (*Dense Fog*)
 - Drought (*Drought*)
 - Extreme Temperatures (*Cold/Wind Chill, Extreme Cold/Wind Chill, Heat, Excessive Heat*)
 - Extreme Winter Weather (*Blizzard, Freezing Fog, Frost/Freeze, Heavy Snow, Ice Storm, Lake-Effect Snow, Sleet, Winter Storm, Winter Weather*)
 - Flood (*Flash Flood, Flood*)
 - Hail (*Hail*)
 - Seiche (*Seiche*)
 - Shoreline Flood (*Lakeshore Flood*)
 - Thunderstorm and High Wind (*Heavy Rain, Lightning, High Wind, Strong Wind, Thunderstorm Wind*)
 - Tornado (*Tornado, Funnel Cloud, Waterspout*)
 - Wildfire (*Wildfire*)
- The Michigan Hazard Analysis, completed by the Michigan Department of State Police in 2019, was referenced to collect data on wildfires that occurred on State of Michigan owned land between 1981 and 2018 (as reported by the MDNR).
- The websites for the National Inventory of Dams and MI-EGLE's Michigan Dam Inventory were used to collect information on dams in the county.
- The Great Lakes Current Incident Database, provided by the National Weather Service and Michigan Sea Grant, was referenced for information about dangerous current-related fatalities and rescues on the Great Lakes occurring between 2002 and 2020.

The NOAA – NCEI Storm Events Database is updated on a rolling basis, and thus the database is always being added to. In Benzie County, 179 events were reported between 01/01/1950 and 12/31/2022 (26,633 days).⁵ There were a total of 166 days with an event; 2 days with event and death; 4 days with an event, death and injury; 26 days with event and property damage, and 2 days with event and crop damage. Those events, including State and Federal emergency or disaster declarations, wildfires on MDNR land, and dangerous lake current incidents, result in a total of 374 events in the hazard analysis, as illustrated in Table 19.

Table 19: Reported Benzie County Hazard Events by Type

Type of Event	# of Events	Event Location	Time Interval/ Year Event Recorded
Wildfire (on MDNR land)	184	County	1981-2018
Extreme Winter Weather	108	County/Region	1978*; 1996-2022
Thunderstorm/Wind & High Wind	45	County and Region	1975-2021
Hail	18	Countywide	1982-2021
Coastal Hazards (Lakeshore Flooding, Dangerous Current)	6	Benzie County Lake MI coastline	2010, 2012, 2019, 2020
Tornadoes	4	Countywide	1956*, 1983, 1986, 1989
Extreme Cold / Wind Chill	2	Region; Statewide	2007, 2019*
Heat/Excessive Heat	2	Region	2001, 2018
Flash Flood / Flooding	2	Countywide and Region	2000, 2013*
Drought	1	Countywide and Region	1977*
Lightning	1	County/Region	2000
Public Health Emergency (COVID-19 Pandemic)	1	Statewide/National	March 2020*
Invasive Species (Terrestrial/Aquatic)	-	Countywide	Ongoing
TOTAL	374		

Sources: [NOAA National Centers for Environmental Information Storm Events Database](#); [Michigan State Police-Dept. of Homeland Security 2020 MI Hazard Analysis](#); [FEMA Disaster Declarations for States and Counties](#)

Note: * indicates a state or federal event designation

Economic Impact Analysis

Table 20 presents the *reported* deaths, illnesses/injuries, property damages, and crop damages of hazard events in Benzie County from 1950-2022. There were 6 injuries attributed to thunderstorm/wind events; 24 injuries related to tornados, and 11 rescues related to coastal hazards (dangerous currents). Three deaths have been attributed to dangerous currents. The COVID-19 pandemic* resulted in an estimated 4,121 illnesses and 78 deaths.

The estimated economic impact of Benzie County natural hazard events as reported to NOAA is nearly \$1.26 million in property damages and \$17 million in crop damages. It should be noted that many events, such as hailstorms, likely cause numerous small amounts in property damage, but this often goes unreported. The total reported Damaging Events' Costs recorded with NOAA for Benzie County are as follows:

⁵ One hail event on record for 1955 was excluded from this analysis due to a large temporal gap between recorded events; the next recorded hail event occurred almost three decades later, in 1982. No deaths, injuries, property damage or crop damage were associated with the 1955 hail event.

Table 20: Impact Estimates by Event Type

Event	Property Damage Estimate	Crop Damage Estimate	Directly Related Deaths	Directly Related Rescues, Injuries or Illnesses
Winter Weather	\$600,000	\$17,000,000	-	-
T-Storm with Wind	\$188,000	-	-	6
High Wind	\$49,000	-	-	-
Tornado	\$277,750	-	2	24
Hail	-	-	-	-
Coastal Hazards	\$145,000	-	3	11
Extreme Heat or Cold	-	-	-	-
Drought	-	-	-	-
Flood/Flash Flood	-	-	-	-
Lightning	-	-	-	-
COVID-19/Pandemic	-	-	78*	4,121*
TOTAL	\$1,259,750	\$17,000,000	83	4,162

Source: NOAA's National Centers for Environmental Information; <https://www.michigan.gov/coronavirus/stats>

* This is the total of confirmed and probable deaths for COVID-19 in Benzie County as of 2/14/2023

Table 21 provides an overview of each potential hazard's impact on the permanent population and the estimated impact on the State Equalized Values (SEV) for real and personal property (residential and commercial). The SEV is equal to half the true value of the property. Population data collected from the US Census, 2019 ACS 5-year Estimates. According to the 2022 Seasonal Population Study for Northwest Lower Michigan, apply a 33.6%% increase from the base population of permanent residents to account for the estimated annual average seasonal population increase within the county.

Table 21: Hazard Impacts by Geography, Population and/or SEV

Potential Hazard Event	Geography	Population Est.	SEV
Extreme Winter Weather, Thunderstorm, Wind, Hail, Lightning, Tornado, Extreme Temperatures, Drought, Public Health Emergency	Benzie County	17,615	\$839,071,400
Riverine and Urban Flooding	City of Frankfort and the Village of Elberta are susceptible to riverine/urban flooding along the Bestie River and Bestie Lake; all other communities have areas susceptible to riverine flooding	1,059 in the City of Frankfort; 165 in the Village of Elberta	\$40,216,718
Road Washout Problem Areas	Homestead Township: Valley Road (CR-677); S. Weldon Road/Brownell Rd./N. Pioneer Rd. Crystal Lake Twp.: Hidden Hollow Road on the north side of Crystal Lake; Lake St. Road end on south side of Crystal Lake; areas of South Shore Drive East on SW side of Crystal Lake Benzonia Township: Eldridge Rd. near Narrow Gauge Rd.		\$7,568,465
Shoreline Erosion	Coastline areas in: Lake Twp., Crystal Lake Twp., City of Frankfort, Village of Elberta, Gilmore Twp., Blaine Twp.		\$17,453,093
Wildfire	Areas with Pine Forest Areas		\$105,734,704
Invasive Species	Woolly Hemlock Adelgid confirmed at Crystal Downs Country Club	N/A	

Sources: 2019 ACS Estimates from the U.S. Census Bureau; Benzie County Equalization

Extreme Winter Weather

The National Weather Service defines a winter weather event as: *a winter weather phenomenon (such as snow, sleet, ice, wind chill) that impacts public safety, transportation, and/or commerce. It typically occurs during the climatological winter season between October 15 and April 15.* The Extreme Winter Weather category in this Plan's hazard analysis includes the following subcategories: winter weather, winter storm, ice storm, heavy snow, blizzard, frost/freeze, and lake effect snow. Blizzards are the most perilous snowstorms and are characterized by low temperatures, strong winds, and enormous amounts of fine, powdery snow. Snowstorms have the potential to reduce visibility, cause property damage, and loss of life.

According to the 2019 Michigan Hazard Analysis, Michigan has 360 snowstorms with 0.1 average annual deaths, 0.1 average annual injuries, and \$1.9 million in average annual property and crop damage. Michigan experiences large differences in snowfall over short distances due to the Great Lakes. The average annual snowfall accumulation ranges from 30 to 200 inches with the highest accumulations in the northern and western parts of the Upper Peninsula. In Lower Michigan, the highest snowfall accumulations occur near Lake Michigan and in the higher elevations of northern Lower Michigan. For example, the average snowfall ranges from 141 inches in the Gaylord area to 101 inches in Traverse City in the northwest region of the Lower Peninsula.

Ice and Sleet Storms are storms that generate sufficient quantities of ice or sleet that result in hazardous conditions and/or property damage. Ice storms occur when cold rain freezes on contact with the surface and coats the ground, trees, buildings, and overhead wires with ice. Often times, ice storms are accompanied by snowfall, which sometimes causes extensive damage, treacherous conditions, and power loss. On the other hand, sleet storms are small ice pellets that bounce when hitting the ground or other objects. It does not stick to trees or wires, but can cause hazardous driving conditions. When electric lines are down, households are inconvenienced, and communities experience economic loss and the disruption of essential services.

According to the 2019 Michigan Hazard Mitigation Plan, Michigan has 16 average annual ice and sleet storm events with 0.2 average annual deaths, 0.5 average annual injuries, and \$11.4 million in average annual property and crop damages.

Location

Extreme winter weather events are regional events that are not confined to geographic boundaries and can affect several areas at one time with varying severity depending on factors such as elevation and wind patterns. All of Benzie County is at risk to the occurrence and impacts from extreme winter weather; the county is more susceptible to lake-effect snow due to proximity to Lake Michigan.

Extent

Snowstorms can be measured based on snowfall accumulations or damages. According to the [Benzie County Road Commission's annual snowfall records](#) dating from the 1966-67 season to the 2020-21 season, the average annual snowfall in Benzie County is 126.6 inches. Extreme winter weather events on record with NOAA in total caused \$600,000 in property damages during the March 2012 heavy snowstorm, and \$17,000,000 in crop damages (2012 heavy snowstorm and 2012 frost/freeze).

Previous Occurrences

Since 1996, there have been 107 extreme winter weather events, including heavy snowstorms, ice storms, frost/freeze, lake-effect snow, blizzards, and winter storms reported in Benzie County (Table 22).

During the January 28 to February 2, 2019 Statewide Winter Emergency, many rivers experienced ice jams that threatened some areas with floods as well; Benzie County's Platte River near the Village of Honor threatened 20 homes and cottages. Additionally, in 1978, Benzie County, along with the rest of the state of Michigan, received a Presidential Emergency Declaration for a snowstorm and blizzard.

In recent years, the more common events are winter storms with moderate snowfall of 5-10 inches. Heavy snow, blizzards, and lake-effect snows have been less common. Nonetheless, extreme winter weather events are the second most frequently recorded natural hazard event in the county, with the potential to impact the entire county and cause widespread damage. With combined property and crop damages, winter weather events are also the most costly events to occur in the county.

Table 22: Benzie County Historic Extreme Winter Weather Events

Event Type	Total Events	Property Damage	Crop Damage	Event Years
Winter Storm	49	-	-	1997-2022
Heavy Snow	35	\$600,000	\$2,000,000	1996-2016
Lake-Effect Snow	12	-	-	2006, 2008, 2009, 2010, 2013, 2016, 2019
Blizzard	1 / 5	-	-	*1978 / 1997, 1998, 1999, 2002, 2019
Ice Storm	4	-	-	2001, 2002, 2005, 2008
Frost/Freeze	1	-	\$15,000,000	2012
Winter Weather	1	-	-	2006
TOTAL	1 / 107	\$600,000	\$17,000,000	1978 / 1996-2022

Source: NOAA: National Centers for Environmental Information; MSP 2019 Michigan Hazard Analysis

One of the highest-impact snowstorms in recent memory impacted Northern Michigan on the night of March 2, 2012. Low pressure tracked from Missouri, to southern Lower Michigan, and on to eastern Canada, while rapidly strengthening. Precipitation surged northward into the region on the evening of the 2nd. This was primarily snow, except in parts of east central Lower Michigan (especially near Lake Huron), where temperatures were mild enough for rain. Snow wound down on the morning of the 3rd, and though somewhat blustery winds occurred behind the system on the 3rd, blowing snow was limited because the snowfall was so wet. Snow totals ranged from 6 to 14 inches across most of Northern Michigan. Higher amounts fell near and west of Grand Traverse Bay, with a maximum amount of 20 inches near Lake Ann. With relatively warm temperatures, the snow was very wet; Traverse City saw around a foot of snow during the night, with a low temperature of 33 degrees. The snow stuck to everything, with the weight of the snow downing many, many trees and power lines. Power outages were widespread, with an outright majority of Northern Michigan residents losing power at some time during or after the storm. In Benzie County, 95 percent of residents lost power. Outages lasted up to a week in some spots. Great Lakes Energy described it as the worst snowstorm (in regards to power outages) in 30 years. A number of counties and communities opened shelters to aid those without power or heat. Also included in the tree damage was substantial damage to fruit trees in the Grand Traverse Bay region, particularly cherry trees. This event accounted for \$600,000 in property damages and \$2 million in crop damages.

The frost/freeze event on listed in Table 21 took place on April 27, 2012 across Northwest Lower Michigan, but especially in the Traverse City region. A killing freeze caused extreme damage to agriculture, particularly in the fruit belt of Northwest Lower Michigan. Traverse City saw low temperatures of 25 degrees on the 27th, 31 degrees on the 28th, and 26 degrees on the 29th. These values were not exceptionally colder than normal lows, which are in the middle 30s. Ultimately, the main culprit was a five consecutive days of unprecedented warmth (80 degrees) from March 17-21. This caused fruit trees to bud out far, far ahead of schedule, and left them vulnerable to even relatively normal weather as the spring progressed. The tart cherry crop was a total loss, while other orchard fruits such as sweet cherries, apples, pears, and peaches saw losses in excess of 90% of the expected crop. Total crop losses were estimated at \$15 million.

Probability of Future Events and Vulnerability Assessment

Since 1996, Benzie County has had 107 extreme winter weather events. This averages to about to about 4 events per year. The probability of an extreme winter weather event occurring in future years is 100 percent. Heavy snow events have the potential of shutting down towns and businesses for a significant period of time. Blowing and drifting snow with blizzard conditions cause driving hazards. Ice damage may occur when high winds push lake water and ice past the shoreline, causing damage to public infrastructure and residential property. Benzie County remains a leading producer in the state of fruits, tree nuts, and berries with over \$5 million in these products sold (2017 USDA Census of Agriculture). A frost/freeze event of the magnitude in 2012 would decimate more than three quarters of the products sold today. This would greatly impact the local economy that is also reliant on agriculture and agri-tourism (wineries, orchards, etc.).

During the winter months, the population is largely made up of the base permanent residents. However, there is increasing demand from seasonal residents to purchase property and retire or work remotely from highly desirable northern and coastal communities like those in Benzie County. Many aspects of Benzie County, including natural wooded areas and proximity to lakes/ivers, are attractive to prospective buyers and the permanent population is expected to continue to grow. New residents, especially those locating in remote areas, increase the chance of risk to life and property during severe weather events. Winter-related events cause difficult driving conditions and in the event of an emergency, can make travel increasingly difficult for emergency personnel who may be more frequently dispatched to rural areas.

Thunderstorms and Severe Winds

The National Weather Service defines a severe thunderstorm as: *a thunderstorm that produces a tornado, winds of at least 58 mph (50 knots or ~93 km/h), and/or hail at least 1" in diameter*. These storms can also produce lightning or heavy rain (that could cause flash flooding). Severe thunderstorms can occur at any time in Michigan, although they are most frequent during the warm spring and summer months from May through September.

High wind events are included in this hazard category. Long-lived wind events associated with fast-moving severe thunderstorms are known as a *derecho* (pronounced similar to "deh-REY-cho"). According to the National Weather Service, a derecho is a widespread, long-lived wind storm that is associated with a band of rapidly moving showers or thunderstorms. Although a derecho can produce destruction similar to the strength of tornadoes, the damage typically is directed in one direction along a relatively straight swath. As a result, the term "*straight-line wind damage*" sometimes is used to describe derecho damage. By definition, if the wind damage swath extends more than 240 miles (about 400 kilometers) and includes wind gusts of at least 58 mph (93 km/h) or greater along most of its length, then the event may be classified as a derecho. A derecho often occurs during the spring or summer; however, it can occur any time of the year.

Severe windstorms can cause damage to homes and businesses, power lines, trees and agricultural crops, and may require temporary sheltering of individuals without power for extended periods of time.

Location

Thunderstorms and severe wind are regional events that are not confined to geographic boundaries and can affect several areas at one time with varying severity depending on factors such as elevation and wind patterns. All of Benzie County is at risk to the occurrence and impacts from thunderstorms and severe winds.

Extent

Thunderstorms can be measured based on wind speed or damages. The average wind speed for events in Benzie is 53.2 knots. Benzie County had a reported \$237,000 in property damages caused by thunderstorms and severe winds. There have been six injuries reported in relation to thunderstorm/wind event in Benzie County. No crop damages or deaths have been reported.

Previous Occurrences

Since 1991, there have been a total of 41 thunderstorm/wind and 8 high wind events reported in Benzie County (Table 23). This is the second-most frequently occurring type of severe weather event in the county. A thunderstorm/wind event at Lake Ann in 1987 resulted in 6 injuries.

Table 23: Benzie County Historic Thunderstorm and Wind Events

Event Type	Number of Events	Property Damage	Crop Damage	Injuries	Event Year(s)
Thunderstorm Wind	33	\$ 188,000	\$ -	6	1975-2021
High Wind	8	\$ 49,000	\$ -		1998, 2001, 2003, 2005, 2010, 2015, 2021
TOTAL	41	\$237,000	\$ -		

Source: NOAA: National Centers for Environmental Information

The most damaging event occurred on November 10, 1998. One of the strongest storms ever recorded in the Great Lakes crossed the region on the 10th and 11th. The storm originated over the Central Plains and lifted across western portions of Lake Superior. The wind shifted to the southwest during the afternoon...with the strongest winds generally developing along the Lake Michigan shoreline. During the afternoon and evening of the 10th wind gusts of 70 to 80 mph were common along the Lake Michigan shoreline...with 50 to 60 mph gusts across the rest of the region.

A large number of trees were uprooted or snapped off with many branches also torn off. Many of the trees and branches fell on power lines resulting in widespread power outages regionwide. Many roads were also blocked by falling trees and several accidents were reported as cars collided with debris on the roadways. Several homes and cars received damage from falling trees and branches. The strong winds generated 15 to 20 foot waves on Lake Michigan. Most ships took shelter with the approach of the storm and rode out the storm in protected waters.

In Frankfort...located on the Lake Michigan shoreline of Benzie County...80 to 90 mph wind gusts destroyed a hangar at the City-County airport and damaged 6 private planes. Damage to the hangar was estimated at around \$500,000 dollars.

Probability of Future Events and Vulnerability Assessment

Between 1975 and 2022, Benzie County has had 41 thunderstorm/wind and high wind events. The probability of an event occurring in a future year is 85 percent. Damage from straight line winds usually affects multiple counties through the loss of electricity from trees/tree limbs downing power lines; causing widespread property damage; and potentially exposing the public to severe injury or fatality due to flying debris. The magnitude and severity depend on the county population, seasonal activity, and the spread of development. During the warm or summer months, the permanent population expands by up to 138% to include both the seasonal population. Residents and visitors are attracted to both rural, sparsely populated areas and city/village centers. Mobile home parks, campgrounds, institutions (schools, places of worship, etc.), and numerous annual events that draw a large number of tourists to outdoor recreation areas were identified as specific areas of concern. The locations of mobile homes and campgrounds are identified on the Vulnerable Populations and Hazard Areas map in Appendix A.

Hail

Hailstorms occur when a severe thunderstorm produces hail that falls to the ground. Hail is formed when the updrafts of the storm carries water droplets above the freezing level, where they form into rounded or irregular lumps of ice that range from the size of a pea to the size of a grapefruit. When the weight of the hail is no longer supported by the air, it falls to the ground and has the potential to batter crops, dent automobiles, and injure people and wildlife. Sometimes, large hail appears before a tornado since it is formed in the area of a thunderstorm that tornadoes are most likely to form.

According to the *2019 Michigan Hazard Mitigation Plan*, Michigan has on average 191 hail storms, an expected annual statewide loss of about \$16.6 million, no deaths, and approximately 1 injury per year. Despite damaging hail occurring in every part of Michigan, the areas of the state most prone to severe thunderstorms (e.g. the Southern half of the Lower Peninsula) are also most prone to large and damaging hail. The majority of the hailstorms occur during the growing season from May through August when crops have the greatest potential to be damaged by hail.

The National Weather Service issues forecasts for severe thunderstorms with sufficient warning time to allow residents to take appropriate action to reduce the effects of hail damage to vehicles and some property. However, little can be done to prevent damage to crops. For example, during September 26-27, 1998, a line of severe thunderstorms moved across northern Lower Michigan producing hail up to 2" in diameter in Manistee County and destroying an estimated 30,000-35,000 bushels of apples at area farms, and damaging several homes and vehicles.

Location

Hailstorms are regional events that frequently accompany thunderstorms, and are not confined to geographic boundaries. The severity of hailstorms may range across the affected areas. All of Benzie County is at risk to the occurrence and impacts from hailstorms. According to the National Weather Service, Benzie County is in an area of the United States that has on average two days of hailstorm events per year.

Extent

According to the NOAA National Centers for Environmental Information, the approximate size of hail is described as follows in Table 24. If a thunderstorm produces hail that is 1 inch in diameter (quarter size) or larger, it is considered to be a severe thunderstorm.

Table 24: NOAA Hail Size Description

Appearance	Approximate Size in Inches
Pea	0.25-0.5 inch
Penny	0.75 inch
Nickel	0.88 inch
Quarter	1.00 inch (<i>Severe Criteria</i>)
Walnut/Ping Pong	1.50 inch
Golf Ball	1.75 inch
Hen Egg	2.00 inch
Tennis Ball	2.50 inch
Baseball	2.75 inch
Tea Cup	3.00 inch
Grapefruit	4.00 inch
Softball	4.50 inch
Appearance	Approximate Size in Inches
Pea	0.25-0.5 inch

The greatest size of hail reported in Benzie County was 3.25 inches on October 3, 2006 in Benzonia. According to the scale, hailstones of this size are slightly larger than a tea cup.

Hail can damage aircraft, homes, vehicles, agricultural crops, and can also injure or kill animals and people.

Previous Occurrences

Between 1982 and 2021, Benzie County had 18 hailstorms reported to NOAA (Table 25). There are no reported property/crop damages, injuries or deaths attributed to hail.

Table 25: Benzie County Hail Events, 1982-2021

Location	Date	Magnitude
Benzie County	7/17/1982	1.75
Benzie County	7/9/1987	0.75
Frankfort	4/24/1993	0.75
Honor	5/30/2002	1.25
Lake Ann	8/3/2003	0.75
Lake Ann	8/28/2003	0.88
Frankfort	9/15/2003	0.75
Lake Ann	9/7/2005	0.75
Elberta	9/7/2005	0.75
Lake Ann	6/28/2006	0.75
Honor	7/17/2006	1
Benzonia	10/3/2006	3.25
Honor	10/3/2006	1
Benzonia	6/20/2007	1
Lake Ann	10/17/2016	1
Benzonia	5/31/2019	0.75
Nessen City	5/31/2019	0.88
Beulah	9/7/2021	0.75

Source: NOAA: National Centers for Environmental Information

During one particularly strong event on July 17, 2006, hail damage was significant within Benzie County and the region. A strong cold front ran headlong into warm and humid air in place over Michigan. Thunderstorms ignited by midday in Eastern Upper Michigan, and became widespread by late afternoon in Northern Lower Michigan. A large number of storms became severe, as this became the largest severe weather outbreak in Northern Michigan in several years. Millions of pounds of fruit crops were destroyed by hail and wind.

Probability of Future Events and Vulnerability Assessment

With 18 events reported in the past 40 years, Benzie County has a 45% chance of a major hailstorm in a given year. All existing and future buildings, exposed infrastructure, and populations are at risk from hailstorms since hail causes damage to roofs, brick walls, glass, landscaping, crops, livestock, and cars. Manufactured homes and campground populations located throughout the county and are more susceptible to hail damage; the locations of these are identified in the Vulnerable Populations and Hazard Areas Map in Appendix A.

Hail can also damage roads, sidewalks, bridges, and above ground utilities. Hail has the potential to cause injury and death, and populations are advised to take shelter when an event occurs.

Riverine and Urban Flooding

Fluvial, or Riverine flooding occurs when rivers, streams, and lakes overflow into adjacent floodplains due to prolonged, intense rainfall, rapid snowmelt or ice jams. Flooding can damage or destroy property, disable utilities, destroy crops and agricultural lands, make roads and bridges impassable, and cause public health and safety concerns. Floods occur in the early spring, but also occur in the winter due to ice jams, and during the summer or fall from severe thunderstorms. Flooding caused by severe thunderstorms has a greater impact on watercourses with smaller drainage areas.

Pluvial, or Urban flooding occurs when water flows into low-lying areas because it does not have a place to go, due to impervious surface coverage. This flooding occurs from a combination of excessive rainfall, snowmelt, saturated ground, and inadequate drainage, and is becoming more common in Michigan. Since development is occurring in floodplains, the natural landscape is unable to properly disperse the water. Urban flooding also has the potential to overflow onto docks or other structures with electricity running to them, which increases the risk for an electric shock drowning. Additionally, storm and sanitary sewers are unable to handle the water flows associated with storm events, which can result in sewer overflows and affect the water quality of nearby lakes and rivers, as well as structures with basements or shallow groundwater tables.

Dam failure is also a potential source of flooding. Dam infrastructure in the state is aging and costly to maintain. FEMA provides Federal Guidelines for Dam Safety, which encourage strict safety standards in the practices and procedures employed by federal agencies or required of dam owners regulated by the federal agencies (2004). The National Inventory of Dams provides a catalogue of dams in the nation with a profile of each. Each profile lists the Hazard Potential Classification. This is a system that categorizes dams according to the degree of adverse incremental consequences of a failure or mis-operation of a dam. The hazard potential classification does not reflect in any way on the current condition of the dam. Three classification levels are adopted as follows: Low, Significant, and High, listed in order of increasing adverse incremental consequences.

According to the 2019 Michigan Hazard Analysis, the most damaging hazard in Michigan, based upon estimated physical damages and known response/recovery costs, appears to be floods. The MSP reports that flooding events have a statewide expected annual loss estimated at more than \$100 million (\$25.69 million had previously been estimated in the 2014 Michigan Hazard Mitigation Plan, but Federal Disaster 4195 confirmed a higher magnitude more in line with earlier MDEQ estimates, as that Metro Detroit flood event was quite similar to Federal Disaster 1346 during the previous decade).

The MSP's 2019 Michigan Hazard Analysis indicates that the Northern Lower Peninsula averages 0.3 annual flooding events, with average annual property and crop damages of \$2,591,244 due to flooding.

Location

The City of Frankfort and the adjoining Village of Elberta comprise an urbanized area of the county and is the most likely location to experience both riverine and urban flooding, due to the presence of impervious surfaces and the presence of the Benzie River it ends at Lake Michigan.

The Betsie River and the Platte River are the two major rivers in the county. There are also multiple inland lakes. The major lakes are Crystal Lake, Platte Lake, Little Platte Lake, Upper Herring and Lower Herring Lakes, and Lake Ann.

The following communities are likely to experience riverine flooding from the Betsie River and its tributaries: the southeast part of Inland Township, Colfax Township, The Village of Thompsonville, Weldon Township, Benzonia Township, Crystal Lake Township, Gilmore Township, the Village of Elberta and the City of Frankfort.

The following communities are likely to be at risk from riverine flooding from the Platte River and its tributaries: Lake Ann Township, Inland Township, Homestead Township, the Village of Honor, Platte Township, Benzonia Township (northern part) and Lake Township.

High groundwater tables are prevalent within the Villages of Benzonia and Beulah, which are in the Crystal Lake watershed. The Village of Beulah recently completed a municipal water and sewer system. A study is underway to evaluate expansion of those systems to the Village of Benzonia and parts of Benzonia Township.

Blaine Township experienced flooding within neighborhoods surrounding Lower Herring Lake in 2020, when exceptionally high Lake Michigan water levels resulted in Lake Michigan waters flowing into Lower Herring Lake. Combined with a high groundwater table, residential backyards and some roads (such as Buena Road near the Herring Creek) around the lake were flooded, and the operability of residential septic systems were compromised. Additionally, Gorivan Road, south of

Heron Road, along Herring Creek in Blaine Township, floods occasionally. The Benzie County Road Commission has indicated they may consider elevating the road with a few feet of fill.

In Homestead Township and the Village of Honor, ice dams on the Platte River caused localized flooding on adjoining properties in 2019.

Other flooding may involve low-lying areas that collect runoff waters; flaws or shortcomings in existing sewer infrastructure; undersized or poorly designed storm water control practices; collective effects of land use and development trends; illegal diversion of water, or actions that interfere with system function.

There are four existing publicly-owned dams in Benzie County that are regulated by MI Dept. of EGLE, as indicated in Table 25 and Figure 14. (Note that the Thompsonville Dam was removed in 1989 after it failed.) The Homestead Dam on the Betsie River in Benzonia Township is the only one that has a “significant” hazard potential; meaning that if the dam were to fail, there would be a significant impact on life and property downstream of the dam. The remaining have a low hazard potential and are therefore not required to have an Emergency Action Plan on file with the State of MI/ Benzie County Emergency Management.

The most recent Emergency Action Plan for the Homestead Dam was received by the MDNR on January 14, 2008, and indicates the following:

The dam was constructed in 1974 at the site of a former powerhouse barrier. It consists of a 60 foot wide fixed crest steel sheet piling spillway, with 25 foot earth fill sections on either side. The total length of the dam is 110 feet. There are two spillway crests within the spillway section, each 29.5 feet. There is no auxiliary spillway. The low head dam now functions as a lamprey barrier for the Betsie River. The dam is considered to have adequate spillway capacity based on hydraulic calculations on file with the MI EGLE Dam Safety Program.

The dam is a very popular fishing area during the spring and fall. The State of Michigan owns the dam and 75% of the stream frontage from the dam downstream to the US 31 Bridge (approximately 2 miles.) The dam hazard area in case of dam failure would be most severe within 1 mile of the dam. Below this area only minor flooding should occur.

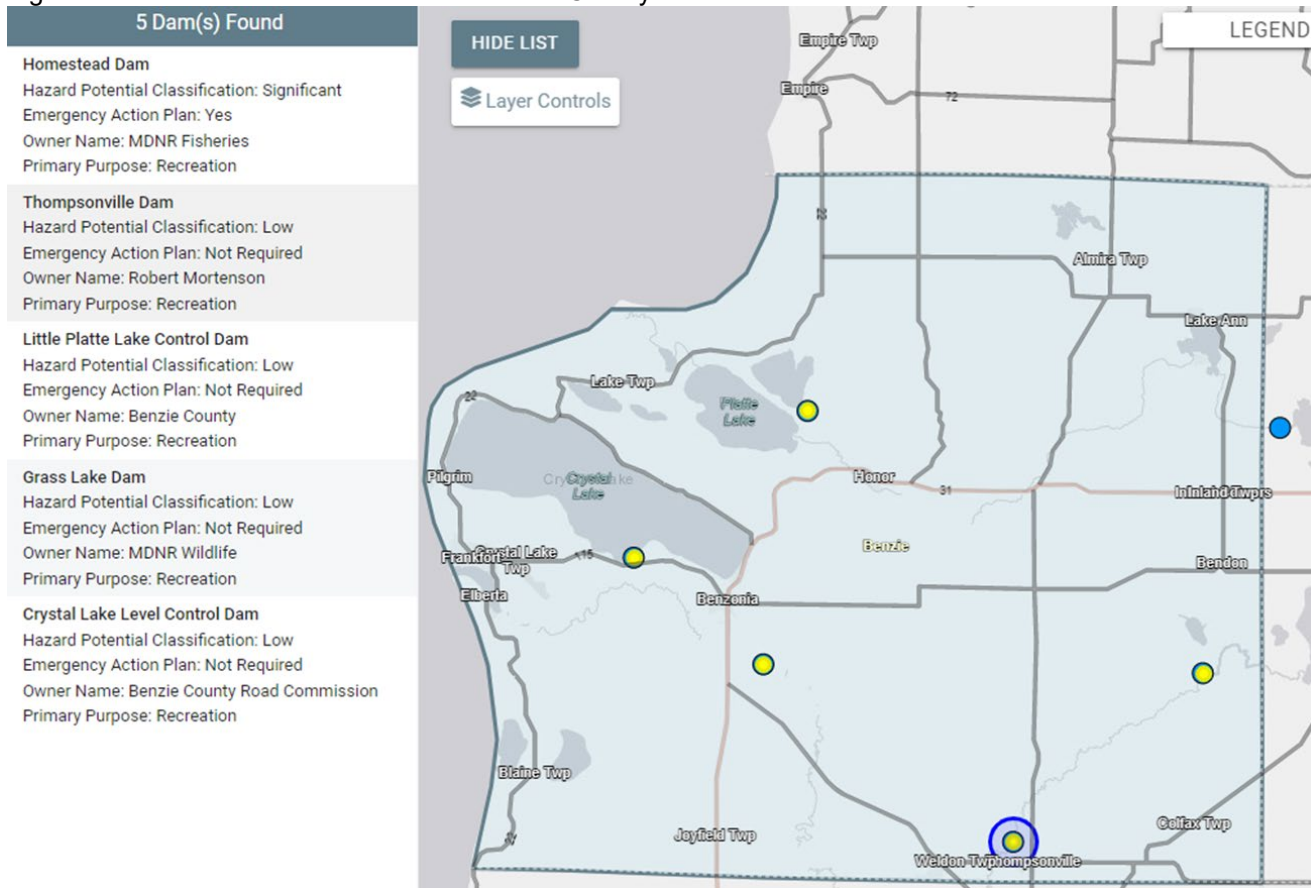
The most recent Operation and Maintenance Plan for the Dam was completed July 27, 2006, and indicates that formal inspections should be made periodically at intervals not to exceed 10 years. The dam was last inspected May 1, 2016 and has a “satisfactory” rating. Should there be an update to the EAP or O&M Plan, the Benzie County Emergency Manager should provide those documents to the EGLE Dam Safety Unit.

Table 26. Public Dams in Benzie County

Name	Height (ft.)	Storage (acre-feet)	Location	Owner	Dam Type	Year Completed	Dam Purpose	Hazard Potential
Crystal Lake Level Control Dam	7	27,190	Crystal Lake Outlet	Benzie County Road Commission	Gravity	1977	Recreation, Other	Low
Grass Lake Dam	8.4	5,200	Betsie River	MDNR Wildlife	Gravity	1951	Recreation	Low
Homestead Dam	14	1,800	Betsie River	MDNR Fisheries	Other	1974	Recreation	Significant
Little Platte Lake Control Dam	10	3,400	N. Branch Platte River	Benzie County	Other	1969	Recreation, Other	Low
(Former) Thompsonville Dam (was removed in 1989 after it failed)	20	165	Betsie River	Robert Mortenson	Earth, Gravity	1901	Recreation	Low

Source: [EGLE Michigan Dam Inventory](#)

Figure 14. Locations of Public Dams in Benzie County



Source: [National Inventory of Dams](#)

Extent

There are no reported property damages associated with inland flooding events for Benzie County. There are no reported deaths or injuries occurred from these events (Table 27).

Table 27: Fluvial and Pluvial Flood Events

LOCATION	DATE	EVENT TYPE	PROPERTY DAMAGE	CROP DAMAGE	FLOOD CAUSE
Countywide/Region	9/1/2000	Flash Flood of Road	-	-	Thunderstorm producing 2-6 inches of rain within four hours
Countywide/Region	April - May 2013	Flooding	-	-	Extensive rainfall during a spring thaw.
TOTAL			-		

Sources: NOAA National Centers for Environmental Information; *Michigan State Police 2019 Michigan Hazard Analysis

Previous Occurrences

On September 1, 2000, flash flooding of roadways occurred in northern Benzie County and surrounding counties. An area of thunderstorms formed over northern Benzie County and surrounding Leelanau County and the Traverse City metropolitan area and persisted until from about 7:00 pm to 11:30 pm, continually affecting the same areas. Over the 4 to 5 hour period of rainfall, much of Leelanau County reported rainfall amounts ranging from 4 to 8 inches, while amounts ranged from 2 to 6 inches in Benzie and Grand Traverse counties. These storms led to flooding of roadways across the northern half of Benzie County as well as Leelanau and Grand Traverse counties.

On May 7, 2013, Governor Snyder issued a State of Disaster Declaration for Benzie County and 18 other counties and two cities in Michigan that were impacted by severe flooding that occurred between April 9 and May 3, 2013. Some homes along the Crystal Lake Outlet Creek (Crystal Lake Township) were flooded, along with several homes on Rhodes

Road (Inland Township), and Demerly Road and Wallaker Road (Joyfield Township). Some of these homes were not located in floodplains. The water table rose so high in some places that it flooded foundations and caused the floors to buckle.

Though not a common occurrence in the county, riverine flooding has occurred when spring snowmelt coincides with prolonged, intense rains.

The county may see an increase in flood events from an increase in rain and snowfall, and the backwater effect from fluctuating high water levels of the Great Lakes.

Probability of Future Events and Vulnerability Assessment

Floods can damage or destroy public and private property, disable utilities, make roads and bridges impassable, destroy crops and agricultural lands, cause disruption to emergency services, and result in fatalities. People may be stranded in their homes for several days without power or heat, or they may be unable to reach their homes at all. Long-term collateral dangers include the outbreak of disease, widespread animal death, broken sewer lines causing water supply pollution, downed power lines, broken gas lines, fires, and the release of hazardous materials.

Between 2000 and 2021, Benzie County has had two major inland flooding events. This represents a 9% chance of an annual major fluvial or pluvial flood event. The magnitude and severity depend on the county population, seasonal activity, and the spread of development. During the warm or summer months, the population expands to include both the permanent resident base population and the seasonal short- and long-term population. The seasonal population is attracted to both rural, sparsely populated rural areas and urban activity centers. The City of Frankfort's Business District is located at the mouth of the Betsie River. City infrastructure is also vulnerable where it intersects with the Betsie River.

High groundwater tables are prevalent in many areas of the county, which poses a compatibility issue with the use of ineffective on-site septic disposal systems resulting potential groundwater contamination. The Village of Lake Ann does not have a local sewer or water supply system. The Village of Honor has sewer, but not municipal water. The Village of Thompsonville has municipal water, but not sewer. The Villages of Elberta, Beulah, and the City of Frankfort each have municipal water and sewer systems. A study is underway to evaluate expansion of those systems to the Village of Benzonia and parts of Benzonia Township. Concerns were expressed in the community survey about how well the existing sewer system in Beulah will keep up with demands placed on it by the seasonal population.

The following comments from the community survey and stakeholder meetings were provided regarding inland flooding/erosion concerns:

- Village of Elberta: The M-22 Causeway over the Betsie River in Elberta was mentioned specifically five times in the survey due to the concern of another flooding/ potential washout situation if/when lake water levels rise again like they did in 2019 and 2020.
- Blaine Township: "Somewhat concerned about structural integrity of the dam in Lower Herring Lake [adjoining Lake Michigan]. Hasn't been a functioning dam in years, but if waters receded a lot it may be something to watch." The lake flooded in 2020 due to high Lake MI water levels and excessive rain.
- City of Frankfort: "Critical infrastructure concerns include the water and sanitary sewer distribution systems"; "dams and rivers in the event of a flood"; and the need to "install check valves on storm discharge locations".
- The Platte and Betsie River both run through the county. The BCRC maintains 17 bridges (not counting the bridges maintained by MDOT). Losing a major bridge could have long term negative impacts to the county.
- Village of Beulah: Potential services failure due to pressures from seasonal tourists; "sustained power outages will have a significant impact on our ability to sustain major DPW responsibilities"
- Village of Thompsonville/Colfax Twp.: Spring runoff issues north of Lindy Road from a natural drain that runs from Thurman Road in Colfax Township and combined with a high water table.
- Weldon Township: ice backups along Little Betsie River crossing Wallin Road and Thompsonville Highway and along the Betsie River north of Lindy Road.
- Platte Township: sometime have high water/flooding along the North Branch Platte River along Gudemoos Road. High water table in low ground areas on the north end of the Little Platte Lake and Saffron Road.
- Homestead Township: Dirt road washouts on hilly roads at Weldon and Brownell and Valley Road north of US 31. Ice dams along Platte River.
- Almira Township: the Pinewoods subdivision off of Lake Ann Road has a high groundwater table and has experienced flooding.
- Benzonia Township: Dirt road washouts on the north side of Hidden Hollow Road and the south side of Crystal Lake on Lake Street. High water area could impact businesses/multi-unit housing along US-31 between Narrow Gauge and Eldridge Road on the north side of US-31, toward Crystal Drive.

- Crystal Lake Township: Betsie River and Crystal Lake outlet area is a flood zone. Have had beach erosion and road washout at the end of Figg Road and the end of Bellows Road, on the south side of Crystal Lake. Also a culvert/possible road washout at Thomas Road east of Bellows Road.
- Gilmore Township: high water near M-22 causeway; concerns about the [structural] soundness of the steel wall along the Betsie Lake in Elberta.

Specific flood hazard areas were identified during public input meetings and the online survey are identified on the Hazard Areas Map provided in Appendix A. Flood hazard information may be obtained from the Flood Insurance Rate Maps (FIRM) available for jurisdictions.

NFIP Participation Status

FEMA's online National Flood Hazard Layer (NFHL) is a geospatial database that contains current effective flood hazard data, which support the National Flood Insurance Program. Flood Insurance Rate Maps, or FIRMs, can be viewed for participating areas in the U.S. through the NFHL. The FIRMs aid in better understanding a property's level of flood risk and type of flooding in the area. The maps show the delineation of the 1% Annual Chance Floodplain Boundary (the "100-Year Flood Boundary") and the 0.2% Annual Chance Floodplain Boundary (the "500-Year Flood Boundary").

For a particular river, USGS collects river streamflow data over time, determines the largest flood in each year, and then calculate statistical data for that river. The more years of data available, the more accurate the estimates for the various flood quantiles. As more years of data become available, the estimates become more refined, which can result in revisions to the quantiles and thus revised floodplain boundaries.⁶ Urban development and installation of flood controls can also result in changes in streamflow data over time.

Almira Township, Blaine Township, Crystal Lake Township, the City of Frankfort, Gilmore Township, Lake Township and the Village of Elberta are the Benzie County communities participating in the National Flood Insurance Program (Table 29). Communities that are not currently participating in the NFIP are listed in Table 30. All communities in Benzie County have a FIRM effective date of 03/23/2021, as FEMA completed a countywide Flood Insurance Study (FIS) and preliminary Flood Insurance Rate Maps for all of Benzie County in 2020.

The 2019 *Michigan Hazard Analysis* by the Michigan State Police reports the following flood insurance policy and claim data for Benzie County (Table 28).

Table 28: National Flood Insurance Statistics for Benzie County

Total Premium	Policies	A-Zone Policies	Total Coverage	Claims since 1978	Total paid since 1978
\$48,653	34	22	\$7,862,600	7	\$54,860

Source: Michigan State Police, 2019 Michigan Hazard Analysis

FEMA defines a "repetitive loss property" as any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period since 1978 (the year at which consistent claims data collection began). According to Susan Conradson, Floodplain Engineer with EGLE's Water Resources Division, there have been no properties in Benzie County that have had repetitive flood losses.

However, in 2015, Benzie County was awarded a FEMA Hazard Mitigation Planning Grant⁷ to assist in acquiring and demolishing a flood-prone home located at 4696 Frankfort Hwy., Frankfort, MI 49365 (in Crystal Lake Township). The project period was from April 27, 2016 to June 21, 2019. Work included the removal of the house and outbuildings, removal of the septic tank, water well abandonment, site grading, and restoration of topsoil, seed and mulch. Following the acquisition and demolition the property was deed restricted as permanent public open space.

One discrepancy was found when researching local ordinances and FEMA's online Flood Map Service Center in comparison to the FEMA Community Status Book Report⁸ for Michigan. The Village of Elberta passed an ordinance on March 1, 2021 addressing the floodplain management provisions of the State Construction Code as related to the issued FIRMs for the Village. The Village intends to investigate this discrepancy and attain compliance with the NFIP.

⁶ <https://www.usgs.gov/faqs/why-do-values-100-year-flood-seem-change-every-flood>

⁷ Project # P4195.3. Total project cost was \$127,935. Total 4195 HMPG contribution was \$95,951. Benzie County's non-federal contribution was \$31,984.

⁸ Contains the current "NFIP status" of a community in the declared counties.

Table 29: NFIP Participating Communities in Benzie County

	Almira Township	Blaine Township	Crystal Lake Township	City of Frankfort	Gilmore Township	Lake Township	Village of Elberta
1	Floodplain Management Adoption*	Y	Y	Y	Y	Y	N
2	FIRM Map Adoption	Y	Y	Y	Y	Y	N
3	Current Effective Map Date	NSFHA	3/23/2021	3/23/2021	3/23/2021	3/23/2021	3/23/2021
4	Reg-Emerg Date**	3/23/2021	10/21/2009	6/19/1989	3/18/1991	4/28/2021	6/5/1989
5	Sanction Date	-	-	-	-	-	9/19/1976
6	Community ID #	261921	260027A	260028A	260029A	261920A	260030A
7	Implementation Method***	Local Ordinance ?	Village Ordinance 2021-1 /Appendix G of Michigan Building Code	Township Ordinance 08 of 2021; Local Zoning Ordinance Section 22.9	Local Zoning Ordinance	Local Ordinance ?	Local Ordinance No. 2021-001
8	Appointed Designee****	Benzie County Building Official?	Benzie County Building Official	Township Zoning Administrator	Benzie County Building Official?	Benzie County Building Official?	Benzie County Building Official
9	Implementation of Damage Provisions*****	Should a structure located in the flood plain be damaged by any means to an extent of more than fifty (50%) percent of the structure's pre-catastrophe market value as recorded by the assessing officer, it shall not be reconstructed. Any building damaged by any means to an extent of less than fifty (50%) percent of the structure's pre-catastrophe market value as recorded by the assessing officer may be modified, repaired, or replaced, but any alterations must incorporate floodproofing of utility and sanitary facilities up to the level of the 100 year floodplain or the level to be inundated during an Intermediate Regional Flood as determined by the U.S. Army Corps of Engineers. The costs of said improvements for floodproofing shall not be included in determining the damage costs.					
Source of Data in Rows 1-6: FEMA Community Status Book Report, accessed 5/15/2023							
Notes:							
* Adoption of NFIP minimum floodplain management criteria via local regulation.							
** The date the community first joined the NFIP.							
*** How local floodplain management regulations are implemented and enforced in Special Flood Hazard Areas.							
**** The primary designee or agency that is appointed to implement the addressed commitments and requirements of the NFIP. Note elevation measurements are required for new building permits; elevation for a proposed building is confirmed when a final Certificate of Occupancy is issued by the Building Department.							
***** How participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event.							
NSFHA = No Special Flood Hazard Area – An area that is in a moderate-to-low risk flood zone; an area of minimal flood hazard. An NSFHA is not in any immediate danger from flooding caused by overflowing rivers or hard rains.							

The communities in Benzie County that are not currently participating in the NFIP are listed in Table 30. These communities are not listed in FEMA's Community Status Book Report as "Communities Not in the National Flood Program".

Table 30: Communities Not Participating in the National Flood Insurance Program

Community Name	FIRM Map Date Effective 3/23/2021 Indications
Benzonia Township	Some areas surrounding Crystal Lake and Platte Lake are in Zone A; rest of the Township contains areas of minimal flood hazard.
Colfax Township	Areas of Minimal Flood Hazard
Homestead Township	Areas of Minimal Flood Hazard
Inland Township	Areas of Minimal Flood Hazard
Joyfield Township	Areas of Minimal Flood Hazard
Platte Township	Some areas adjoining Little Platte Lake are in Zone A; rest of the Village contains areas of minimal flood hazard.
Weldon Township	Areas of Minimal Flood Hazard
Village of Benzonia	Areas of Minimal Flood Hazard
Village of Beulah	Some areas adjoining Crystal Lake are in Zone A; rest of the Village contains areas of minimal flood hazard
Village of Honor	Areas of Minimal Flood Hazard
Village of Lake Ann	Areas of Minimal Flood Hazard
Village of Thompsonville	Areas of Minimal Flood Hazard

Sources: FEMA Community Status Book Report, accessed 5/15/2023; FEMA online Flood Map Service Center

Lightning

Lightning is a random and unpredictable discharge of electricity in the atmosphere between the clouds, air, or ground to equalize the charged regions in the atmosphere. It is still being debated how the electrical charges build up in the clouds. Lightning generally occurs during thunderstorms; however, it can occur without a thunderstorm, such as during intense forest fires and heavy snowstorms. Lightning that occurs without nearby rain is most likely to cause forest fires.

Location

Lightning is not confined to geographic boundaries and is a regional event. Since lightning occurs randomly, it is impossible to predict where lightning will occur and how severe it will be. All of Benzie County is at risk to the occurrence and impacts from lightning.

Extent

Only one lightning event has been reported to NOAA for Benzie County. That event occurred in conjunction with a flash flood event in the county on September 1, 2000. While no property damages, injuries or fatalities were reported for Benzie County, the NOAA Episode Narrative describes there was one injury and one fatality in the region from that lightning event. A father and son were exposed on a hillside viewing the lightning storm. The 40 year old father was struck and killed by a lightning bolt. His son was thrown to the ground, but only sustained minor injuries. Emergency crews performed CPR on the father immediately and a police officer arrived with a defibrillator. However attempts to revive the man failed.

During the same event, lightning later that Friday night also disrupted numerous high school football games. Many games were cancelled or postponed until the following Saturday morning. Many of the schools which began play had lengthy delays and many waited an hour or more before fans and players could return to the field.

Previous Occurrences

There has been one lightning event reported to NOAA for Benzie County since 1950 (Table 31). Outside of Benzie County, there was one injury and one fatality that occurred associated with this event.

Table 31: Lightning Events

LOCATION	DATE	DEATHS	INJURIES	PROPERTY DAMAGE
Countywide/Region	9/1/2000	0	0	\$-

Source: NOAA: National Centers for Environmental Information

Probability of Future Events and Vulnerability Assessment

Since there have been one lightning event reported in the last 22 years, this indicates a 4.5% chance an impactful lightning event would occur every year. However, not all lightning events been reported to NOAA, since events with injuries, deaths, and extensive damages/disruptions tend to be the only ones reported. Therefore, the number of lightning events and damages may be higher.

All existing and future buildings, exposed infrastructure, and populations are at risk from lightning events since it may cause structural and wildland fires, loss of electrical and telecommunications equipment, and damage to buildings or vehicles from falling trees struck by lightning. People that work outside or participate in outdoor recreation activities are at a higher risk to be struck by lightning. The locations of campgrounds are identified on the Vulnerable Populations and Hazard Areas Map in Appendix A.

Tornado

A tornado is a violently rotating column of air that extends from a thunderstorm to the ground, and can occur anytime during the day and throughout the year. It can only be seen if water droplets, dust, and debris form a funnel. The funnel cloud can have winds that reach up to 300 miles per hour with an interior air pressure that is 10-20% below the surrounding atmosphere's pressure. The length of a tornado path has been reported up to 200 miles. Tornado path widths are generally less than one-quarter mile wide. These storms are the most violent of the atmospheric storms since they have the potential to destroy buildings, uproot trees, hurl objects, and cause loss of life.

According to the National Oceanic and Atmospheric Administration/National Weather Service's Storm Prediction Center, tornadoes cause approximately 60 deaths and hundreds of millions of dollars in property damage each year. According to the 2019 Michigan Hazards Plan, Michigan is located on the northern fringe of the nation's tornado belt and has a statewide expected annual loss of about \$19.6 million due to tornadoes. Michigan also has an average of 18 tornadoes, approximately 4 deaths, and approximately 50 injuries per year. Between 1999 and 2019, Michigan has had 314 reported tornado events with 52.9% as EF0 (weak) or EF1 (moderate), 38.9% reported as F0 or F1 (weak), 6.7% as EF2 (significant) or EF3 (severe), and 1.6% as F2 (strong). In Northern Michigan, tornados are most likely in the summer months, although some have occurred in the spring and fall.

Location

Tornadoes are a regional event that are not confined to geographic boundaries and can affect several areas at one time. Also, the magnitude of tornadoes may range across the affected areas. All of Benzie County is at risk to the occurrence and impacts from tornadoes. It is impossible to predict where and with what magnitude a tornado will touchdown. Approximate trajectories of recorded tornadoes with NOAA are illustrated on the Vulnerable Populations and Hazard Areas Map in Appendix A.

Extent

The Fujita Scale (Table 32) categorizes tornado severity based on observed damage. The six-step scale ranges from F0 (light damage) to F5 (incredible damage). Based on the Fujita Scale, Benzie County's most damaging tornado occurred in 1956 with winds ranging from 210-261 mph. As of February 2007, the National Weather Service uses the Enhanced Fujita Scale (EF Scale). This new scale ranges from EF0 to EF5.

Table 32: Fujita and Enhanced Fujita Scale Comparison

Fujita Scale (Old)		EF Scale (Current)	
Fujita Scale	3-Second Gust Speed (mph)	EF Scale	3-Second Gust Speed (mph)
F0	45-78	EF0	65-85
F1	79-117	EF1	86-109
F2	118-161	EF2	110-137
F3	162-209	EF3	138-167
F4	210-261	EF4	168-199
F5	262-317	EF5	200-234

Source: FEMA

Previous Occurrences

Between 1950 and 2022, Benzie County has had four (4) reported tornadoes touchdown, causing \$277,750 in property damage (Table 33). The most destructive tornado occurred in 1956. It was a category F-4, causing two (2) deaths, twenty-four (24) injuries and \$250,000 in property damage. The remaining three tornadoes were category E-1 tornados.

The EF4 tornado that occurred in 1956 began near Wallaker Road in southern Joyfield Township and continued northeast through Weldon, Homestead, Inland and Almira Townships for 19.4 miles before ending just east of Lake Ann in Grand Traverse County.

The EF1 tornado that occurred in 1983 was located near Lamerson Lane, between St. Johns Rd. and US-31, in Inland Township.

The EF1 tornado that occurred in 1986 was located in the Village of Thompsonville.

The EF1 tornado that occurred in 1989 began near the Crystal Downs Country Club and traveled 12 miles southeast across Crystal Lake, ending southwest of Narrow Gauge Rd and S. Marshall Rd. in Benzonia Township.

Table 33: Tornado Events, 1950-2022

Begin Location	Date	Deaths	Injuries	Scale	Property Damage	Crop Damage
Joyfield Township	4/3/1956	2	24	F4	\$250,000	
Inland Township	7/21/1983	0	0	F1	\$250	
Village of Thompsonville	6/26/1986	0	0	F1	\$2,500	
Lake Township	10/15/1989	0	0	F1	\$25,000	
TOTAL	4	2	24		\$277,750	\$

Source: NOAA: National Centers for Environmental Information

Probability of Future Events and Vulnerability Assessment

Since there have been four tornadoes events reported in the last 72 years, the data shows that there is a 5.6% chance a tornado would occur every year. While the chance for a tornado is low, if an event occurs, there is potential for a high magnitude tornado to touch down. All of the reported historic events have caused property damage.

Similar to thunderstorms and severe wind events, populations without access to permanent, sturdy shelter are most vulnerable to tornado events. This includes mobile home parks, campgrounds, recreation areas, and large outdoor gatherings. The locations of mobile homes and campgrounds are identified on the Vulnerable Populations and Hazard Areas Map in Appendix A. Persons with a disability or elderly persons are also more vulnerable. Tornadoes can occur suddenly with very little warning, and it may be difficult for these populations to find adequate shelter in a hurry.

The Benzie County Office of Emergency Management utilizes CodeRED mass notification system or NWS messaging to notify citizens of events and emergencies in the community. CodeRED enables real-time, communication through text, email, voice messages, social media, and the CodeRED mobile app. There are no operable tornado sirens in the county.

Additionally, the Grand Traverse Band Tribe of Ottawa and Chippewa Indians maintains two underground tornado shelters on tribal property at Four Seasons Drive in Benzonia. Completed in 2008, each shelter can accommodate up to 32 individuals and their pets and belongings. The prefabricated underground shelters were designed and installed for the safety and protection of tribal residents without basements in their homes during severe storms and tornadoes. The shelters are open during the severe weather months (April – September) and are locked during the late fall and winter months.

Extreme Temperatures

Prolonged periods of very high or very low temperatures are often accompanied by other extreme meteorological conditions, such as high humidity, drought, heavy snowfall, or high winds. Extreme heat or extreme cold primarily affect the most vulnerable segments of the population, such as the elderly, children, impoverished individuals, and people in poor health.

Nationwide, there are approximately 175 deaths per year that are attributable to extreme heat, according to the 2019 Michigan Hazard Analysis. The threats from extreme heat are heatstroke, sunstroke, muscle cramps, heat exhaustion, and fatigue. It is hazardous to livestock and agricultural crops, causes water shortages, exacerbates fire hazards, exacerbates respiratory problems, prompts excessive electrical energy demands, and causes infrastructure failures. Urban areas experience the most serious extreme heat with the combined high temperatures and high humidity that produce a heat-island effect.

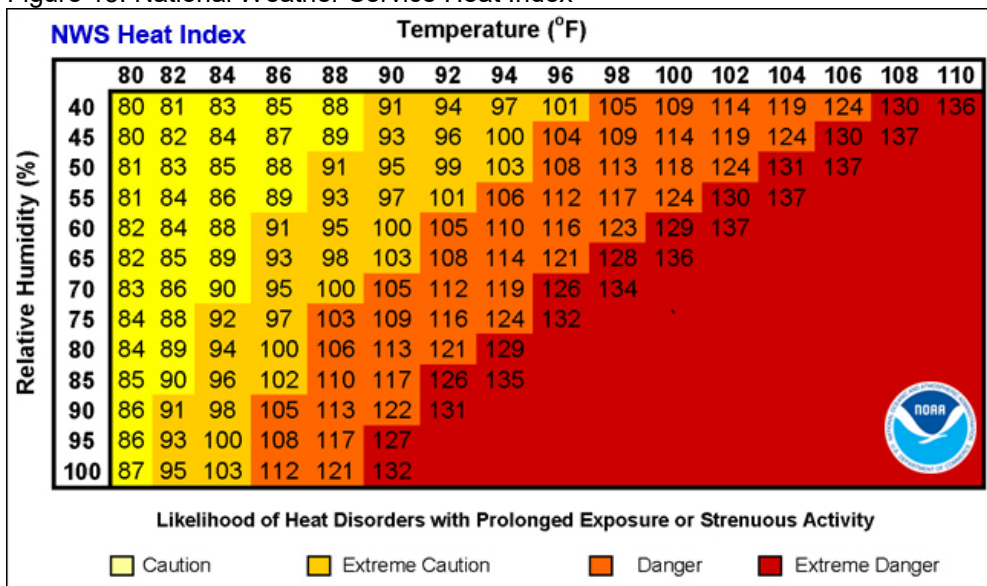
According to the 2019 Michigan Hazard Mitigation Plan, Michigan has 11 average annual extreme heat events with 0.4 average annual deaths and 41 average annual injuries.

In the United States, approximately 700 people die each year as a result of severe cold temperature-related causes according to the 2019 Michigan Hazard Analysis, with a significant number of deaths occurring due to illnesses or disease that are negatively impacted by severe cold weather, such as stroke, heart disease, and pneumonia. Exposure to extreme cold temperatures can be life threatening and can cause hypothermia and frostbite. According to the 2019 Michigan Hazard Mitigation Plan, Michigan has 35 average annual extreme cold events with 1 death, 9.4 average annual injuries, and \$6.4 million in average annual property and crop damage. Extreme cold affects transportation modes and power utilities, resulting in dead vehicle batteries and loss of power/heat.

Measuring Extreme Temperatures (Extreme Heat and Extreme Cold)

Extreme heat is measured with the National Weather Service's Heat Index Chart (Figure 15). The chart uses relative humidity and air temperature to determine the likelihood of heat disorders with prolonged exposure or strenuous activity. Individuals are unable to shed excess heat from their bodies when they experience prolonged exposure to hot temperatures, which results in heat disorders.

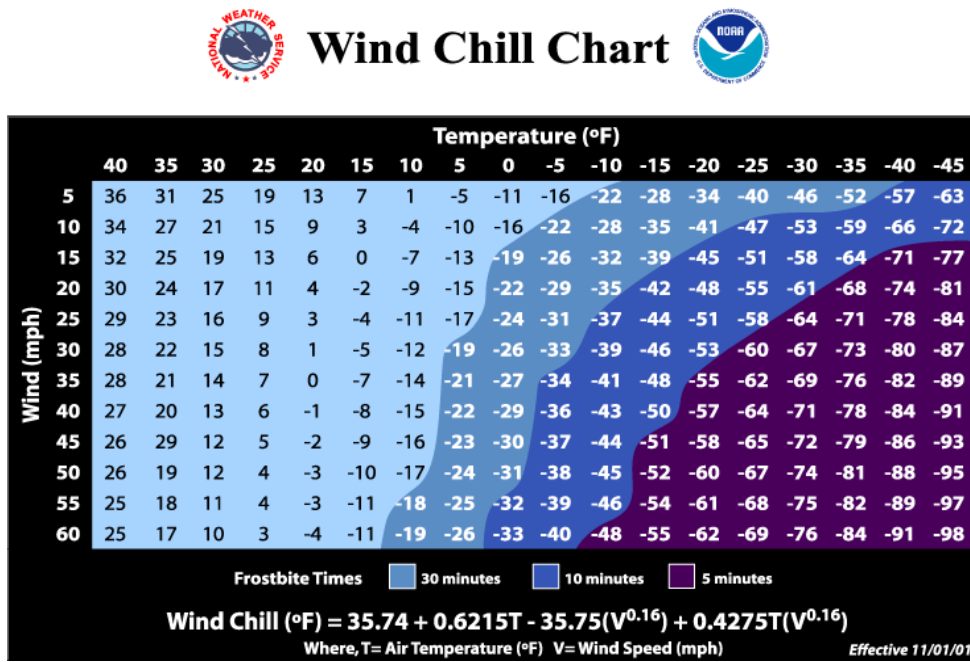
Figure 15: National Weather Service Heat Index



Source: National Weather Service

Extreme cold is measured with the wind chill index, which is a measure of the rate of heat loss from exposed skin caused by the combined effects of wind and cold. As the wind increases, heat is carried away from the body and reduces the external and internal body temperatures. Figure 16 shows the NOAA Wind Chill Chart as it corresponds to various temperatures and wind speeds.

Figure 16: National Weather Service Wind Chill Chart



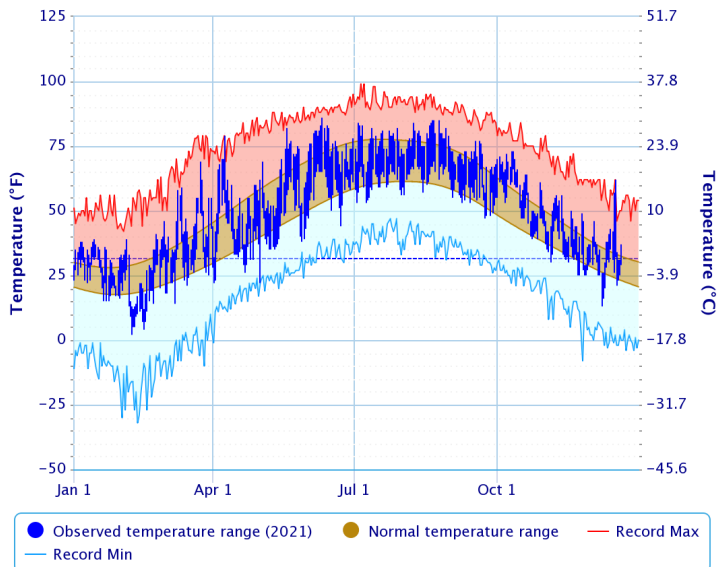
Source: National Weather Service

Figures 17 and 18 are the observed temperatures at Frankfort and Beulah for 2021. The dark blue line shows temperatures recorded between January 1 2021 and December 21, 2021. The red line shows record high temperatures for that day, and the light blue line below indicates record low temperatures for that day.

Figure 17: Daily Temperature Data for Frankfort

Daily Temperature Data – FRANKFORT 2NE, MI

Period of Record – 1898-03-01 to 2022-08-11. Normals period: 1991-2020. Click and drag to zoom chart.

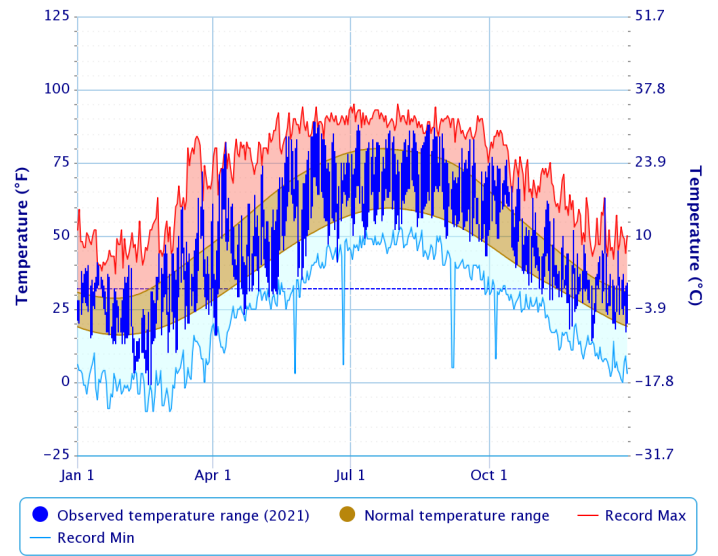


Powered by ACIS

Figure 18: Daily Temperature Data for Beulah

Daily Temperature Data – BEULAH 7SSW, MI

Period of Record – 2000-04-02 to 2022-08-11. Normals period: 1991-2020. Click and drag to zoom chart.



Powered by ACIS

Source: [NOAA Climate Data Online](https://climate.noaa.gov/data/observed/summary?locationId=2020&period=1991-2020)

Location and Extent

Extreme temperatures are a regional event that are not confined to geographic boundaries and range in severity across the affected areas. All of Benzie County is at risk to the occurrence and impacts from extreme temperatures.

There have been two heat/extreme heat events recorded in Benzie County. The first occurred on August 1, 2001. Excessive heat was a problem the first two weeks that August across all of northern Michigan. Temperatures reach the mid to upper 90s, on average, a few days each year; however, for a 5 day (8/5 - 8/9) stretch overnight low temperatures failed to fall below the lower 70s in most areas. This very humid air mass was unusual for northern Michigan, an area which typically sees cool nighttime temperatures and for this reason has very few homes with air conditioners. No heat related deaths or injuries were reported; however, most outdoor events were modified due to the forecasts of hot and humid conditions. County fairs sent animals home, yet still there were livestock losses at fairs in Otsego and Alcona counties. Attendance at county fairs was well below normal and this was attributed to the heat. This period of excessive heat also brought on a drought event at the same time.

The second instance of reported excessive heat occurred on June 30, 2018. The month of June closed with one of the hottest days in recent memory. Highs were well into the 90s, including 99 at Alpena, and 98 at Traverse City and Gaylord. The National Weather Service office near Gaylord also hit 98; that was (by several degrees) the warmest reading recorded at that location since observations began there in the late 1990s. Heat indices exceeded 105 degrees across most of northern lower Michigan, and some locations exceed 110. The warmest reported heat index on the day was 114 near Indian River. An estimated 25 and 30 individuals visited local hospitals due to heat-related illnesses.

There have been two extreme cold events reported in Benzie County. The first occurred on February 4, 2007. Exceptionally cold air surged into Northern Michigan. High temperatures on the 4th (Super Bowl Sunday) were around zero, with low temperatures that night from five to ten below zero. Gusty northwest winds produced hazardous wind chills of 20 to 30 below zero, along with blowing and drifting snow. Many area schools closed on the 5th, due to the extreme cold and poor road conditions.

The second instance of extreme cold is the Governor Declared Emergency that occurred on January 29, 2019. Wind chills of 15 to 30 below zero were common in northern lower Michigan. Wind chills were much colder in eastern upper Michigan, including -51 at Kinross, and -42 at Sault Ste Marie and Mackinac Island.

Previous Occurrences

Benzie County has had two extreme heat events in 2001 and 2018 (Table 34). The events did not have any deaths, injuries, or property/crop damages. The events consisted of hot and humid conditions that caused outdoor events to be modified and attendance at outdoor events to be lower than normal.

Table 34: Heat Related Events

	DATE	EVENT TYPE	INJURIES, DEATHS, DAMAGES	EVENT DESCRIPTION
BENZIE (ZONE)	8/1/2001	Heat	0	Excessive Heat was also a problem the first two weeks in August across all of northern Michigan. Temperatures reach the mid to upper 90s, on average, a few days each year; however, for a 5 day (8/5 - 8/9) stretch overnight low temperatures failed to fall below the lower 70s in most areas. County fairs sent animals home, yet still there were livestock losses at fairs in Otsego and Alcona counties. Attendance at county fairs was well below normal and this was attributed to the heat.
BENZIE (ZONE)	6/30/2018	Excessive Heat	0	Highs were well into the 90s, including 98 at Traverse City and Gaylord. The National Weather Service office near Gaylord also hit 98; that was (by several degrees) the warmest reading recorded at that location since observations began there in the late 1990s. Heat indices exceeded 105 degrees across most of northern lower Michigan, and some locations exceed 110. The warmest reported heat index on the day was 114 near Indian River. There were estimated to be between 25 and 30 individuals who visited local hospitals due to heat-related illnesses.

Source: NOAA: National Centers for Environmental Information

There have been three extreme cold events reported in Benzie County (Table 35). These events did not have any deaths, injuries, or property/crop damages for the county. The low temperatures caused schools to close. However, since very cold temperatures/wind chills typically occur during winter months, many events may have gone unrecorded.

A Governor-declared emergency for extreme cold in the State was enacted in January 2019 and included Benzie County.

Table 35: Extreme Cold Events

DATE	EVENT TYPE	INJURIES, DEATHS, DAMAGES	EVENT DESCRIPTION
BENZIE (ZONE)	2/4/2007	Extreme Cold/Wind Chill	0
			High temperatures on the 4th (Super Bowl Sunday) were around zero, with low temperatures that night from five to ten below zero. Gusty northwest winds produced hazardous wind chills of 20 to 30 below zero, along with blowing and drifting snow. Many area schools closed on the 5th, due to the extreme cold and poor road conditions.
BENZIE (ZONE)	2/19/2015	Extreme Cold/Wind Chill	0
			Wind chills reached 30 to 40 below zero across part of northern Michigan, bottoming out at -43 near Cadillac early in the morning on the 19th.
BENZIE (ZONE)	1/29/2019	Extreme Cold/Wind Chill	
			Governor Declared Emergency – Wind chills of 15 to 30 below zero were common in northern lower Michigan. Wind chills were much colder in eastern upper Michigan, including -51 at Kinross, and -42 at Sault Ste Marie and Mackinac Island.

Sources: NOAA: National Centers for Environmental Information; MSP 2019 Michigan Hazard Mitigation Plan

Probability of Future Events and Vulnerability Assessment

Since 2001, there have been two extreme heat events in Benzie County. This indicates an approximate 9.5% chance of an annual extreme heat event occurring.

Since 2007, there have been three extreme cold/wind chill events in Benzie County. This indicates an approximate 20% chance of an extreme cold event occurring in a year. Since these events tend to occur during the winter months and are coupled with blustery winds and snowstorms, these events may have been reported as other hazards or not at all, which means there may have been more extreme cold events in the county.

Extreme heat and cold events are more likely to impact unsheltered populations. The county's homeless population is especially vulnerable. Seasonal emergency shelters are essential services for the community. The *Northwest Lower Michigan Coastal Resilience Atlas* written by the Land Information Access Association completed a Heat Vulnerability Assessment⁹ of coastal communities. A community's vulnerability is their exposure to the hazard (determined by tree canopy and impervious surface coverage) + their sensitivity. Sensitivity is determined by the following factors:

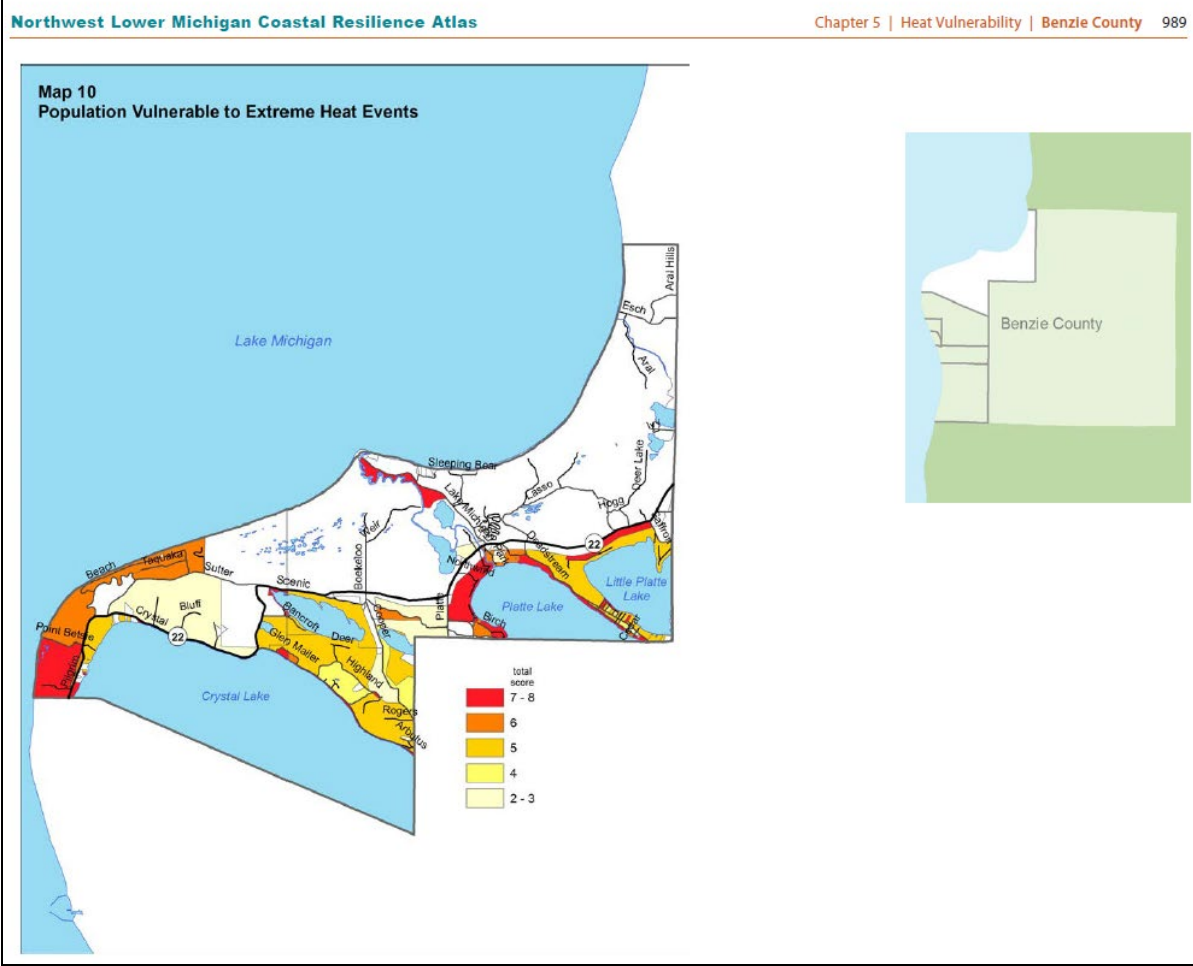
- Persons > 65 years
- Persons living alone
- Minority (non-white) persons
- Persons living below the poverty threshold
- People > age 25 with less than a high school education
- Disability status (i.e., ambulatory difficulty, mental disability)

Lake Township has the highest median age of all communities at the county, at 65.8 years (Figure 9). Figure 19, sourced from the NW MI Coastal Resilience Atlas, shows the relative sensitivity of the population in Lake Township to extreme heat events. Other Lake Michigan shoreline communities in Benzie County consist of Crystal Lake Township, The City of Frankfort, The Village of Elberta, Gilmore Township and Blaine Township. The Heat Vulnerability maps for Benzie County coastal communities can be found in pages 979 to 1029 of the NW MI Coastal Resilience Atlas.

Benzie County Emergency Management maintains agreements with many community organizations, as listed in Section VI of this plan, for use of their facilities for temporary heating and cooling shelters if needed.

⁹ Land Information Access Association. (2019). *Northwest Lower Michigan Coastal Resilience Atlas*. http://www.resilientmichigan.org/nw_atlas.asp

Figure 19: Lake Township Relative Sensitivity of Population to Extreme Heat Events



Drought

Drought is a normal part of the climate cycle. It is a slow-moving hazard, which causes people to underestimate the damage it can do, but losses from drought are as substantial as those from hurricanes, tornadoes and other faster-moving disasters. Drought causes losses to agriculture; affects domestic water supply, energy production, public health, and wildlife; and contributes to wildfire, to name a few of its effects.

Location

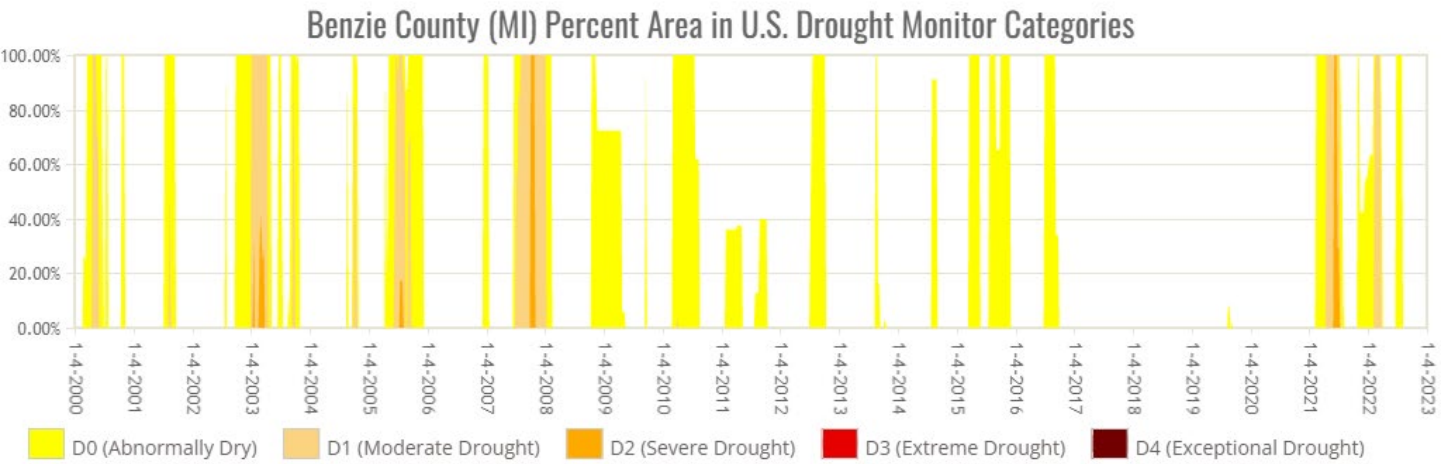
Drought is a regional event that is not confined to geographic boundaries and range in severity across the affected areas. All of Benzie County is at risk to the occurrence and impacts from drought.

Extent

The Palmer Drought Severity Index (PDSI) uses readily available temperature and precipitation data to estimate relative dryness. It is a standardized index that generally spans -10 (dry) to +10 (wet). Maps of operational agencies like NOAA typically show a range of -4 to +4, but more extreme values are possible. The PDSI has been reasonably successful at quantifying long-term drought.

The U.S. Drought Monitor (Figure 20) combines several input sources including the PDSI and the Standardized Precipitation Index to prepare a weekly map showing parts of the U.S. that are in drought. The map uses five classifications: abnormally dry (D0), showing areas that may be going into or are coming out of drought, and four levels of drought: moderate (D1), severe (D2), extreme (D3) and exceptional (D4) (Figure 21).

Figure 20: Benzie County Historical Drought Levels



Source: [US Drought Monitor](#)

Figure 21: U.S. Drought Categories and Historically Observed Impacts

Michigan

Category	Historically observed impacts
D0	Grass fires increase
	Lawns are brown; landscape and gardens are watered more frequently
D1	Most crops and vegetation are stressed; farmed Christmas trees are stressed
	Well levels decline
D2	Corn and soybean yields are low
	Mature trees are stressed
	Streamflow is extremely low, potentially too low to irrigate

Source: US Drought Monitor

Previous Occurrences

There has been one recorded incident of drought in Benzie County. In March 1977 there was a Presidential Declared Emergency for drought problems plaguing counties in the Upper Peninsula and Northern Lower Peninsula, which included Benzie County. This event was part of the 1976-77 drought in the Great Plains, Upper Midwest, and West of the United State. At a statewide level, the drought lasted for 11 consecutive months, from September 1976 to July 1977, and reached a low point in January 1977, with a Palmer Index value of -5.29 (within the D4 exceptional drought classification).¹⁰

Probability of Future Events and Vulnerability Assessment

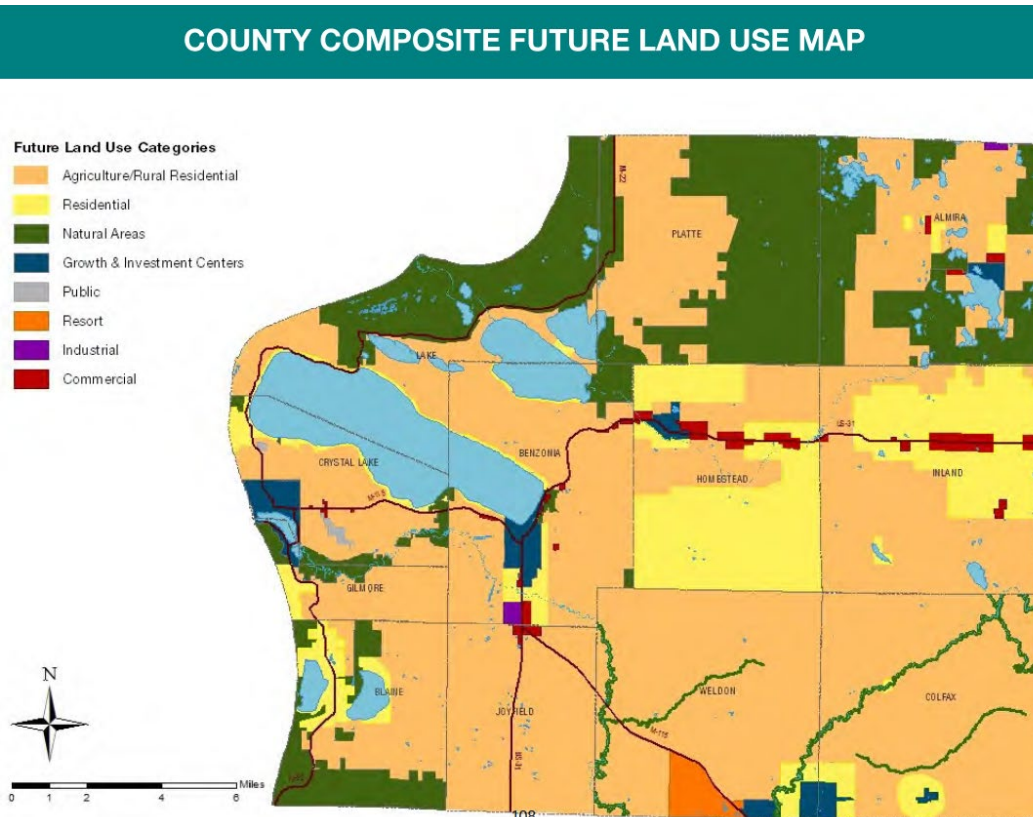
Since 1977, there has been one drought incident on record for Benzie County, which equates to a 2.2% annual chance for a drought event in Benzie County. In Northern Michigan's forested regions, drought can adversely impact timber production and some tourism and recreational enterprises. This can also cause a drop in income, which impacts other economic sectors. The biggest problem drought presents, however, is the increased threat of wildfire. The western portions of Benzie County are at highest risk for wildfire due to the presence of grasslands in the sand dune environment.

Additionally, the threat to water sources should also be considered. Many county residents rely on ground water wells for drinking water. Even drought events in category D1 experience water well level decline. Drought events combined with excessive heat can have severe impacts the health of vulnerable populations, such as elderly and low income persons.

Agriculture is also a key component of Benzie County's economy. Figure 22, the County's Composite Future Land Use Map, indicates much of the county consists of desired "Agricultural/Rural Residential" areas. Drought may cause the following damages to agricultural land:

- Agricultural production losses: crop failure and pasture losses
- Decreased water availability: water depletion from soils causes significant decline in crop/livestock productivity
- Pests and diseases: drought, coupled with high temperatures, may expand the distribution and incidence of pests and diseases that affect crops, forage, and livestock.
- Damage to specialty crops: most specialty crops (such as fruits, vegetable, tree nuts, and herbs) are more vulnerable to drought than field crops and have a higher value per unit of land/water.

Figure 22. Benzie County Composite Future Land Use Map (2017 Benzie County Master Plan)



¹⁰ MSP [2019 Michigan Hazard Analysis](#)

Wildfire

A wildfire is an unplanned, uncontrolled fire in grassland, brushland, or forested areas. Wildfires can occur in any forest or grassland type under dry conditions; however, some forest types are more susceptible to wildland fires. For example, jack and red pine forest stands have a high risk for wildfires, as they dependent on fire to provide all the right conditions for regeneration, while aspen and white pine forest stands have a moderate risk. The primary cause of wildfires is from human activities, specifically burning outdoor debris. Wildfires cause destruction to property and timber resources, and injuries or loss of life to wildlife and persons living or recreating in wildfire prone areas. Long-term effects include scorched and barren land, soil erosion, landslides/mudflows, water sedimentation, and loss of recreational opportunities.

Approximately 55% (20.4 million acres) of Michigan's total land area is forest cover. The vast forests provide Michigan with the largest state-owned forest system in the United States. In addition, Michigan has the fifth largest quantity of timberland acreage, with 19.3 million acres (including hardwoods and softwoods). That vast forest cover is a boon for both industry and recreation, and these areas have been gradually increasing in recent years. However, it also means that many areas of Michigan are vulnerable to wildfires.

Michigan's fire season starts in early spring, when leaves and grasses remain dry from fall and winter and trees are not yet green. Wildfires are often accompanied by drought where dry conditions increase the potential to burn. Often a thunderstorm will roll through and lightning will strike causing sparking of dry leaves and dead wood. High winds can then spread wildfire. Wildfires can become unpredictable in windy conditions or when the wind changes direction suddenly. Cooler nighttime temperatures often help suppress wildfires and the potential for wildfire; however Michigan has had several major fire events.

According to MDNR and U.S. Forest Service records, between 1910 and 1949, over 5.8 million acres of forest were burned in Michigan, an average of 145,000 acres per year. By comparison, it was reported that between 1950 and 1996, the MDNR and U.S. Forest Service were involved in suppressing over 46,100 wildfires that burned 390,000 acres of forest, which averages only 8,300 acres burned per year. This drastic reduction in the acres of timber burned was largely the result of increased use of specialized equipment to suppress the fires, and intensified efforts toward fire prevention.

However, lightning strikes are not the primary cause of wildfires in Michigan. Recently, only about 4% of all wildfire in Michigan were caused by lightning strikes, and most other causes have been attributed to human activity. Outdoor debris burning is the leading cause of wildfires in Michigan. Most Michigan wildfires occur close to where people live and recreate, which puts both people and property at risk. The immediate danger from wildfires is the destruction of property, timber, wildlife, and injury or loss of life of persons who live in or are are using recreational facilities in the area.

Location

All of the county's communities and developed areas are vulnerable to wildfires since the community centers and rural residential developments interface with areas of pine forest that are prone to fire (Red Pine, Eastern White Pine, and Jack Pine). Approximately 159,469.7 acres, or 64.6% of Benzie County is forested. Red Pine forest comprises 25,005.99 acres of forested land (15.7%); Jack Pine forests comprise 4,938.69 acres (3.1%); and Eastern White Pine comprises 9.56 acres (0%). As shown on the Environmental Features Map in Appendix A, pine forests are scattered throughout various portions of the entire county, and are present in every jurisdiction.

Extent and Previous Occurrences

Extent can be measured by the number of acres burned and the cost of property damage. Between 1981 and 2018 there were 184 wildfires on lands under MDNR jurisdiction, or 4.8 wildfires per year. This resulted in a total of 396.8 acres burned and 10.4 acres burned per year. No property damages were recorded. NOAA records do not indicate any wildfire incidents within Benzie County.

Probability of Future Events and Vulnerability Assessment

There is a 100% chance there will be a wildfire on MDNR lands, and a small chance there will be a wildfire on lands outside of MDNR jurisdiction. Forest types of Red Pine, Eastern White Pine, and Jack Pine are scattered throughout Benzie County and are susceptible to wildfires.

Additional factors that increase fire risk include dead or dying Ash trees as a result of disease/invasive species, invasive species itself (i.e., dense thickets of Autumn olive may create hazardous fuel loads for wildfires.), lightning strikes, and human factors such as the number of persons residing, camping, or traveling through the County. Historically, Michigan's landscape has been shaped by wildfire; however, over the last several decades, the current landscape has transformed from wildland to residential development. With the increase in residential development in and around rural areas prone to wildfires, there is an increase in the potential for loss of life and property damage. Local fire departments have mutual aid agreements in order to provide additional coverage for rural, sparsely populated, or difficult to reach areas. Residential

development in rural Benzie County is often isolated from town centers and emergency services. Many of these areas interface with public lands and local emergency services coordinate fire services with State and Federal fire protection agencies.

Furthermore, a Weldon Township representative expressed a concern in the community survey pertaining to road access in the event of an emergency event, such as a wildfire: "We have a bridge that was...removed and we have hoped that it would be replaced. We have residents that live on the other side of the river. Any emergency vehicles now have to go way out of their way to get to any residents or forest area on the other side of the former bridge location (Haze Road)." The Benzie County Road Commission has indicated they are not planning on replacing that bridge.

Coastal Flooding and Coastal Recession

Shoreline hazards also include coastal flooding and coastal recession are two types of hazards associated with the Lake Michigan shoreline.

Shoreline flooding results when water levels rise and push inland or during rainfall or snowmelt accumulates and is not able to drain properly. Shoreline flooding may also be caused during storms and wind events with high-energy waves.

Coastal recession (subsidence) is the wearing away of land, such as loss of riverbank, beach, shoreline, or dune material. It is measured as the rate of change in the position or displacement of a riverbank or shoreline over a period of time. Short-term erosion typically results from periodic natural events, such as flooding, hurricanes, storm surge, and windstorms, but may be intensified by human activities. Long-term erosion is a result of multi-year impacts such as repetitive flooding, wave action, sea level rise, sediment loss, subsidence, and climate change. Death and injury are not typically associated with erosion; however, it can destroy buildings and infrastructure. Much of the coastline of northwest Lower Michigan is susceptible to coastal recession and many areas are designed High Risk Erosion Areas by EGLE.

In developing the *Northwest Lower Michigan Coastal Resilience Atlas*, scenario planning was used to determine the potential impact of three differing levels of storms combined with high waters. The three scenarios are described as follows:

The first scenario, **“Lucky” Future:** Under the Lucky Climate Future, Great Lakes water levels will continue to stay relatively low. Although there will be wave and wind action, major storm events and wave impacts will not encroach on properties landward of current beaches. A Lucky Future projection, indicating the land areas that would be affected by high-energy waves along the shorefront and/or adjacent riverine flooding under these conditions, is shown in green on the maps.

“Expected” Future: Under the Expected Climate Future, Great Lakes water levels will continue to fluctuate according to long-term decadal patterns, including recent extreme storm events incorporated into the ongoing Great Lakes Coast Flood Study being conducted by the Federal Emergency Management Agency (FEMA). Given those ongoing fluctuations, this Climate Future accounts for periods when Great Lakes still-water elevations are closer to the long-term average. In addition, this Climate Future anticipates the so-called “100-year storm event” (or 1% storm) becoming more like a 20- or 50-year storm event (i.e., an expected storm within the normal community planning time horizon) because of increased storminess. The Expected Future projection is shown in yellow on the maps.

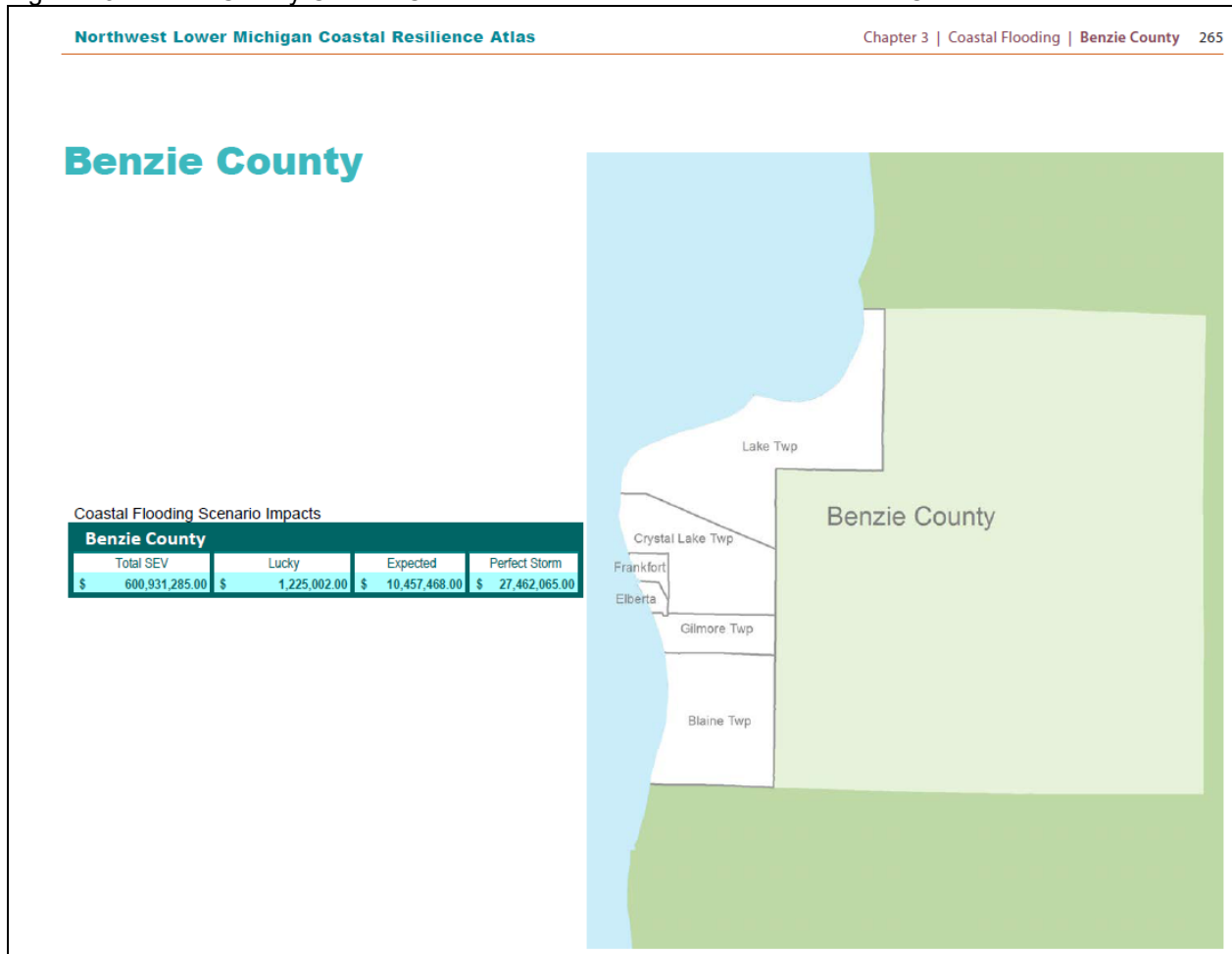
“Perfect Storm” Future: Under the Perfect Storm Climate Future, Great Lakes water levels will continue to fluctuate according to decadal patterns, consistent with assumptions made for the Expected Future. However, for this Perfect Storm Climate Future, the estimated still-water elevation is set higher than the long-term average and closer to the long-term high (583 feet). In addition, this Climate Future anticipates the occurrence of a so-called “500-year storm event” (or 0.2% storm) occurring within the planning time horizon while lake levels are high. The Perfect Storm Future projection is shown in red on the maps.

Location

To reference the *Northwest Lower Michigan Coastal Resilience Atlas*, “Climate scientists predict that northwest Lower Michigan can expect more frequent storms of increasing severity in the decades ahead. The total amount of rainfall per year is also likely to increase. The potential for substantially larger rain events and severe storms raises concerns of harm to human health and damage to buildings and infrastructure, especially for areas along the Lake Michigan coastline.”

Jurisdictions located on the Lake Michigan coast that are impacted by shoreline hazards include: Lake Township, Crystal Lake Township, the City of Frankfort, the Village of Elberta, Gilmore Township and Blaine Township (Figure 23). The Land Information Access Association documented potential shoreline hazards for these communities in the *Northwest Lower Michigan Coastal Resilience Atlas*. Additionally, specific areas of shoreline hazards were identified during the hazard mitigation planning public input sessions. These are marked as a hazard area on the Hazard Area Map in Appendix A.

Figure 23: Benzie County Coastal Communities Included in the NW Lower MI Coastal Resilience Atlas



Source: LIAA, Northwest Lower Michigan Coastal Resilience Atlas

While there have been Governor-Declared Disasters for shoreline problems in the State in 1985-1986, these declarations did not include Benzie County. However, NOAA's National Centers for Environmental Information storm event database indicates that there have been four (4) lakeshore flood incidents; two occurred in 2019 in and two occurred in 2020, during a time of very high Great Lakes water levels. Three out of the four event narratives described the presence of shoreline erosion. Two of these events occurred within the City of Frankfort; one occurred "several miles north of Frankfort", and one occurred around the border of the Village of Elberta and the City of Frankfort, on M-22 causeway over the Betsie River.

Figures 24 through 27 illustrate the three potential flooding scenarios in the City of Frankfort, the Village of Elberta and Gilmore Township. The "Lucky" scenario flooding is shown in green, "Expected" flooding scenario is shown in yellow, and "Perfect Storm" future scenario is shown in red.

Coastal recession or erosion to Lake Michigan communities is a constant, but very small wearing away of the shoreline. The Great Lakes are estimated to lose one foot of shoreline per year to normal wave and wind activity. However, storms and increased wave activity have caused increased coastal recession to varying degrees in Benzie County's coastal communities. Chapter 4 of the *Northwest Lower Michigan Coastal Resilience Atlas* describes bluffline recession since its recorded shoreline in 1938. The blue line indicates the shoreline in 1938, the green line indicates the bluffline in 1938, the yellow line is the bluffline in 2016, and the red line is the predicted 30 year bluffline.

The varying lines shown in Figures 28-29 depict the recession of the bluffline in the City of Frankfort and Crystal Lake Township. There are several structures located near or on the predicted 30-year bluffline. Refer to the full Atlas for panels depicting bluffline erosion for the remained of Benzie County coastal communities.

282 Chapter 3 | Coastal Flooding | Benzie County Northwest Lower Michigan Coastal Resilience Atlas

**Panel #188
Flooding Hazards**

Crystal Lake Twp
Frankfort
Elberta
188
189
190

Crystal Lake Twp
Frankfort
Hanse
Denick
Beach
Maple
Oak
8th
Michigan
George
Cox
Belmont
Wieneth
N 1st
N 2nd
N 3rd
N 4th
N 5th
N 6th
N 7th
N 8th
N 9th
N 10th
N 11th
N 12th
N 13th
N 14th
N 15th
N 16th
N 17th
N 18th
N 19th
N 20th
N 21st
N 22nd
N 23rd
N 24th
N 25th
N 26th
N 27th
N 28th
N 29th
N 30th
N 31st
N 32nd
N 33rd
N 34th
N 35th
N 36th
N 37th
N 38th
N 39th
N 40th
N 41st
N 42nd
N 43rd
N 44th
N 45th
N 46th
N 47th
N 48th
N 49th
N 50th
N 51st
N 52nd
N 53rd
N 54th
N 55th
N 56th
N 57th
N 58th
N 59th
N 60th
N 61st
N 62nd
N 63rd
N 64th
N 65th
N 66th
N 67th
N 68th
N 69th
N 70th
N 71st
N 72nd
N 73rd
N 74th
N 75th
N 76th
N 77th
N 78th
N 79th
N 80th
N 81st
N 82nd
N 83rd
N 84th
N 85th
N 86th
N 87th
N 88th
N 89th
N 90th
N 91st
N 92nd
N 93rd
N 94th
N 95th
N 96th
N 97th
N 98th
N 99th
N 100th

Benzie County

Lucky Flooding Scenario
Expected Flooding Scenario
Perfect Storm Flooding Scenario

Northwest Lower Michigan Coastal Resilience Atlas Chapter 3 | Coastal Flooding | Benzie County 283

**Panel #189
Flooding Hazards**

Crystal Lake Twp
Frankfort
Elberta
188
189
190

Crystal Lake Twp
Frankfort
Hanse
Denick
Beach
Maple
Oak
8th
Michigan
George
Cox
Belmont
Wieneth
N 1st
N 2nd
N 3rd
N 4th
N 5th
N 6th
N 7th
N 8th
N 9th
N 10th
N 11th
N 12th
N 13th
N 14th
N 15th
N 16th
N 17th
N 18th
N 19th
N 20th
N 21st
N 22nd
N 23rd
N 24th
N 25th
N 26th
N 27th
N 28th
N 29th
N 30th
N 31st
N 32nd
N 33rd
N 34th
N 35th
N 36th
N 37th
N 38th
N 39th
N 40th
N 41st
N 42nd
N 43rd
N 44th
N 45th
N 46th
N 47th
N 48th
N 49th
N 50th
N 51st
N 52nd
N 53rd
N 54th
N 55th
N 56th
N 57th
N 58th
N 59th
N 60th
N 61st
N 62nd
N 63rd
N 64th
N 65th
N 66th
N 67th
N 68th
N 69th
N 70th
N 71st
N 72nd
N 73rd
N 74th
N 75th
N 76th
N 77th
N 78th
N 79th
N 80th
N 81st
N 82nd
N 83rd
N 84th
N 85th
N 86th
N 87th
N 88th
N 89th
N 90th
N 91st
N 92nd
N 93rd
N 94th
N 95th
N 96th
N 97th
N 98th
N 99th
N 100th

Benzie County

Lucky Flooding Scenario
Expected Flooding Scenario
Perfect Storm Flooding Scenario

Figures 26 & 27: Panels #189-190 - Flooding Hazards, Gilmore Twp. & Village of Elberta



Figure 28: Panel #188 Shoreline Recession, City of Frankfort and Crystal Lake Township



Source: LIAA, Northwest Lower Michigan Coastal Resilience Atlas

Figure 29: Panel #187-188, Shoreline Recession in Crystal Lake Township

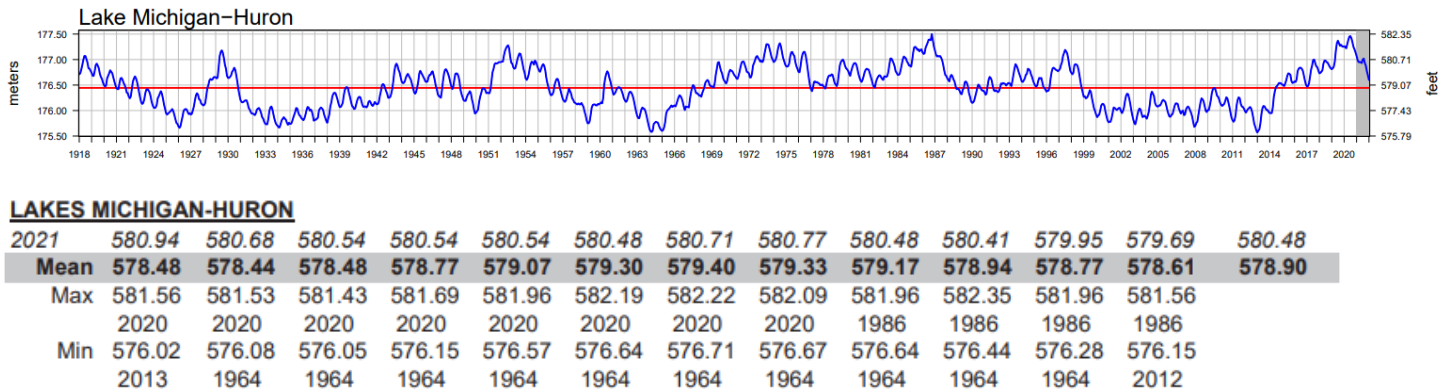


Extent

Shoreline recession can be measured by feet of bluffline retreat and property damages. Bluffline retreat distances vary across the county, and there are no reported damages from bluffline recession. Shoreline flooding can be measured by flood water levels, inches of rainfall, lake water levels (shown in Figure 30), and damages. The four lakeshore flooding events in 2019 and 2020 caused \$145,000 in property damages within and near the City of Frankfort (Table 36).

In recent years, the swings in water levels have been unprecedented. In January 2013, Lake Michigan-Huron set an all-time record low of 576.02 feet, and seven years later in July of 2020 Lake Michigan-Huron reached a monthly record high of 582.22, only second to the October 1986 monthly record high of 582.35.

Figure 30: Lake Michigan-Huron Historic Water Levels, 1918-2021



Source: US Army Corps of Engineers

Additionally, portions of all six of the Lake Michigan coastal communities in Benzie County contain High Risk Erosion Areas (HREAs) as designated by the State of Michigan EGLE (refer to Figures 5 and 6 earlier in this plan.) HREAs are those shorelands of the Great Lakes where recession of the landward edge of active erosion has been occurring at a long-term average rate of one foot or more per year, over a minimum period of 15 years.

Previous Occurrences

The Great Lakes experienced record high lake levels in 1985-86, 1997-98, and most recently in 2019-2020. Issues of erosion and high lake levels, causing rivers, lakes and tributaries to back up have caused infrastructure damage and failures throughout Benzie County and many other areas in Michigan. There have been four lakeshore floods on record with the NOAA Storm Events database, as indicated in Table 36.

Table 36. Lakeshore Flooding Events, Benzie County

Date	Property Damage	Event Narrative	Episode Narrative
10/16/2019	\$8,000	Severe beach erosion threatened to destroy a home several miles north of Frankfort.	Northwest to north winds produced high waves and elevated water levels along the northwest lower Michigan coastline. With Great Lakes water levels at near-record levels, significant coastal flooding and beach erosion resulted.
10/22/2019	\$129,000	A parking lot next to Betsie Lake in Frankfort flooded. A large field of debris, including entire trees and large tree limbs, was deposited along the beach at Point Betsie Lighthouse.	Strong northerly to easterly winds resulted in another round of substantial coastal flooding and beach erosion, this time on both Lake Michigan and Lake Huron, for the 21st into the 22nd.
4/13/2020	\$8,000		Strong low pressure passed just north of eastern upper Michigan on the morning of the 13th. Gusty west to northwest winds of 40-50 mph were common. Lakeshore flooding also occurred along portions of the Lake Michigan coastline of northwest lower Michigan. The city boat launch in Frankfort experienced flooding of docks and the parking lot.
6/10/2020	\$0	M-22 was closed across the Betsie Lake Causeway near Elberta due to high water.	The remnants of Atlantic Tropical Cyclone Cristobal lifted across Lake Superior and into northern Ontario, producing multiple rounds of showers and thunderstorms. Some lakeshore flooding occurred on the northwest lower Michigan coastline, thanks to gusty onshore winds.
	\$145,000		

Input received from the community survey and stakeholder meetings included the followings site specific concerns related to past shoreline hazard incidents experienced in 2019-2020:

Gilmore Township: Lake Michigan erosion prevented beach access for emergency vehicles; high water flooded the M-22 causeway.

Crystal Lake Township: Bluff erosion along Lake Michigan at Golf Lane and Ness Roads

Blaine Township: Lake Michigan waters flowed into Lower Herring Lake in 2020

City of Frankfort: Would like to pursue mitigation strategies to “better establish a resilient shoreline to overcome high water cycles that create erosion concerns”.

Probability of Future Events and Vulnerability Assessment

Considering that the data on record from 1950-2022 (73 years) indicates four shoreline flooding events, there would be a 5.5% chance that shoreline flooding/erosion would occur in a given year. Shoreline or soil erosion hazards involve the loss of property or necessitate the relocation of homes as sand or soil is removed by flowing water (lake, river, etc.) and carried away over time. The foundation of a structure, or underground utility pipes in the area, may become fully exposed and vulnerable to weather, extreme temperatures, water damage, or other sources of risk. Shoreline banks that support roadways may erode and cause the road surface to crack, become unstable, or more prone to deposits of sand, snow, water, and ice. This hazard is especially relevant to those municipalities that contain residential and commercial development along Lake Michigan (Lake, Crystal Lake, Gilmore, and Blaine Townships; Village of Elberta; and City of Frankfort) that experience seasonal shifts in water levels and possible ice erosion hazards.

As lake water levels fluctuate and increased storminess occurs, shoreline recession and flooding will continue. In 2021 the levels of Lake Michigan-Huron began to decline, however, as historic data shows us, the water will begin to rise again. Those communities that have already faced shoreline hazards are likely to experience issues in the future. Changes in land use practices and improvements to the shoreline such as natural vegetation plantings or shoreline armoring may reinforce the shoreline for a period of time, but is likely not a permanent solution.

Dangerous Currents

Dangerous currents and breaking waves are common in the Great Lakes region. Rip currents and other currents found near piers are extremely dangerous for swimmers and can lead to drownings. Currents in the Great Lakes can form from any combination of wind, waves, bottom formation, beach slope, water temperature, man-made structures, and natural outlets. In the Great Lakes, swimmers are most likely to encounter one of five common currents: rip, longshore, structural, outlet, and channel.

During rip currents, the water “piles up” between a sandbar and the beach. It has to find a way back out to sea. After the pressure builds up, the water creates a pathway and gushes from the shore back out to open water. That’s a rip current: a narrow but powerful stream of water and sand moving (ripping) swiftly away from shore. Rip currents vary in size and speed and can be found on many beaches every day. They typically extend from the shoreline through the surf zone, and past the line of breaking waves. Typically, they form at breaks in sandbars, and also near structures, such as jetties and piers, as well as cliffs that jut into the water.

Rip currents carry swimmers into deeper water, where they may not be able to get their footing. These currents rarely extend far out, and will not pull a swimmer underwater. Rip currents vary in size from very narrow to more than 50 yards wide. Speeds can also vary. The average speed is 1-2 feet per second, but they have been measured as fast as 8 feet per second.

Longshore currents move parallel to or the “long” way along the shoreline. These currents will exert a force to move along shore, making it difficult to remain in front of a spot on the beach. They often happen between the first and second sandbars near the shore. Longshore currents become more dangerous when they combine with rip currents or structural currents since they can move a swimmer swiftly down a beach and into the path of another current or into a structure (pier or breakwall), making it more difficult to swim to shore.

Structural currents - the currents found alongside or as a result of structures like piers and breakwalls - are usually always present. Structural currents are dangerous on their own, but when paired with others like longshore or rip currents, the combination can create a washing machine effect, moving the swimmer from one dangerous current area to another with no clear path to safety.

Outlet currents can be found where rivers and streams empty into the Great Lakes. The flow of water from the river or stream can move quickly. As it enters the open water of a lake, it may take awhile for that current to dissipate. Pair that with currents that are present in the lake and the situation can become dangerous.

Channel currents are like a river running parallel to shore. With a channel current, typically there is an island or structure such as a large group of rocks not far from shore. A channel current forms when the flow of water speeds up as it goes between the island and shore, like a bottleneck. This is made worse by the presence of a submerged or partially submerged sandbar connecting the beach to the island, which allows pressure to build behind the water and waves until it breaks through. When the wind speed increases, the waves also increase in intensity, and this causes the current to become stronger and faster.

According to the Great Lakes Current Incident Database, between 2002 and 2020, there have been 75 deaths and 274 persons rescued from dangerous current incidents along the Lake Michigan coastline of Michigan’s Lower Peninsula.

It is important to note that there are no “rip tides” or “undertows” in the Great Lakes. Since there are no tides in the Great Lakes, and rip currents don’t pull a person down under the water (it will carry them out to the open water, away from shore), “rip tides” or “undertows” are inaccurate coastal hazard terms.

Location

All Lake Michigan coastal areas in Benzie County are at risk to the occurrence and impacts from dangerous currents. The presence of piers and breakwalls, such as in the City of Frankfort, pose a more likely risk for structural currents to occur.

Dangerous current-related incidents in the Great Lakes most often occur when:

- Winds are blowing towards the shore
- Wave heights reach 3 to 6 feet
- A cold weather front is passing through

Extent

The National Weather Service provides a Surf Zone Forecast to measure the risk level associated with rip current hazards. Surf Zone Forecasts contain three levels of Rip Current Outlooks:

- Low Risk: The risk for rip currents is low, however, life threatening rip currents often occur in the vicinity of groins, jetties, reefs, and piers.
- Moderate Risk: Life threatening rip currents are possible in the surf zone.
- High Risk: Life threatening rip currents are likely in the surf zone.

Dangerous current events can be measured by damages caused, including rescues, injuries and deaths, as described in Table 37.

Previous Occurrences

According to the [Great Lakes Current Incident Database](#), and the NOAA Storm Events database, Benzie County has had seven lake current incidents along Lake Michigan between 2002 and 2020 (Table 37). This has resulted in 12 rescues and 3 fatalities.

Table 37. Lake Michigan Dangerous Current Incidents, Benzie County

Date	Fatalities	Rescues	NOAA Event Narrative	NOAA Episode Narrative	Type Of Current	Wave Direction	Wave Height (ft)
8/17/2010	0	1	A 14-year-old male was caught in a rip current while swimming in Lake Michigan, near Frankfort. He was carried away from the beach, and eventually was submerged for 5 to 10 minutes. When rescued, he was not breathing and had no pulse. He was revived by CPR, and taken to a Frankfort hospital, then eventually transported to Traverse City and from there to Grand Rapids. The victim was unconscious and on a respirator for two days, before coming to. At this time, he is not expected to suffer any long-term damage.	Rip currents produced a near-fatality on Lake Michigan.	Rip Current		
8/12/2011	0	4			STRUCTURAL	SW	3 TO 4
8/5/2012	1	3	A rip current fatality occurred near Peterson Beach, in the Sleeping Bear Dunes National Lakeshore. During a family outing, a 40 year old male from Cincinnati went into the water to pull out two nephews who were struggling with waves and strong currents. He was able to get them to safety, but was unable to himself escape the water. A park ranger retrieved his body from about five feet water a half-hour later, and CPR was performed on site, but he was pronounced dead soon after arrival at a local hospital. Rescue personnel estimated waves of 3 to 5 feet at the time of the incident.	Wave action produced by onshore winds of 15 to 20 mph contributed to rip current development on Lake Michigan.	CLASSIC RIP	NW	5 TO 6
8/5/2012	0	2			CLASSIC RIP	NW	5 TO 6
8/25/2018	1	0			STRUCTURAL	SW	5 TO 6
7/3/2019	0	2			CLASSIC RIP	NW	0 TO 2
7/4/2020	1	0			Longshore Current	NW	0 TO 2

Probability of Future Events and Vulnerability Assessment

There have been seven (7) current incidents on Lake Michigan in Benzie County between 2002 and 2020. In that time period of 19 years, that equates to a 36.8% chance that another current incident will occur. These events likely happen occasionally, but may be unreported if injuries or deaths do not occur. Dangerous currents are a hazard to all swimmers, especially those who are unprepared to be swept up in the current. Swimmers who are caught unaware may panic when caught up in the fast-moving water, tire as they try to swim against the current (instead of sideways, parallel to the beach), and drown. Many Lake Michigan beaches also do not have a lifeguard on duty who may identify potential hazardous swimming conditions.

Shoreline communities with public (or private) Lake Michigan access are expected to receive a continuous, if not an increase in, seasonal visitors.

People may feel comfortable swimming in seemingly moderate wind and wave conditions, public education is important to convey that when there are onshore winds and breaking waves dangerous currents may be present. The highest number of deaths and rescues happen in Michigan, specifically along the eastern shore of Lake Michigan. Additionally, swimmers near structures are more likely to die, and dangerous currents can exceed 5 mph — faster than an Olympic swimmer can swim (2 mph and faster are considered dangerous).

Seiche

A seiche is typically caused when strong winds and rapid changes in atmospheric pressure push water from one end of a body of water to the other. When the wind stops, the water rebounds to the other side of the enclosed area. The water then continues to oscillate back and forth for hours or even days. In a similar fashion, earthquakes, tsunamis, or severe storm fronts may also cause a seiche.

Seiches are usually limited to partially or fully enclosed basins, such as Lake Erie. Lake Erie is known for seiches, especially when strong winds blow from southwest to northeast. In 1844, a 22-foot seiche breached a 14-foot-high sea wall killing 78 people and damming the ice to the extent that Niagara Falls temporarily stopped flowing. As recently as 2008, strong winds created waves 12 to 16 feet high in Lake Erie, leading to flooding near Buffalo, New York.

In some of the Great Lakes and other large bodies of water, the time period between the "high" and "low" of a seiche can be as much as four to seven hours. This is very similar to the time period between a high and low tide in the oceans, and is often mistaken as a tide.

According to the NOAA-NCEI Storm Events Database, there have been 15 seiche events in Michigan since 1998. There are no deaths, no injuries, and \$31,000 in property damages due to seiche events.

Location

Seiches are a coastal event that is not confined to geographic boundaries and may occur anywhere in Lake Michigan waters. All coastal areas are at risk to the occurrence and impacts from a seiche.

Extent/Previous Occurrences

Seiche events can be measured by damages-caused including deaths, injuries, and property damages. There are no reported seiche events for Benzie County.

Probability of Future Events and Vulnerability Assessment

While there are no storm surge (seiche) events listed in the NOAA NCEI database for Benzie County from 1950 until present, there does remain a small possibility that a seiche may occur along the Lake Michigan coastline. Seiche events have likely occurred, but may have been unreported if injuries, deaths, or significant property damages did not occur.

Persons and property at the lake shore, particularly marinas (along the Bestie Lake in Frankfort and Elberta), are vulnerable to high waves caused by a seiche. Seiche events are also dangerous to all swimmers, especially those who are unprepared to be swept up in the current. Many Lake Michigan beaches do not have a lifeguard on duty who may identify potential hazardous swimming conditions.

Public Health Emergency (Infectious Disease)

Public health emergencies occur when there is a widespread and/or severe epidemic, contamination incident, bioterrorist attacks, or other situation that negatively impacts the health and welfare of the public. These emergencies include disease epidemics, large-scale food or water contamination incidents, extended periods without adequate water and sewer services, harmful exposure to chemical, radiological or biological agents, and large-scale infestations of disease-carrying insects or rodents. A common characteristic of public health emergencies is that they impact or have the potential to impact a large number of people either statewide, regionally, or locally in scope and magnitude. These health emergencies can occur as primary events or as secondary events from another hazard or emergency (e.g. flood, tornado, or hazardous material incident).

Location

Public Health Emergency can be a worldwide, national, state or regional event that is not confined to geographic boundaries and range in severity across the affected areas. All of Benzie County is at risk to the occurrence and impacts from an infectious disease. Depending on the type of disease, different populations are more susceptible.

Extent

The extent of a public health emergency can be determined by the number of cases and deaths, and the amount of money spent to prepare for and respond to public health threats. In Grand Traverse County, the Grand Traverse County Health Department works with local, state, and federal agencies to prepare for and respond to public health threats. It developed a comprehensive emergency preparedness program capable of responding to a variety of emergency situations with funds from the Centers for Disease Control.

State of Michigan (<https://www.michigan.gov/coronavirus/stats>) reports, as of February 14, 2023 there have been 4,121 cumulative cases of COVID-19 and 78 deaths (total confirmed and probably cases) related to COVID-19 in Benzie County. Of the deaths with details provided, those in the age 70+ category years and older have the most deaths of any age range. All of the deaths reported were persons for persons aged 50 years and above. COVID-19 originally appeared in January 2020.

Previous Occurrences

Throughout the years, there have been many pandemics. For example, there was an outbreak of severe acute respiratory syndrome (SARS) in 2003. This virus was a new coronavirus that resulted in over 8,000 illnesses worldwide. Of these, 774 died. Since 2012, Middle East respiratory syndrome (MERS), a coronavirus, has been reported in 27 countries where there have been approximately 2,494 people infected and 858 deaths. In 2017, the World Health Organization (WHO) put SARS and MERS on its priority pathogen list to spur further research into coronaviruses. More recently in 2020, a Presidential and Governor Emergency was declared for COVID-19 Pandemic in Michigan.

Probability of Future Events and Vulnerability Assessment

Naturally occurring pandemics may result in widespread precautions around the world. The Benzie-Leelanau Health Department created a pandemic plan that serves as a template for responding to a large-scale outbreak of influenza and other highly infectious respiratory diseases. That plan is being tested currently since COVID-19 appeared in January 2020. The response is ongoing to this pandemic. The elderly, immune-compromised, and low income populations are most vulnerable to public health emergencies. Additionally, the community survey results indicated that a pandemic/illness was the second most frequently mentioned hazard event that would have the largest impact on their community.

Invasive Species

The National Invasive Species Council defines an invasive species as, “A species that is not native and whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health.” The Council was formed under Presidential Executive Orders 13112 and 13751 to prevent the introduction and spread of invasive species, and to support efforts to eradicate and control invasive species that are established throughout the United States. NOAA’s National Ocean Service identifies invasive species as “capable of causing extinctions of native plants and animals, reducing biodiversity, competing with native organisms for limited resources, and altering habitats.” There are a wide variety of species considered invasive. Known and monitored species include:

- Mammals
- Birds
- Insects
- Fish
- Crustaceans
- Mollusks
- Worms
- Plants
- Diseases

Invasive species harmful to Michigan and Benzie County may be either terrestrial invasive species (TIS) or aquatic invasive species (AIS). Terrestrial invasive include non-native, land-based plants, insects, animals and diseases that harm Michigan’s environment, economy, and human health. Aquatic invasive include non-native, water-dwelling plants, animals, and other organisms that have evolved to live primarily in water (aquatic habitats) rather than on land. Aquatic habitats are habitats that are covered with water all or part of every year. Michigan State Departments cooperated to prepare the Terrestrial Invasive Species State Management Plan and the 2013 Aquatic Invasive Species State Management Plan Update: Prevention, Detection, and Management in Michigan Waters. Each plan outlines a statewide strategy to reduce the environmental and economic damages caused by either TIS or AIS.

Non-native terrestrial and aquatic species are introduced to Michigan and the Great Lakes both intentionally and unintentionally. Aquatic invasive species are the result of unwanted fish and aquatic plants released from home aquariums, transported across the ocean in ballast water carried by freighters, or entered from the ocean through human-built channels such as the Welland Canal¹¹. There are 32 AIS specifically listed in the State Management Plan. The State TIS Management Plan lists fourteen species including insects, mollusks, plants, mammals, a shrub, and a bird.

The Midwest Invasive Species Network (MISIN) is a regional effort to develop and provide early detection and response resources for invasive species. Among many tools and resources, the website (misin.msu.edu) provides a catalog of species information and a report of occurrences submitted within each state. Animals, plants, and diseases are included in the catalog. The top five reported species in Michigan are: phragmites (invasive) with 63,018, garlic mustard with 18,368, autumn olive with 16,042, spotted knapweed with 15,436, and brown marmorated stink bug with 13,351.

Location

Terrestrial and aquatic invasive species threaten sensitive ecosystems and may be present in Benzie County forest, wetland, farmland, grassland, aquatic, shoreline, and urban environments. “A Field Guide to Invasive Plants of Aquatic and Wetland Habitats for Michigan” (Campbell, Higman, Slaughter, Schools) identifies the Lake Michigan coastline as particularly vulnerable. “Lake-moderated climates along the Lake Michigan shoreline, Saginaw Bay, the Thumb, Lake St. Clair, and western Lake Erie are much milder than those in the state’s interior... These areas have the potential to harbor species typically found far south of Michigan.” TIS and AIS designation generally applies, however, to several upland species that appear to be spreading to wetland and aquatic areas. Regular monitoring and reporting introductions detected is the only way to know where an invasive species has infested. The MISIN Species Observations Data Viewer (online) shares reported detections by species name (common and scientific) and family type. Figure 31 identifies reported MISIN Autumn olive cases throughout Benzie County and in some adjoining counties.

¹¹ The Welland Canal is a ship canal in Ontario, Canada, connecting Lake Ontario and Lake Erie.

A map of Lake County, Ohio, illustrating the distribution of COVID-19 cases by township. Each township is represented by a blue circle, where the size of the circle corresponds to the number of cases. Some circles are labeled with their respective case counts. The map includes labels for several townships: Frankfort, Benzenia, Joyfield, Weldon, Colfax, Almira, and others. Notable case counts include 121 in Benzenia, 87 in Harbor, 93 in Frankfort, 61 in Blaine Twp, and 55 in Lake Ann.

Figure 32 is from the MDNR interactive mapping resource “Look for Oak Wilt,” which allows users to submit an Oak Wilt Report throughout Michigan. Multiple Oak Wilt cases have been reported throughout Benzie County. These include trees confirmed positive for the disease and trees that are reported cases.

69

Extent

Invasive species impact can be measured by its damaging effects. TIS cause billions of dollars in damage annually, are extremely costly to control, and often have irreversible ecological effects. Native habitats, agriculture lands and livestock, and the outdoor recreation economy are threatened or damaged by invasive species. *Michigan's Terrestrial Invasive Species State Management Plan* lists these State-wide impacts:

- The State of Michigan estimates 42% of threatened or endangered species are considered at risk due to non-native species.
- Visitors spent over \$22 billion dollars in Michigan in 2014, supporting nearly 327,000 jobs (Tourism Economics 2014). Invasive species impact the use and beauty of Michigan's shorelines, trails and parks, which may result in a reduction in visitor spending and citizen enjoyment
- Michigan's Forest Products Industry supports 96,000 jobs and contributes more than \$20 billion to the state's economy each year (Michigan DNR 2015). Invasive forest pests including emerald ash borer, oak wilt and beech bark disease kill trees and significantly impact the value of urban properties, forests and timber resources. The estimated cost of treating or removing dead ash within developed land in Michigan's communities due to emerald ash borer was \$230 million in 2009¹².

The Grand Traverse Conservation District serves the four counties of Benzie, Manistee, Leelanau and Grand Traverse, and is a partner and fiduciary agent of the Northwest Michigan Invasive Species Network (NMISN). The typical annual budget is around \$225,000 for invasive species management efforts in all four counties.

Previous Occurrences

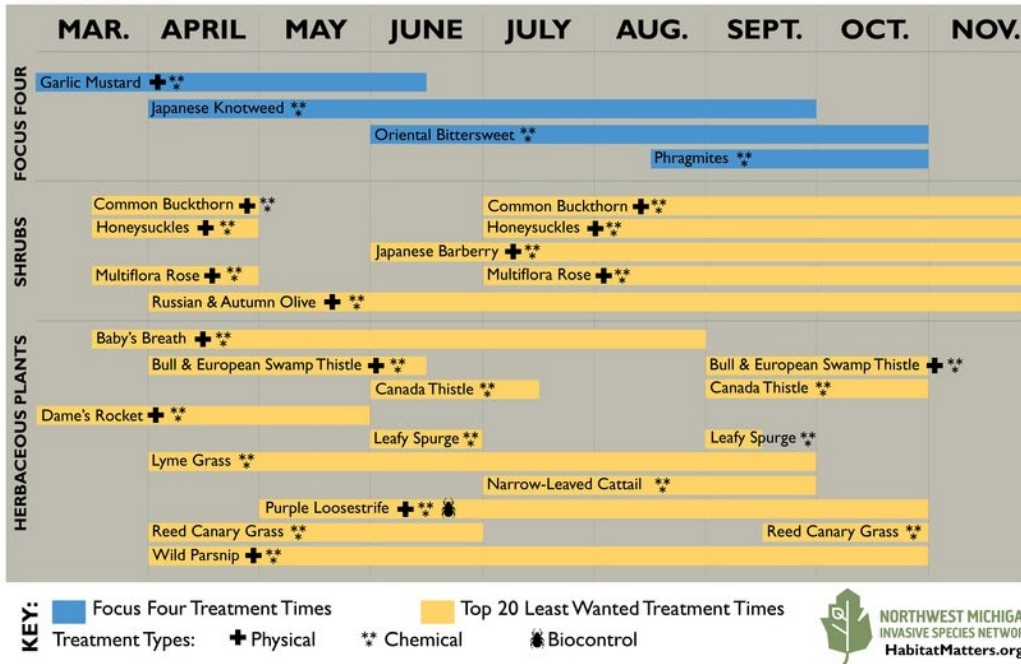
The Department of Environment, Great Lakes, and Energy oversees invasive species programs for the State. The State has produced prohibited and restricted species lists, watch lists, and state management plans for terrestrial and aquatic species. Many of the species listed in this plan are also listed as a prohibited or restricted species: it is unlawful to possess, introduce, import, sell, or offer that species for sale as a live organism, except under certain circumstances. A full list of prohibited and restricted species can be found at Michigan.gov/invasives.

NMISN works directly with over 60 partners in Benzie, Grand Traverse, Leelanau, and Manistee Counties to manage populations of terrestrial invasive species that threaten northwest Michigan's high-quality natural areas, such as around Lake Michigan coastal dunes and waterways & riparian areas. The NMISN focuses their efforts on slowing the spread of new invasives, and prioritizes areas with lower occurrences of "Early Detection" species that have the likelihood of spreading. The rationale is that it's easier to treat a few areas of isolated populations over an infestation of an established invasive species. Figure 33 indicates the treatment methods and schedules for the "focus four" priority plants (Phragmites, Oriental Bittersweet, Japanese Knotweed and Garlic Mustard) and the "top 20 least wanted" plants in the ISN management area.

¹² Kovacs, K.F., R.G. Haight, D.G. McCullough, R.J. Mercader, N.W. Siegert and A.M. Liebhold. 2010. Cost of potential emerald ash borer damage in U.S. communities, 2009–2019. *Ecological Economics* 69: 569-578.

Northwest Michigan Invasive Species Treatment Times

HOW TO USE THIS CHART: Below are the ideal treatment times and types for the Top 20 and Focus Four. Additional, detailed information, especially if more than one treatment type is recommended, can be found on www.habitatmatters.org.



The image is a vertical collage of four photographs, each showing a different invasive plant species. The first photo at the top shows a close-up of a white flower with yellow centers on a green stem. The second photo shows a dense thicket of green leaves with long, thin, white, thread-like flowers. The third photo shows a close-up of a green leaf with a cluster of small, round, orange-red fruits. The fourth photo at the bottom shows a field of tall, green grasses with brown, feathery seed heads.

Garlic Mustard

Japanese Knotweed

Oriental Bittersweet

Phragmites

- Japanese knotweed, Giant knotweed, and Bohemian knotweed, Polygonaceae, can be a concern to homeowners, and municipalities because of these plants' ability to grow into a structure's foundation, through sidewalks and road surfaces. These plants can also be spread by root fragments and stem sections. It can create monocultures that shade out desirable vegetation, creating poor habitats for native species. This is of particular concern along water bodies and has been shown to be extremely detrimental to waterways in the Eastern US.
- (Invasive) Phragmites is a large-scale clonal grass that rapidly colonizes wetlands. Phragmites crowds out native plants and alters habitat for native fauna. In doing so, Phragmites also alters human access to water resources and has adverse economic effects, including decreasing property value, inhibiting recreational use, and limiting populations of game species. It can become a fire hazard when it dries down
- Cypress spurge is an erect, herbaceous to semi-woody perennial with bright yellow-green flowers that turn to purple-red as they mature. Cypress Spurge is toxic to horses and cows.
- Black Swallow Wort is a rapidly growing, herbaceous perennial in the Milkweed family. However, Black Swallow Wort is toxic to animals and the monarch butterfly.
- Oriental bittersweet is a vine plant that can strangle a tree and causes tree mortality. This impacts ecosystem health and economic health that is associated with trees' health.
- Autumn olive is very widespread in Michigan. It is spread by birds and is recolonizing old farm fields. Its value to wildlife is relatively low (low in protein and other nutrients compared to our natives). It also is known for its nitrogen-fixing abilities. Specific areas of problematic autumn olive infestation provided by a participant in this plan development include these areas of Forest Home Township: properties along Miley Pointe Drive down to Cottage Drive, and along sections of Steiner Road between Clam Lake Road and SE Torch Lake Drive.
- Oak wilt is an infectious vascular disease that can affect all species of oak. Red oaks get the disease more often and succumb more readily than white oak. The disease spreads via root grafts and sap-feeding beetles.
- Beech bark disease is caused by the combination of the *Neonectria* fungus and beech scale. Beech scales are yellow, soft-bodied insects that are 0.5 to 1.0 mm long as adults. The insects, found on the tree trunk and branches, feed on sap in the inner bark. The minute wounds caused by the scale insects eventually enable the *Nectria* fungus to enter the tree. The *Nectria* kills areas of woody tissue.
- Garlic mustard is an herbaceous biennial, up to 4 feet in height. Forms round basal rosette the first year, flowers the second year and dies. Grows in forests, particularly floodplain forest, open wetlands, parking lots, campgrounds, paths, and roadsides. A specific area of garlic mustard infestation, as provided by a participant in this plan development, is at the Coy Mountain Natural Area in Helena Township.

The following aquatic invasive species are causing significant harm in the northwestern Lower Peninsula:

- Didymo or “rock snot” is an aquatic diatom that is brown, tan, or yellow in color. Unlike most algae, it feels like wet cotton and is not slimy. Grows in rivers, streams, and lakes. It occurs particularly in cool, oligotrophic, clear water.
- Purple loosestrife is an herbaceous wetland perennial reaching 5 feet with reddish-purple flowers with five to seven petals are held in dense terminal cluster. Grows in moist soils, in wet meadows and prairies, shallow marsh, ditches, waste areas, and along lakes, ponds, streams, and rivers.
- Eurasian water-milfoil is a submergent, aquatic perennial that reached 3-10 feet or more in length. Grows in ponds, lakes, and low-energy zones in rivers and streams. Specific areas of autumn olive infestation provided by a participant in this plan development include Six Mile Lake in Echo and Banks Townships, the Clam River and Alden Harbor on Torch Lake.
- New Zealand mudsnail is an aquatic mollusk with an elongated shell 1/8 inch long with 7-8 whorls. Shell color varies from gray and dark brown to light brown. Grows in flowing freshwater with silt/sand to very brackish rivers; lives in water as deep as 60 feet in lakes or reservoirs.
- Red swamp crayfish is an aquatic crustacean with a dark red body and claws with spiky, bright red bumps, and black wedge-shaped stripe on underside. Grows in flowing to non-flowing freshwater or salt water; permanent ponds; areas of streams and ditches with organic debris; agricultural areas; wetlands.
- Zebra mussel is an aquatic mollusk with striped shells or dark or light shells with no stripes. They attach to objects (pipe, boats, etc.) causing major damage as colonies can block pipes, affecting power and water-treatment plants.

Many of the species listed above are monitored and managed by NMISN. However, the list of all invasive species impacting the county and region is extensive and many established species are treated on a case-by-case basis. Other species of concern include: Honeysuckle (non-native), Glossy buckthorn, Common buckthorn, Wild parsnip, Multiflora rose, and Periwinkle.

One emerging invasive species threat impacts the eastern hemlock tree (*Tsuga canadensis*). Often found along ravines, hillsides, and stream banks, eastern hemlock offer habitat for wildlife and provide shade for streams, effectively lowering stream temperatures and increasing oxygen for fish and other aquatic species. Hemlocks provide aesthetic value and are loved by homeowners. It is estimated that Michigan is home to 170 million eastern hemlock trees. Unfortunately, this beautiful tree is now threatened by an invasive species: hemlock woolly adelgid (HWA) (*Adelges tsugae*). Areas near the Lake Michigan shoreline are the most probable for new infestations, as the adelgids tend to favor the temperatures and conditions found near the lake more than those inland.

In 2018, NMISN and regional partners established a map that narrowed down areas that were expected to be denser with hemlock – following the current trajectory of HWA movement in Michigan. Winter surveys took place to minimize any potential spread of the invasive and because it is easier to locate the woolly mass of HWA ovisacs underneath hemlock needles. ISN's focus was on easier-to-access locations such as public land and conservation easements. The following winter, the focus shifted to private land surveys. Landowners and Homeowner Associations meeting the following requirements are encouraged to complete a landowner survey from ISN (on their website):

- Property is in Benzie, Grand Traverse, Leelanau or Manistee County (*required*)
- Located within 10 miles of the Lake Michigan shoreline (*required*)
- A hemlock tree you planted was purchased from an online retailer

In 2021, a single tree infested with HWA was found at a campsite at the Sleeping Bear Dunes National Lakeshore in Benzie County. That hemlock and all hemlocks within an 800 foot buffer were preventively treated with pesticide. No signs of the insect have been found in subsequent surveys of that property. On January 27, 2023, the USDA Animal and Plant Health Inspection Service confirmed a sample taken from hemlock trees at Crystal Downs Country Club in Frankfort as positive for HWA. NMISN completed a delimitation survey of the country club and surrounding area to determine the extent of the infestation and mark the trees for treatment in the summer of 2023.

Local lake management associations are the primary method of monitoring and treating aquatic invasive species on inland lakes. One of the highest priorities of the Crystal Lake and Watershed Association (CLWA) is preventing the spread of aquatic invasives into the Crystal Lake watershed environment. Since these nuisances are commonly introduced into a new lake by hitchhiking on watercraft that have picked them up elsewhere in infested waters, the CLWA has promoted boat washing on Crystal Lake. CLWA has also focused on regular monitoring of the watershed to identify potential threats at an early stage, followed by rapid action to control or eliminate the intrusive plant or animal before it becomes widespread. In the summer of 2008, as part of CLWA's Cooperative Lakes Monitoring Program (CLMP) the CLWA sampled, identified, and mapped aquatic plant species for comparison with previous studies. It launched a new comprehensive aquatic plant identification and mapping survey in the summer of 2016, again under the auspices of the CLMP. This survey was completed in the summer of 2018, with the assistance of aerial drone observation.

Eurasian watermilfoil was the only invasive aquatic nuisance plant detected during the survey. It is well established and extensive at the east end of the lake, in the area of the Beulah public boat launch. Smaller patches occur at the eastern parts of the north and south shores, again in the vicinity of public boat launches (for example, at the Mollineaux Road DNR launch and the Lobb Road end). The CLWA is now developing a treatment and control plan to prevent this problem from becoming more severe.

Two other identified invasive species in Crystal Lake are *Phragmites australis* (Common Reed) and the Round Goby (*Apollonia melanostomus*). CLWA requests that occurrences be reported to info@crystallakewatershed.org so that prompt control measures can be taken.

Several other lake associations in Benzie County administer water quality monitoring and treatment for invasive species:

- Lower Herring Lake Association (Blaine Township)
- Little Platte Lake Association (Platte and Lake Townships)
- Sanford Lake Association (Almira Township)
- Benzie Long Lake Association (Lake Township)
- Ann Lake Property Owners Association (Almira Township and Village of Lake Ann)

Probability of Future Events and Vulnerability Assessment

The State TIS Management Plan provides a list of eleven terrestrial species on the “watch list”, provided below. These are priority species that have been identified as posing an immediate and significant threat to Michigan’s natural resources. These species have either not been confirmed in Michigan, have very limited distribution, or are localized. Early detection and timely reporting of occurrences of these species is crucial for increasing the likelihood of stopping an invasion and limiting negative ecological and economic impacts. This list is reviewed and updated periodically, and the most current list is available at www.michigan.gov/invasives.

Common Name - Scientific Name - Category

1. Asian longhorned beetle *Anoplophora glabripennis* Insect
2. Asiatic sand sedge *Carex kobomugi* Plant
3. Balsam woolly adelgid *Adelges piceae* Insect
4. Chinese yam* *Dioscorea oppositifolia* Plant
5. Hemlock woolly adelgid* *Adelges tsugae* Insect
6. Himalayan balsam* *Impatiens glandulifera* Plant
7. Japanese stiltgrass* *Microstegium vimineum* Plant
8. Kudzu* *Pueraria montana* Plant
9. Mile-a-minute weed *Persicaria perfoliata* Plant
10. Nutria *Myocastor coypus* Mammal
11. Thousand Cankers Disease *Geosmithia morbida* *Pityophthorus juglandis* Tree Disease

Local land and water management groups are also monitoring for the presence of other [Michigan Watch List](#) invasives:

- Spotted lantern fly which impacts fruit and winery production, and therefore impact agri-tourism.
- Hydrilla is an aquatic, perennial plant forming dense mats in slow-moving water of lakes, ponds, streams, and rivers.
- European frog-bit is an aquatic, floating, herbaceous annual that forms large colonies, creating dense mats. Grows in open, still waters.
- Parrot feather water-milfoil is an aquatic, herbaceous perennial that can grow 6.5-16.5 feet in length and forms monotypic stands. Grows in lakes, ponds, slow streams, and mudflats, where the emergent form is found.
- Starry stonewort is an aquatic microalga which forms dense mats that cover lake bottoms. Grows in still or slow moving waters.
- Asian Carp (bighead, black, grass, and silver carp) are in direct competition with native aquatic species for food and habitat. Their rapid population increase is disrupting the ecology and food web of the large rivers of the Midwest.
- Beech leaf disease causes dark stripes or banding between leaf veins. A nematode (microscopic worm) is associated with symptoms. Ongoing research is investigating the possibility of other contributing microorganisms.

Potential impact from the species listed on watch lists could be catastrophic for Benzie County’s natural resources, agriculture, recreation, tourism, and economy. The services provided by the Northwest Michigan Invasive Species Network, Benzie Conservation District, Grand Traverse Regional Land Conservancy, and other land and water management agencies are crucial to continuous invasive species management and prevention.

Impacts from Climate Change

Climate describes the average weather conditions for a particular location and over a long period of time. The changing climate impacts society and ecosystems in a broad variety of ways. For example, climate change can alter rainfall, influence crop yields, affect human health, cause changes to forests and other ecosystems, and even impact our energy supply. Climate-related impacts are occurring across the country by increasing the severity of storms and weather-related events. Natural disasters then have a direct impact on our economy.

According to a new comprehensive report from the World Meteorological Organization (WMO), “A disaster related to a weather, climate or water hazard occurred every day on average over the past 50 years – killing 115 people and causing \$202 million (US \$) in losses daily. The number of disasters has increased by a factor of five over the 50-year period, driven by climate change, more extreme weather and improved reporting. But, thanks to improved early warnings and disaster management, the number of deaths decreased almost three-fold¹³” (World Meteorological Organization, 2021).

The impacts of climate change already are, and continue to be, deep and widespread in the Great Lakes Region and Michigan as a whole. The National Climate Assessment (NCA) assesses the science of climate change and variability and its impacts across the United States, now and throughout this century. Chapter 21 of the NCA *Fourth National Climate Assessment Volume II: Impacts Risks, and Adaptation in the United States reports*, the Great Lakes influence regional weather and climate conditions and impact climate variability and change across the region. The lakes influence daily weather by:

- 1) Moderating maximum and minimum temperatures of the region in all seasons,
- 2) Increasing cloud cover and precipitation over and just downwind of the lakes during winter, and
- 3) Decreasing summertime convective clouds and rainfall over the lakes.

The Great Lakes Integrated Sciences and Assessments (GLISA) is one of 11 NOAA Regional Integrated Sciences and Assessments teams that focus on helping the nation prepare for and adapt to climate variability and change. A summary of findings from NCA and the GLISA report, *Climate Change in the Great Lakes Region*¹⁴, are provided to show the impacts of climate change throughout the state of Michigan.

Temperature

Warm-season temperatures are projected to increase more in the Midwest than any other region of the United States.¹⁵ Since 1951, annual average air temperatures have increased by 2.3°F (1.3°C) in the U.S., Great Lakes region. By mid-century (2050), average air temperatures are projected to increase by 3°F to 6°F (1.7°C to 3.3°C). By end of century (2100), average air temperatures are projected to increase by 6°F to 11°F (3.3°C to 6.1°C).

The frost-free season is projected to increase 10 days by early this century (2016–2045), 20 days by mid-century (2036–2065), and possibly a month by late century (2070–2099) compared to the period 1976–2005 according to the higher scenario (RCP8.5).¹⁶

Precipitation

Since 1951, total annual precipitation has increased by 14% in the U.S., Great Lakes Region. Future projections suggest more precipitation on average, but not necessarily during all seasons (summer to be drier) and not for all locations depending on which model is used. Reduced lake ice cover and enhanced evaporation may lead to increased lake-effect snowfall in the near-term, but rising temperatures will cause more winter precipitation to fall as rain as opposed to snow across the region by late century.

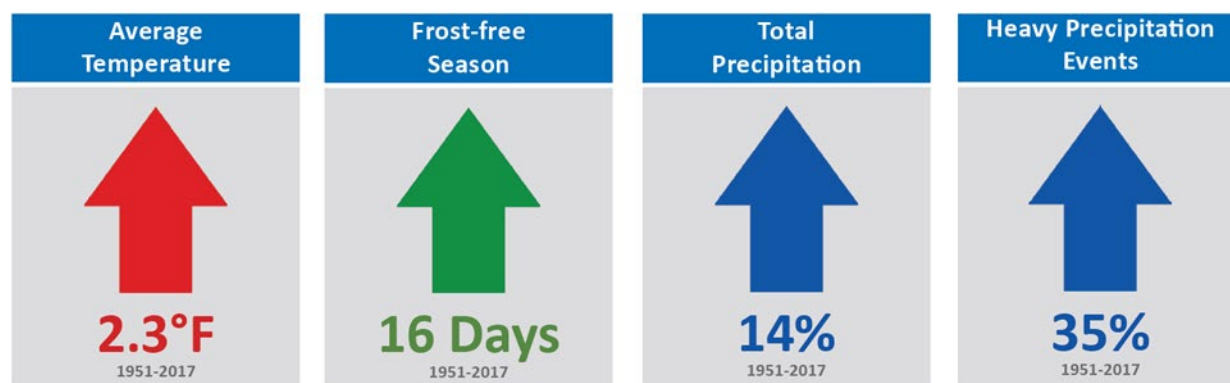
¹³ World Meteorological Organization. (2021, August 31). Retrieved from Weather-related disasters increase over past 50 years, causing more damage but fewer deaths: <https://public.wmo.int/en/media/press-release/weather-related-disasters-increase-over-past-50-years-causing-more-damage-fewer>

¹⁴ (2019, February 14). Retrieved from Climate Change in the Great Lakes Region: <https://glisa.umich.edu/summary-climate-information/>

¹⁵ Vose, R. S., D. R. Easterling, K. E. Kunkel, A. N. LeGrande, and M. F. Wehner, 2017: Temperature Changes in the United States. *Climate Science Special Report: Fourth National Climate Assessment, Volume I*. Wuebbles, D. J., D. W. Fahey, K. A. Hibbard, D. J. Dokken, B. C. Stewart, and T. K. Maycock, Eds., U.S. Global Change Research Program, Washington, DC, USA, 185–206. doi:10.7930/J0N29V45.

¹⁶ Hibbard, K. A., F. M. Hoffman, D. Huntzinger, and T. O. West, 2017: Changes in Land Cover and Terrestrial Biogeochemistry. *Climate Science Special Report: Fourth National Climate Assessment, Volume I*. Wuebbles, D. J., D. W. Fahey, K. A. Hibbard, D. J. Dokken, B. C. Stewart, and T. K. Maycock, Eds., U.S. Global Change Research Program, Washington, DC, USA, 277–302. doi:10.7930/J0416V6X.

From 1951-2017, the United States, Great Lakes Region, overall, has seen increases in average temperature, frost-free season, total precipitation, and heavy precipitation events.



Snow, Ice Cover and Lake Temperature

Summer lake surface temperatures have been increasing faster than the surrounding air temperatures, with Lake Superior increasing by 4.5°F between 1979 and 2006. Annual average ice cover on the Great Lakes shifted from higher amounts prior to the 1990s to lower amounts in recent decades. There remains strong year-to-year variability, and high ice years are still possible. Lake-effect snowfall has increased in northern areas and may continue to increase through mid-century.

Extreme Weather

The frequency and intensity of severe storms has increased. This trend will likely continue as the effects of climate change become more pronounced. The amount of precipitation falling in the heaviest 1% of storms increased by 35% in the U.S. Great Lakes region from 1951 through 2017. More severe storms may have a negative economic impact due to resulting damages and increased costs of preparation, clean up, and business disruption.

According to the *NCA Fourth National Climate Assessment Volume II: Impacts Risks, and Adaptation in the United States*: “Climate change is transforming where and how we live and presents growing challenges to human health and quality of life, the economy, and the natural systems that support us. Risks posed by climate variability and change vary by region and sector and by the vulnerability of people experiencing impacts. Social, economic, and geographic factors shape the exposure of people and communities to climate-related impacts and their capacity to respond. Risks are often highest for those that are already vulnerable, including low-income communities, some communities of color, children, and the elderly” ([Ch. 14: Human Health, KM 2](#); [Ch. 15: Tribes, KM 1–3](#); [Ch. 28: Adaptation, Introduction](#)).

A vulnerability assessment can be found in the two-page report: *Climate Change in the Great Lakes Region* by GLISA. The report identifies key challenges from climate change such as:

- **Public Health**
 - Increased risk of heat waves and increased humidity may amplify the number of heat-related deaths and illnesses.
 - More storm activity and flooding, resulting in increased point- and non-point source pollution, will likely increase watershed contamination and water-borne illnesses, while warmer surface waters amplify the risk of toxic algal blooms and fish contamination.
- **Tourism and Recreation**
 - *Winter recreation/tourism are likely to suffer* due to reduced snow cover and shorter winters. Reduced lake ice cover and enhanced evaporation may lead to increased lake-effect snowfall in the near-term, but rising temperatures will cause more winter precipitation to fall as rain as opposed to snow across the region by late century.
 - Increasing temperatures and a longer summer season may *increase the demand for lake and beach use*.
 - Overall, *summer tourism may grow before temperature rise becomes unfavorable* for outdoor recreation.
 - *The fishing industry* (commercial and recreation) is likely to be impacted by the *decline of coldwater species of fish, such as lake trout and whitefish*.

- **Natural Environment**

- Despite increasing precipitation, land surfaces in the region are expected to become drier overall due to increasing temperatures and evaporation rates.
- More frequent summer droughts could affect soil moisture, surface water, and groundwater supply.
- Increased evaporation rates and sustained levels of high or low water levels may change wetland areas in the region.
- The rate of warming may *outpace the rate at which ecosystems are able to migrate and adapt*.
- *Wildlife populations better adapted to cold temperatures will continue to decline* as competing species migrate into the region with rising air and surface water temperatures.
- *Forest productivity will likely increase in the short term*, until other impacts of climate change such as increased drought, fire and invasive species present additional stressors to forests.

V. Goals and Objectives

The mission of the Benzie County Natural Hazards Mitigation Plan is to protect the health and safety of the public and property in the County which includes prevention of injury, loss of life, property damage, breakdown in vital services like transportation and infrastructure, economic slumps, maintain tourist base, and liability issues. This is done by taking action to permanently eliminate or reduce the long-term risks from natural hazards.

Specific goals and objectives have been established based upon the community's natural hazards analysis, as well as input from the Task Force participants and the public through meetings, request for comments on the draft plan, and the presentation of the plan to the Local Emergency Planning Team.

Goal 1: Increase local awareness and participation in natural hazards mitigation strategies

Objectives:

- Encourage cooperation and communication between planning and emergency management officials
- Encourage additional local governmental agencies to participate in the natural hazards mitigation process
- Encourage public and private organizations to participate, including organizations who advocate for individuals with functional or access needs (vulnerable populations)

Goal 2: Integrate natural hazards mitigation considerations into the community's comprehensive planning and operational processes

Objectives:

- Enforce and/or incorporate natural hazards mitigation provisions in building code standards, ordinances, and procedures
- Create or update ordinances to reflect building codes, shoreline protection rules, etc.
- Incorporate natural hazards mitigation into basic land use regulation mechanisms
- Develop community education programs and public warning systems
- Strengthen the role of the Local Emergency Planning Committee in the land development process
- Integrate natural hazards mitigation into the capital improvement planning process so that public infrastructure does not lead to development in natural hazards areas
- Encourage county agencies to assess local roads, bridges, dams, and related transportation infrastructure for natural hazards vulnerability

Goal 3: Utilize available resources and apply for additional funding for natural hazards mitigation projects

Objectives:

- Identify desired community mitigation measures and provide them to the State
- Encourage the application for project funding from diverse entities (i.e., Homeland Security grants for EOC equipment needs or training; Tribal government partnerships for emergency services; invasive species management and treatment efforts)

Goal 4: Develop and complete natural hazards mitigation projects in a timely manner

Objectives:

- Encourage public and business involvement in natural hazards mitigation projects

VI. Mitigation Strategies and Priorities

Types of Mitigation Actions

The mitigation planning regulations requires that each participating jurisdiction identify and analyze a comprehensive range of specific mitigation actions and projects to reduce the impacts of the hazards identified in the risk assessment. The emphasis is on mitigating the impacts or vulnerabilities identified in the risk assessment, not on the hazards themselves. The types of mitigation actions can be classified into the following types:

- Local Plans and Regulations
- Structure and Infrastructure Projects
- Natural Systems Protection
- Education and Awareness Programs

Furthermore, a set of evaluation criteria was developed to determine which mitigation strategies were best suited to address the identified problems in Benzie County.

- The measure must be technically feasible.
- The measure must be financially feasible.
- The measure must be environmentally sound and not cause any permanent, significant environmental concerns.
- The measure must be acceptable to those participating in the strategy and/or primarily affected by the strategy.

By anticipating future problems, the County can reduce potential injury, structure losses, loss of power, such as electric and gas, and prevent wasteful public and private expenditures. The County Infrastructure, Vulnerable Populations, and Hazard Maps in Appendix A can assist with the determining future problem areas.

Emergency Warning System Coverage

Mobile warning system: Benzie County uses the CodeRED Emergency Communications Network, which is an electronic high-speed outbound notification service available to the general public.

The FEMA Mobile App is also a publicly available mobile warning system providing real-time weather alerts, locations of emergency shelters, and allows for notifications to be sent to loved ones.

The National Weather Service may concurrently utilize their mobile warning notification system when deemed necessary in severe weather event situations to send phone notifications to users within signal of a cellular tower.

Radio warning system: NOAA Weather Radio All Hazards is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. National Weather Radio broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week. NWR requires a [special receiver](#) or scanner capable of picking up the signal. Broadcasts can be found on seven frequencies in the VHF band.

NOAA Weather Radio Frequencies
162.400 MHz (WX2 on marine radio)
162.425 MHz (WX4)
162.450 MHz (WX5)
162.475 MHz (WX3)
162.500 MHz (WX6)
162.525 MHz (WX7)
162.550 MHz (WX1)

Tornado/Severe Weather Systems: The CodeRED Emergency Communications Network is utilized for severe weather/tornado alerts.

Flood warning system: For dam failures/flooding downstream an active warning system is pre-determined utilizing geographic boundary information and the CodeRED Emergency Communications Network.

Website and Social Media Platforms: Benzie County's Office of Emergency Management maintains an active Facebook page where information pertaining to emergency awareness and prevention is posted. The Benzie County Office of Emergency Management webpage also provides multiple informational links and current postings from the Facebook page.

One of the links on the webpage is for "Smart911", a free, new service provided by Benzie County Central Dispatch to help someone when they call 9-1-1. Once a person has signed up, first responders will be aware of important information they have provided that will help them address the caller's emergency. This information - including medical issues, current location and even pets - can help Police, Fire and EMS locate and help them.

Shelters

The Benzie County Office of Emergency Management (OEM) maintains use agreements with the following organizations to utilize their facilities for temporary emergency shelters:

- Benzie Central Schools
- Frankfort/Elberta Schools
- Two buildings at the United States Coast Guard Station (Small) Frankfort, 098 Coast Guard Road, Frankfort, MI 49632
- The Garden Theatre in Frankfort

The OEM also maintains "soft" agreements with municipalities to use their city, village or township halls as temporary shelter sites.

The Emergency Manager intends to renew Memorandums of Understanding need to be renewed with "GROW Benzie" in Blaine Twp. and "New Covenant" for emergency food provision services.

The Grand Traverse Band Tribe of Ottawa and Chippewa Indians maintains two underground tornado shelters on their property at Hoadley Road and Four Seasons Drive in Benzonia.

Benzie Bus can provide transportation of the public to emergency shelter sites. The Benzie Bus Main Office at 14150 US-31, Beulah, MI 49617 can also serve as a secondary Emergency Operations Center site if needed.

The American Red Cross – Northern Michigan Chapter can provide resources to create a long-term shelter if needed.

Mitigation Strategies

Strategies were developed based on discussions with local officials and a review of FEMA best practices for hazard mitigation. The Strategies Table is grouped according to purpose. Purpose types include: Awareness & Preparation, Shelters, Buildings & Infrastructure, Utilities & Technology, and Environment & Natural Resources. The table also includes: a description of each strategy; what natural hazards they address; where the strategy applies; who is responsible for implementing the strategy; how the strategy will be implemented (what resources are available to help execute the strategy); when the strategy could feasibly begin; the level of priority; and what type of strategy it is. Strategies are intended to be action items completed during the 5-year timeframe in which the plan is active. Some long-term strategies extend beyond the 5-year timeframe due to feasibility or level of difficulty. Appendix C provides a review of mitigation strategies included in the 2016 plan and their current status.

Resources to Assist with Implementing the Strategies

To assist with the funding of the proposed natural hazards mitigation strategies, a "Resources Table" of potential financial assistance entities and programs to help fund the implementation projects of the Plan is provided. Other organizational resources are also provided to assist with education, outreach, and capacity efforts. Each potential resource is assigned a letter code, and the appropriate letters are listed in the "Resources" column of the Strategies Table.

The Resources Table and the Mitigation Strategies table are provided on the following pages of Section VI.

Rationale for Prioritizing the Strategies

The Benzie County Emergency Manager and Local Emergency Planning Committee considered factors like level of need, economic impact, ease of execution/level of effort, cost, and range of benefit (short term, long-term, small group/area, large group/area) when determining the level of priority for each strategy. In general, strategies were given either a high, medium, or low priority level based on the following rationale:

ID	Resource	Description	Hazard Type	Website
A	Benzie County staff	Benzie County staff as appropriate	All hazards	https://www.benzieco.net/
B	Local government staff	All local units of government - employees, elected and appointed officials	All hazards	https://www.benzieco.net/residents_visitors/links/index.php
C	Local Emergency Services and Fire Departments	Almira Township Fire & EMS; Benzie County Central Dispatch; Benzie County EMS; Benzie County Sheriff's Office; Benzonla Township Fire; City of Frankfort Fire and Police Departments; Homestead Township Fire Department; Inland Township Fire Dept.; Thompsonville Fire & Rescue; USGG Station Frankfort, Sleeping Bear Dunes National Lakeshore Office (in Empire, Leelanau Township); MDNR Customer Service Center (in Grand Traverse County)	Severe winter weather; Thunderstorm, High Winds, Hail, Tornado, Lightning; Wildfire; Flooding; Extreme Temperatures; Public Health Emergency; Shoreline Hazards; Dangerous Currents	
D	Benzie Senior Resources	Benzie Senior Resources is a private, non-profit organization that provides programs and services for residents of Benzie County, Michigan who are age 60 and older. Services fall into the categories of Home Services, Health & Safety, Meals & Food, Social Connections, and Support Services.	Severe winter weather; Thunderstorm, High Winds, Hail, Tornado, Lightning; Flooding; Extreme Temperatures; Public Health Emergency	https://benzieseniorresources.org/
E	Benzie-Leelanau District Health Dept.	Provide programs and services such as: immunizations; community clinics; school health services; well and septic system inspections and permits; education about cleaning, monitoring and maintaining septic systems; septic or well repair financial assistance, the inspection and licensing of food service establishments, and emergency scenario preparedness and response training.	Severe winter weather; Thunderstorm, High Winds, Hail, Tornado, Lightning; Flooding; Extreme Temperatures; Public Health Emergency	https://www.blhd.org/
F	Northern Michigan Community Action Association (NMCAA)	Weatherization Assistance Program and Emergency Home Repair Program for low- to moderate- income households. Provides food distribution via the following USDA programs: monthly food package to low-income senior citizens via the Commodity Supplemental Food Program (CSFP), and The Emergency Food Assistance Program (TEFAP) to low-income persons through a quarterly distribution.	Severe winter weather; Thunderstorm, High Winds, Hail, Tornado, Lightning; Flooding; Extreme Temperatures; Public Health Emergency	https://www.nmcaa.net
G	"MI HOPE" Grants (Michigan Housing Opportunities Promoting Energy Efficiency)	Program for up to \$25K to repair or replace roofs, doors, windows, insulation, heating/cooling systems, water heaters, security lighting, Energy Star appliances and electrical systems for eligible low-income residents.	Severe winter weather; Thunderstorm, High Winds, Hail, Tornado, Lightning; Flooding; Extreme Temperatures; Public Health Emergency	www.michigan.gov/mi-hope
H	Grand Traverse Regional Community Foundation	GTRCF supports a variety of community need areas, including youth, arts and culture, education, environment, and health and human services. We do this by promoting giving, engaging in collaborative leadership, supporting nonprofit organizations through meaningful grants and local students through scholarships, and building endowments that make a lasting impact for generations to come. Service area includes Antrim, Benzie, Grand Traverse, Kalkaska, and Leelanau Counties.	Invasive Species, Flooding, Extreme Temperatures, Public Health Emergency	https://www.gtrcf.org/
I	Grand Traverse Regional Land Conservancy	We work to educate, raise awareness and provide appropriate support throughout the Benzie and Northern Manistee Counties area for programs related to watershed issues, water levels, aquatic and shoreline stewardship, fish & wildlife, and recreational opportunities. We are committed to assisting in developing solutions to mutual watershed-related problems along with local, State and Federal governmental units.	Flooding, Invasive Species, Coastal Hazards, Public Health Emergency, Drought, Extreme Heat	https://www.gtrfc.org/
J	Groundwork Center for Resilient Communities	With roots firmly embedded in the pro-health, pro-environment, and pro-economy principles of a local food system, the Groundwork Food and Farming team creates markets for local farmers, and helps connect locally grown food to school children, food pantry clients and families across the state.	Public Health Emergency	https://www.groundworkcenter.org/food-farming/
K	Midwest Agriculture Climate Team	MAC-T members are Extension specialists and state climatologists from many of the states represented in the Midwest Climate Hub, and NOAA NWS climate and weather specialists. The goal of this team is to share expertise regionally, discuss impacts and opportunities as it relates to agriculture and outlooks, and maintain an open line of communication so when weather/climate events do occur, the Midwest agriculture community is set to respond. The team meets monthly during the growing season regularly, and as needed during the winter season.	Drought, Extreme Temperatures, Flooding, Severe Winter Weather, High Winds, Hail	https://www.climatehubs.usda.gov/hubs/midwest/topic/midwest-agriculture-climate-team-mac-t
L	NWS Climate Prediction Center	The U.S. Drought Monitor is a map released every Thursday, showing parts of the U.S. that are in drought. The map uses five classifications: abnormally dry (D0), showing areas that may be going into or are coming out of drought, and four levels of drought: moderate (D1), severe (D2), extreme (D3) and exceptional (D4).	Drought	https://www.cpc.ncep.noaa.gov/products/Drought/
M	National Fire Protection Association Firewise USA Program	Firewise USA Program: Each applicant must create a board/committee, complete a community wildfire risk assessment with a 3-year action plan to reduce ignition risk to homes, and complete annual educational and risk reduction actions identified in the plan.	Wildfire, Drought	https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Wildfire/Firewise-USA
N	National Fire Protection Association Community Wildfire Defense Grants	Communities can use these grants from the USFS in a variety of ways to reduce the wildfire risk to people and property. One key use is capacity building for wildfire mitigation. For example, communities can use the grants to support the implementation and enforcement of wildfire-related codes and standards; to train people to assess wildfire risk and implement effective mitigation measures; and to perform outreach to community members through programs like Firewise USA®. Communities that build these fundamentals—sound land use and building practices, a skilled workforce, and an educated public—will be better prepared for sustained and effective risk reduction and better equipped to take advantage of future federal grants that prioritize communities with codes in place.	Wildfire, Drought	https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Wildfire
O	HMGP Post-Fire Assistance (PFA) grant program	This grant funds projects that make a community more resilient after a designated wildfire disaster. States and federally-recognized tribes affected by fires resulting in a Fire Management Assistance Grant (FMAAG) declaration on or after October 5, 2018, are eligible to apply.	Wildfire, Drought	https://www.fema.gov/grants/mitigation/post-fire
P	Consumer's Energy Utility Services	Consumers Energy provides electrical and natural gas utility services. Energy through renewable energy sources is available. A power outage map is available to track outage locations.	All hazards except invasive species.	https://www.consumersenergy.com/outage-map
Q	Cherryland Electric Cooperative	Provides electric service in Benzie County to the townships of Almira, Colfax, Homestead, Inland, Weldon, and Joyfield. Their website also includes information on renewable energy programs and an interactive outage map.	All hazards except invasive species.	https://cherrylandelectric.coop/
R	Connected Nation Michigan	Connected Nation develops and provides the tools, resources, and methods that help states and communities create and implement solutions to their broadband and digital technology gaps. They assess and plan for the expansion of broadband access, adoption, and use. They empower people with technology skills and resources to improve their quality of life, and we develop public-private partnerships to bring technology access to targeted geographies and population.	All hazards except invasive species.	https://connectednation.org/michigan/
S	Great Lakes Shoreviewer Tool	View aerial imagery of Lake MI shoreline and associated risk levels for coastline, infrastructure/roads, and buildings.	Shoreline flooding and erosion	http://www.greatlakesshoreviewer.org/
T	Northwest Lower MI Coastal Resilience Atlas	Mapped coastal flooding and coastal erosion based on three future climate scenarios for communities adjoining Lake MI; areas of the shoreline population, by census tract, that are most vulnerable to extreme heat events.	Shoreline flooding and erosion, Extreme Heat	http://www.resilientmichigan.org/nw_atlas.asp
U	State-designated High Risk Erosion Areas: programs and maps	High risk erosion areas are those shorelands of the Great Lakes where recession of the landward edge of active erosion has been occurring at a long-term average rate of one foot or more per year, over a minimum period of 15 years.	Shoreline erosion	https://www.michigan.gov/egle/about/organization/water-resources/shoreland-management/high-risk-erosion-areas
V	State-designated Critical Dune Areas	Michigan's critical dune program protects the dune resource using alternative construction techniques to reduce the impacts of development on dunes and protects dune vegetation essential to dune preservation and stability. Earthmoving, vegetation removal, and construction activities within a critical dune area are regulated through a permit program.	Shoreline erosion	https://Michigan.gov/CriticalDunes
W	Michigan EGLE's Coastal Zone Management Program	A plethora of resources to improve coastal and climate resiliency through both planning and best management projects.	Shoreline flooding and erosion	https://www.michigan.gov/egle/about/organization/water-resources/coastal-management
X	Resilient Lakeshore Heritage Program	This grant program is administered by the Michigan State Historic Preservation Office. Funding for the program is provided by the Paul Bruhn Historic Revitalization Grant from the National Park Service to support the preservation of historic buildings in rural communities located along the Great Lakes statewide.	Shoreline flooding and erosion	
Y	Great Lakes Water Safety Consortium	A nonprofit community of BEST practice, connecting and serving safety experts & water enthusiasts, educating the public on safer ways to enjoy the water, and encouraging leaders to take bold action to make their shoreline safer for residents and visitors.	Coastal Hazards - dangerous currents	https://www.greatlakeswatersafety.org/
Z	EGLE's Wetlands Map Viewer	The WMV application was created for the Department of Environment, Great Lakes, and Energy to provide the public with quick and easy access to wetland spatial data.	Flooding, Drought, Extreme Temperatures	https://www.mcgl.state.mi.us/wetlands/mcglMap.html

ID	Resource	Description	Hazard Type	Website
AA	FEMA Floodplain Management Resources for Local Government Officials	How to participate with the NFIP and tools and resources to provide higher standards for floodplain management.	Inland and coastal flooding	https://www.fema.gov/floodplain-management/manage-risk/local
BB	FEMA Flood Mitigation Assistance (FMA) Grant Program	FMA is a non-disaster, competitive grant program that provides funding to states, local communities, federally recognized tribes. Funds can be used for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program. • \$800 million available in funding for FY22 • Application Period: September 30, 2022, to January 27, 2023 • Period of Performance: 3 Years • Cost-share: 25% non-federal • Severe Repetitive Loss (up to 100% federal) • Repetitive Loss (up to 90% federal) • Priorities are set each fiscal year	Inland and coastal flooding	https://www.fema.gov/grants/mitigation/floods
CC	FEMA Building Resilient Infrastructure and Communities (BRIC) Grant Program	BRIC is a non-disaster grant program, which provides funds on an annual basis for hazard mitigation planning and the implementation of mitigation projects prior to a disaster. The BRIC program guiding principles are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency. Funding has doubled for BRIC to \$2.295 billion for FY21. • Caps: States/Territories Allocation and Activities: \$2 million; Tribal set-aside: \$2 million; National Competition: \$2.133 billion • Application Period: September 30, 2022 to January 27, 2023 • Period of Performance: 3 year from start date on Recipient's federal award • Cost-share: 25% non-federal • Economically disadvantaged rural communities are eligible for 10% non-federal • Priorities are set each fiscal year	All hazards	https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities
DD	FEMA Hazard Mitigation Grant Program (HMGP)	HMGP is a post-disaster grant program, where funding is only made available under a Presidential major disaster declaration, in the areas of the State requested by the Governor. Federally-recognized tribes may also submit a request for a Presidential major disaster declaration within their impacted areas.	All hazards	https://www.fema.gov/grants/mitigation/hazard-mitigation
EE	Great Lakes Stream Crossing Inventory	Previously, individual inventories were conducted by partnership agencies, watershed organizations, and road agencies but were not readily accessible to stakeholders and did not contain comparable information. The newly developed protocol and datasheet are intended to promote consistent data collection, selection criteria for improvement projects, and selection of appropriate Best Management Practices for each project to benefit all stakeholders. Information gathered on the datasheet can and has been used to prioritize structure replacement and successfully seek funding.	Flooding & Erosion	https://great-lakes-stream-crossing-inventory-michigan.hub.arcgis.com/
FF	Conservation Resource Alliance	Current projects include: Wild Roots, a cost-share program offering native plants to property owners at a greatly reduced rate; and The River Care Program, which ensures that natural resource professionals maintain a consistent and prioritized action plan for each river in the organization's region. River Care professionals not only find and repair physical problems before they become worse, they also team with local agencies, residents, and interest group representatives for fact-based conversations. These cross-functional teams can speak openly and affect change in an agile, efficient and transparent way. CRA works in the 10-county northwest MI region, along with the southerly adjoining counties of Mason, Lake, Oscoda, Oceana and Newaygo.	Flooding & Erosion; Invasive Species; Drought; Extreme Heat; Public Health Emergency	https://www.rivercare.org/
GG	State of MI: Resources and Best Practices to Prevent and Manage Invasive Species	Prevention tips and action steps to control or remove invasive species.	Invasive Species	https://www.michigan.gov/invasives/take-action
GG	EGLE's "NotMiSpecies" webinar series	This webinar series explores how agencies, universities and locally led organizations are working together to protect Michigan's natural resources through the Michigan Invasive Species Program. If you are concerned about the impacts of invasive species or interested in the techniques used to control them, join us as we examine species-specific actions, innovations in research and technology, and programs designed to help communities prevent and manage harmful invasive species.	Invasive Species	https://www.michigan.gov/invasives/take-action
HH	Michigan Invasive Species Grant Program	The Departments of Natural Resources, Environmental Quality and Agriculture and Rural Development work together to address strategic issues of prevention, detection, eradication, and control for both terrestrial and aquatic invasive species in Michigan. This program is designed to address strategic issues of prevention, detection, eradication and control for both terrestrial invasive species (TIS) and aquatic invasive species (AIS) in Michigan.	Invasive Species	www.michigan.gov/invasives/grants/misgp
II	Clean Boats, Clean Waters Program	Funding from the Michigan Department of Environment, Great Lakes, and Energy and the Great Lakes Restoration Initiative has enabled Clean Boats, Clean Waters to grow into a comprehensive aquatic invasive species boater outreach program. The program's mission: to prevent new aquatic invasive species introductions and limit their dispersal from water recreation activities through outreach and engagement. The program promotes understanding of boat cleaning practices and regulations through the distribution of educational materials, an online resource library, boat washing demonstrations, grants and partnerships.	Invasive Species	www.canr.msu.edu/clean_boats_clean_waters/index
JJ	Michigan State University Extension (MSUE)	Resources available for: training elected and appointed officials, agriculture and food support programs, and natural resources protections.	Inland flooding, shoreline erosion; Invasive Species; Public Health Emergency	https://www.canr.msu.edu/outreach/
KK	MSUE's Michigan Inland Lakes Partnership	The purpose of the Michigan Inland Lakes Partnership (Partnership) is to engage state and local agencies, Native American Nations, outreach institutions (universities and other educational institutions), non-governmental organizations (NGOs), businesses, industries and citizens in a collaborative effort to ensure the quality, sustainability and ecological diversity of lakes, while considering society's needs. The Partnership will promote communication and cooperation between partners, communities and citizens interested in the management of Michigan's inland lakes, educating leaders, and strengthening stewardship efforts.	Inland flooding, shoreline erosion; Invasive Species	https://www.canr.msu.edu/michiganlakes/convention/
LL	USDA Natural Resources Conservation Service (NRCS)	The NRCS helps America's farmers, ranchers, and landowners conserve our nation's resources through voluntary programs and science-based solutions.	Drought; Extreme Temperatures; Invasive Species; Public Health Emergency	https://www.nrcs.usda.gov/
MM	Benzie Conservation District	The District's purpose is to foster the best use of land for the present and future benefits of the community, based on the land's capabilities and landowner's goals. Combating soil erosion, managing surface and groundwater quality and promoting the maintenance of the lands related resources and the aesthetic values are vital to the community's long range economic well being, from food and timber production to natural resources related industries and tourism. To these ends, the District strives to be a "gateway" to resource management information and service providers, so that citizens may manage their lands for a healthier Benzie County. District activities include cooperation in implementing federal, state, and local government programs, as well as other independent programs, such as conservation awareness, farmland preservation, forestry, and wildlife habitat enhancement	Flooding, Shoreline Erosion; Invasive Species; Wildfire; Drought	https://www.benziecd.org/
NN	Northwest Michigan Invasive Species Network	A Cooperative Invasive Species Management Area (CISMA) serving Benzie, Grand Traverse, Leelanau & Manistee counties to manage populations of invasive species that threaten northwest Michigan's high-quality natural areas through terrestrial invasive plant management and outreach.	Invasive Species	https://www.habitatmatters.org/
OO	Crystal Lake Watershed Association	CLWA is a nonprofit (501c3) organization of concerned citizens committed to protecting the beauty and water quality of Crystal Lake and its surrounding environment. It engages in monitoring, education, and advocacy on behalf of the broad community for whom Crystal Lake is a vital economic, recreational, and aesthetic resource.	Flooding, Invasive Species, Public Health Emergency, Drought	https://crystallakewatershed.org/
PP	Lower Herring Lake Association	The Lower Herring Lake Association is an organization committed to helping maintain the natural beauty, water quality and recreational opportunities in our watersheds and those of the surrounding area. They work to educate, raise awareness and provide appropriate support throughout the Benzie and Northern Manistee Counties area for programs related to watershed issues, water levels, aquatic and shoreline stewardship, fish & wildlife, and recreational opportunities. They are committed to assisting in developing solutions to mutual watershed-related problems along with local, State and Federal governmental units.	Flooding, Invasive Species, Public Health Emergency, Drought	https://www.lowerherringlakeassociation.org/
QQ	Little Platte Lake Association	Their mission is to preserve the lake and its environs. Activities include aquatic invasive species surveying, management, and education, along with regulating lake levels, fisheries management, and public education on lake stewardship practices.	Flooding, Invasive Species, Public Health Emergency, Drought	http://www.littleplattelake.org/
RR	Ann Lake Property Owners Association	The purpose of ALPOA is to: Preserve Ann Lake as a natural resource and recreational area. Promote the education of all users of the lake about water quality and water safety on Ann Lake and the Platte River Watershed. Support issues which concern the welfare of Ann Lake. Promote the best interests of the membership in fiscal and civic matters.	Flooding, Invasive Species, Public Health Emergency, Drought	https://www.annlake.org/

PRIORITY LEVEL	RATIONALE
HIGH	Included critical infrastructure, already had in place an enforcement standard, level of need, economic impact, future interoperability, high probability of immediate impacts to public health or safety.
MEDIUM	Included education or planning, did not have immediate impacts to public health or safety but may have impacts to specific residents or visitors. If the action item included an agency that was not at the table during discussion, we defaulted to Medium to respect that they may have a different interpretation of the priority which could not be identified at the current discussion.
LOW	In foreseeable short- or long-term health and safety impacts (but may change within 5 years), used the word “consider” which is what they feel they are doing by including on the list of strategies for natural hazard mitigation, so it is on the list for continued communication. The probability of an event occurring in the geographic area is low, but not impossible, so it should be considered. The strategy's priority level may also change based on natural events or time.

The key for the strategy types in the far right columns of the strategies table are as follows:

STRATEGY TYPES

1	Local Planning & Regulations
2	Building & Infrastructure Projects
3	Natural Systems Protection
4	Education & Awareness Efforts

Awareness and Preparation

		BENZIE COUNTY HAZARD MITIGATION STRATEGIES	HAZARD TYPE										WHERE - Affected Locations or Groups	WHO - Responsible Parties	HOW - Resources	WHEN - Timeframe (Years)	PRIORITY TYPE (High, Med, or Low)	STRATEGY TYPE			
			Severe Winter Weather	T-Storm, High Winds, Hail, Tornado, Lightning	Wildfire	Inland Flooding and Erosion	Coastal Hazards: Flooding, Erosion, Rip Current, Seiche	Extreme Temperatures	Drought	Invasive Species	Public Health Emergency	1						2	3	4	
Awareness and Preparation	1	Incorporate the County Hazard Mitigation Plan's strategies into elements of County and local master plans.	X	X	X	X	X	X	X	X	X	Countywide	Benzie County; All local jurisdictions		Ongoing	High	X	X	X	X	
	2	Continue to pursue interdepartmental cooperation and coordination of police, fire, rescue and EMS services to achieve community-wide coverage availability.	X	X	X	X	X	X	X	X	X	Countywide	County Sheriff and EM; local fire/EMS		Ongoing	High	X				
	3	Continue and strengthen partnerships amongst local government agencies, businesses and non-profits to provide public education on hazard scenario preparedness and prevention.	X	X	X	X	X	X	X	X	X	Countywide			Ongoing	Med	X	X	X	X	
	3a	Continue to inform the public about emergency events and shelter sites via utilization and promotion of the CodeRED mass notification system, NWS mobile and/or radio notifications, and social media.	X	X	X	X	X	X	X		X	Countywide	County EM; NWS		Ongoing	Med				X	
	3b	Continue the preparedness practice of conducting the annual statewide tornado drill.		X								Countywide	County EM		Annually	Med	X			X	
	3c	Continue to promote participation in Storm Spotter Training via partnership with the NWS.	X	X	X	X	X	X	X			Countywide	County EM		Annually	Med				X	
	3d	Educate developers and property owners about best building practices to mitigate impacts of natural hazards	X	X	X	X	X	X	X	X	X	Countywide	Benzie County Building Dept.		Ongoing	Med		X		X	
	3e	Continue to share the County Road Commission's snow removal plan with communities	X									Countywide	Benzie County Road Commission		Ongoing	Med	X			X	
	3f	Utilize resources offered by the Great Lakes Water Safety Consortium to increase beach safety awareness and incident prevention at public beaches		X			X					Lake Twp., Crystal Lake Twp., the City of Frankfort, the Village of Elberta, Gilmore Twp. and Blaine Twp.	Benzie County; DNR; NPS; Local jurisdictions		Ongoing	Med				X	
	3g	Per page 6 of the 2021 City of Frankfort Master Plan: define, improve and regulate the Lake Michigan Beach area for the safety and wellbeing of the public.		X			X					City of Frankfort	City of Frankfort	City Parks and Rec budget; MDNR rec grants	0-3 years	Med	X	X			
	3h	Per page 61 of the Village of Elberta's 2018 Master Plan: support ongoing efforts and explore opportunities to maintain, enhance, and improve the environment, accessibility, and amenities at the Village Beach.		X			X					Village of Elberta	Village of Elberta	Village budget; MDNR rec grants	Ongoing; MNRTF Development Grant awarded to the Village in 2021	Med	X	X			
	3i	Investigate opportunities for joint scenario planning/training with the power utility companies and Benzie County Central Dispatch to help restore power more effectively.	X	X	X	X	X	X				Countywide	County EM/ 911 Dispatch		Ongoing	Med	X				
	3j	Identify communities that have an interest in becoming a recognized Firewise USA® community. Each applicant must create a board/committee, complete a community wildfire risk assessment with three-year action plan to reduce ignition risk to homes, and complete annual educational and risk reduction actions identified in the plan.			X							Village of Lake Ann, Almira Twp.; Lake MI shoreline areas in Lake Twp., Crystal Lake Twp and Blaine Twp.	County EM., Local Fire Depts./First Responders, MDNR, NPS		0-5 years	Med	X			X	
	3k	Work with campgrounds to create areas of refuge involving imminent fire dangers at campgrounds, and establish evacuation routes.		X	X	X						Townships of Almira, Platte, Lake, Crystal Lake, Blaine, Benzonia, Weldon, Colfax, Inland and Homestead.	County EM., Local Fire Depts./First Responders, MDNR, NPS		0-5 years	Med	X			X	
3l	Engage in public education efforts to improve neighboring resident awareness and understanding of National Park Service's wildfire management practices. The NPS maintains their "no extinguish" policy on wildfires on the Sleeping Bear Dunes National Lakeshore and NPS lands. NPS also continues to manage the park's wildfire risk by utilizing their wildfire and prescribed fire management programs.			X							Lake Township, Platte Township	NPS, EM, local fire depts., Lake Twp. government, Platte Twp. government	NPS - SBD budget	Ongoing	Med				X		

Awareness and Preparation

	BENZIE COUNTY HAZARD MITIGATION STRATEGIES	HAZARD TYPE								WHERE - Affected Locations or Groups	WHO - Responsible Parties	HOW - Resources	WHEN - Timeframe (Years)	PRIORITY TYPE (High, Med, or Low)	STRATEGY TYPE			
		Severe Winter Weather	T-Storm, High Winds, Hail, Tornado, Lightning	Wildfire	Inland Flooding and Erosion	Coastal Hazards: Flooding, Erosion, Rip Current, Seiche	Extreme Temperatures	Drought	Invasive Species	Public Health Emergency					1	2	3	4
3m	Reference LIAA's Northwest Michigan Coastal Resilience Atlas to identify and promote awareness of the impacts to public and private properties from "lucky", "expected" and "perfect storm" coastal flooding scenarios, as well as the predicted advancement of coastal recession.					X					Lake Twp. (particularly the Betsie Point Lighthouse and the Crystal Downs/Michabou Shores residential developments), Crystal Lake Twp., the City of Frankfort, the Village of Elberta, Gilmore Twp. and Blaine Twp.	County EM, Local Governments	Ongoing	Med				X
4	Evaluate additional designated sites to temporarily store cleanup debris from downed trees after storm events.	X	X		X						Countywide	Community DPWs, EM, RC	0-5 years	Low	X			
5	Continue to develop Emergency Action Plans as needed for large public events.	X	X	X	X	X	X			X	Countywide	County EM	As needed	Med	X			
6	Continue Benzie Senior Resources' provision of discounted snow plowing/home repair services, heating/utility/food delivery assistance to qualified seniors, and the "telephone reassurance" call service to check on homebound seniors.	X	X	X	X	X	X			X	Countywide	Benzie Senior Resources	BSR Budget	Ongoing	Med	X		
7	Share LIAA's NW MI Coastal Resilience Atlas - Ch. 5 for maps of areas along the Lake MI shoreline where vulnerable populations are most at risk from extreme heat events - with Benzie Senior Resources, local charities/non-profits, emergency responders and local governments.						X				Lake Township, Crystal Lake Twp, City of Frankfort, Village of Elberta, Gilmore Twp., Blaine Twp.	County EM, Benzie Senior Resources	As needed	Med				X
8	Ensure that County residents, particularly vulnerable populations, have access to healthy, affordable food options.												Ongoing	Med				
8a	Create community gardens in urban locations and/or school locations to promote learning about growing local food, native pollinating plants, and provide access to fresh produce.							X	X	X	City of Frankfort; Villages	City of Frankfort; Villages; School Districts	As needed	Med		X	X	X
8b	Continue to provide and improve food assistance programs and emergency food programs to help communities prepare for unanticipated pandemics, but also increase year-round food accessibility.	X	X	X	X					X	Countywide	Benzie Senior Services; local food pantries; School Districts (school meal programs)	Ongoing	Med	X			
8c	Food rescue programs, involving public/private partnerships between restaurants, hotels and other venues of large food production, can partner with local food pantries to make good food more widely available.	X	X	X	X					X	Countywide	Benzie Senior Services; local food pantries; School Districts (school meal programs)	As needed	Med	X		X	X
9	Continue collaboration amongst the Benzie-Leelanau District Health Department with federal, state, and local partners to coordinate the responses pertaining to public health (i.e., COVID-19)				X					X	Countywide	County EM; BLDHD	Ongoing	High	X	X	X	X
10	Continue to coordinate with the MDHHS for guidance via the State Pandemic Plan and information about new or emerging disease threats.									X	Countywide	County EM; BLDHD	Ongoing	High	X			X
11	Maintain proper levels of PPE for healthcare workers and first responders, with additional supplies for long-term care facilities.									X	Countywide	County EM; local fire/EMS; Senior living facilities	As needed	Med	X			

		BENZIE COUNTY HAZARD MITIGATION STRATEGIES	HAZARD TYPE								WHERE - Affected Locations or Groups	WHO - Responsible Parties	HOW - Resources	WHEN - Timeframe (Years)	PRIORITY TYPE (High, Med, or Low)	STRATEGY TYPE				
			Severe Winter Weather	T-Storm, High Winds, Hail, Tornado, Lightning	Wildfire	Inland Flooding and Erosion	Coastal Hazards: Flooding, Erosion, Rip Current, Seiche	Extreme Temperatures	Drought	Invasive Species						Public Health Emergency	1	2	3	4
Awareness and Preparation	12	Identify flood-prone areas and any areas that have reported repetitive loss damages due to flooding on FIRMs. Pursue FEMA hazard mitigation assistance grants related to flood mitigation, such as innovative stormwater management solutions, property acquisition, structure demolition or relocation, dry flood proofing, structure elevation, or project scoping (engineering, environmental, feasibility, and/or benefit-cost analysis).				X	X					Almira Twp., Blaine Twp., Gilmore Twp., Village of Elberta, City of Frankfort, Crystal Lake Twp, and Lake Twp.	Drain Commissioner, EM, MI EGLE		As needed	Low	X	X	X	X
	12a	Reference LIAA's NW MI Coastal Resilience Atlas for a depiction of structures located within predicted storm scenarios and blufflines, as well as floodplain areas on current FIRMs.				X	X					Almira Twp., Blaine Twp., Gilmore Twp., Village of Elberta, City of Frankfort, Crystal Lake Twp, and Lake Twp.	Almira Twp., Blaine Twp., Gilmore Twp., Village of Elberta, City of Frankfort, Crystal Lake Twp, and Lake Twp.		As needed	Low	X			
	12b	Bluff erosion along Lake MI in Crystal Lake Twp. has impacted properties at Golf Lane & Ness Rds.					X					Crystal Lake Township	Crystal Lake Township			Low	X			
	13	Provide outreach to communities that do not currently participate in the National Flood Insurance Program about the benefits of doing so. (The NFIP provides flood insurance to property owners, renters and businesses, and having this coverage helps them recover faster when floodwaters recede. There is no cost for communities to participate.)				X	X					Townships of Inland, Colfax, Weldon, Joyfield, Blaine, Homestead, Benzoncia, and Platte; Villages of Lake Ann, Honor, Benzoncia, Elberta, and Beulah	County EM		Ongoing	Low	X			X
	13a	Platte River Watershed communities				X	X					Villages of Lake Ann, and Honor; Townships of Inland, Homestead, Benzoncia, and Platte			As needed	Low	X			X
	13b	Blueberry Creek/Trout Pond area (off of US 31 west of Honor)				X	X					Benzonia Township			As needed	Low	X			X
	13c	Betsie River Watershed (portions)				X	X					Townships of Inland, Colfax, Weldon, Joyfield, Benzoncia; Villages of Benzoncia, Beulah, Thompsonville			As needed	Low	X			X
	13d	Crystal Lake Watershed (portions)				X	X					Villages of Beulah and Benzoncia, Benzoncia Twp.			As needed	Low	X			X
	13e	Village of Elberta (has a recent FIRM but is listed as not participating with NFIP)				X	X					Village of Elberta		As needed	Low	Low	X			X
	14	Promote education about the benefits of natural shoreline and streambank restoration; identify priority shoreline and streambank restoration sites.				X	X					Countywide	BCD, GTRLC		Ongoing	Low	X		X	X
	14a	Continue efforts by the Lower Herring Lake Association Board to promote natural shoreline restoration/ BMPs.				X				X		Blaine Township	Lower Herring Lake Association Board		Ongoing	Low	X		X	X
	15	Consider developing a drought communication plan and early warning system to facilitate timely communication of local drought conditions/outlook to officials, emergency responders, and the public.								X		Countywide	County EM, BCD/USDA-NRCS		As needed	Low	X			X
	16	Consider establishing an irrigation time/scheduling program or process so that all agricultural land gets the required amount of water. Through incremental timing, each area is irrigated at different times so that all water is not consumed at the same time. Spacing usage may also help with recharge of groundwater.								X		Countywide	County EM, BCD/USDA-NRCS		As needed	Low	X			
	17	Consider implementing mandatory water conservation measures during drought emergencies, such as: •Developing an ordinance to restrict the use of public water resources for non-essential usage, such as landscaping, washing cars, filling swimming pools •Adopting ordinances to prioritize or control water use, particularly for emergency situations								X		Countywide	County EM, USDA-NRCS, local governments		As needed	Low	X			
	18	Continue collaboration with MSUE to provide information on agriculture management and best practices in drought situations.								X		Countywide	County EM, MSUE, BCD/USDA-NRCS,		Ongoing	Low			X	X
19	Support the provision of free technical assistance (through the Benzie Conservation District) such as the USDA-NRCS' Conservation Stewardship Program, resource assessment and monitoring, and determination of financial assistance for local farmers, ranchers and forest managers in the wake of a natural disaster.	X	X	X	X		X	X	X	X	Countywide	BCD/USDA-NRCS		Ongoing	Low	X		X	X	

		BENZIE COUNTY HAZARD MITIGATION STRATEGIES	HAZARD TYPE								WHERE - Affected Locations or Groups	WHO - Responsible Parties	HOW - Resources	WHEN - Timeframe (Years)	PRIORITY TYPE (High, Med, or Low)	STRATEGY TYPE				
			Severe Winter Weather	T-Storm, High Winds, Hail, Tornado, Lightning	Wildfire	Inland Flooding and Erosion	Coastal Hazards: Flooding, Erosion, Rip Current, Seiche	Extreme Temperatures	Drought	Invasive Species						Public Health Emergency	1	2	3	4
Shelters	20	Increase collaboration between the Benzie County Office of Emergency Management with local communities and non-profits to ensure that adequate emergency shelters are available to the public, particularly for heating/cooling during extreme temperature days.	X	X	X	X	X	X		X	Countywide	County EM		Ongoing	Med	X				
	21	Provide local governments or public/private organizations information on funding sources for the installation of generators to enhance capabilities of emergency shelter locations.	X	X	X	X		X		X	Countywide; however Blaine Township and Crystal Lake Township have specifically expressed the need for generators at their Township halls	County EM; Local Fire Depts.; Senior Centers; Municipal Offices		As needed	Med		X		X	
	22	Evaluate the feasibility and need to construct storm shelters, such as concrete "safe rooms", at campgrounds, recreation areas, and mobile/modular home communities.	X	X	X	X		X			See hazard map for locations of campgrounds and mobile homes	County Building Dept., EM; local govts; private and public campground managers		Ongoing	Low		X			
	23	Continue to establish areas of refuge and evacuation routes from campgrounds, recreation areas, and other sites of large outdoor events.	X	X	X	X		X		X	See hazard map for locations of campgrounds and mobile homes	County EM; private and public campground managers; local fire depts.		Ongoing	Med	X	X		X	
	24	Investigate the need to create signage in public parks/beaches that illustrate the nearest emergency shelter locations.	X	X	X	X		X			Countywide	County and local governments; MDNR; NPS		0-5 years	Low				X	
	25	Maintain procedures to create quarantine areas in group living quarters, such as overnight shelters or assisted living facilities.								X	Countywide	The Maples (Benzie Co. Medical Care Facility); Paul Oliver Memorial Hospital; private ALFs, non-profit shelters		Ongoing	Med	X				
Buildings, Roads & Dams	26	Continue building code enforcement for new construction by following State of MI Building Code and applicable local zoning ordinances. Note: State code is based on International Code Council (ICC) with reference to the National Fire Protection Act (NFPA).	X	X	X	X	X	X		X	Countywide	Benzie County Building Dept., all local governments		Ongoing	High	X		X		
	26a	Continue enforcement of applicable soil erosion statutes, building codes and EGLE permitting requirements for new construction by verifying floodplains, EGLE-designated Critical Dune areas and/or High Risk Erosion Areas relative to new construction or site modification (assistance with this provided by Benzie Conservation District)				X	X				Countywide	County Building Dept., EGLE		Ongoing	High	X		X		
	26b	Continue to enforce the Village of Benzonia's ordinance for steep slope protection (development is restricted on slopes greater than or equal to 15%) and removal of existing vegetation. Reconsider the fines for violation and pursue opportunities to provide education and awareness to property owners about issues with development on steep slopes.				X					Village of Benzonia	Village of Benzonia	Village fund	Ongoing	Med	X		X	X	
	26c	Per the Village of Elberta's 2018 Master Plan, protect development and preserve coastal features by siting new development away from areas prone to coastal flooding and erosion.				X					Village of Elberta	Village of Elberta		Ongoing	Med	X				
	27	Suggest structural modifications (such as foundation anchoring and tie downs for mobile/modular homes) and tree management to reduce damage to structures from high winds.		X							Countywide	Benzie County Building Dept.; Local Fire Depts.; County EM		Ongoing	Med				X	
	28	Promote the availability of low-cost residential weatherization and home improvement programs.	X	X	X	X		X		X	Countywide	Benzie Senior Services; NMCAA		Ongoing	Low		X		X	
	29	Evaluate the need/potential to provide reduced-cost program to install air conditioning in the homes of low-income senior citizens.			X			X		X	Countywide	Benzie Senior Services		Ongoing	Med		X			
30	Improve ventilation techniques in areas, facilities, or vehicles that are prone to crowding or that may involve exposure to contagion or noxious atmospheres.								X	Countywide	Local and county governments, schools, private venues.		As needed	Med	X	X				

Buildings, Roads & Dams

		BENZIE COUNTY HAZARD MITIGATION STRATEGIES	HAZARD TYPE									WHERE - Affected Locations or Groups	WHO - Responsible Parties	HOW - Resources	WHEN - Timeframe (Years)	PRIORITY TYPE (High, Med, or Low)	STRATEGY TYPE			
			Severe Winter Weather	T-Storm, High Winds, Hail, Tornado, Lightning	Wildfire	Inland Flooding and Erosion	Coastal Hazards: Flooding, Erosion, Rip Current, Seiche	Extreme Temperatures	Drought	Invasive Species	Public Health Emergency						1	2	3	4
Buildings, Roads & Dams	31	Continue to pursue opportunities for brownfield and blight clean-up activities, including demolition and clearance of vacant, condemned structures, to remove actual and potential sources of land, water and air contamination.	X	X	X	X	X				X	Countywide	Benzie County Economic Development and Brownfield Redevelopment Authority; Local Governments		Ongoing	Med	X	X	X	X
	32	Continue to enforce the Benzie County Septic Inspection and Property Transfer Ordinance to protect public health and prevent or minimize the degradation of groundwater and surface water quality from malfunctioning sewage treatment and disposal systems.				X	X				X	Countywide	Benzie County		Ongoing	Med	X	X	X	
	33	Continue maintenance of major dams in the county, with updated Emergency Response Plans on file and regular inspections completed by EGLE for dams with "High" or "Significant" downstream hazard potential.				X					X	Homestead Dam in Benzonia Township ("Significant" hazard potential)	MDNR Fisheries Division		3 years (next inspection due by end of 2026)	Med	X		X	X
	34	Continue efforts by the Lower Herring Lake Association Board to secure a five-year maintenance (excavation) permit filed jointly with EGLE and the USACE to ensure the Lake MI outlet can remain open to protect riparian shoreline and the property/homes from the ongoing blockages that occur, especially in winter.				X						Blaine Township	Lower Herring Lake Association	LHLA Funds and Staff	Ongoing	Med	X		X	
	35	Complete road infrastructure maintenance and improvements in areas of high flooding potential, such as upgrading aging stormwater abatement structures, or replacing undersized/aging culverts and bridges to improve river function and high volume streamflow.				X	X					Countywide	BCRC, MDOT, City, Villages, Townships		As needed	High		X	X	
	35a	M-22 / Platte River Bridge				X						Lake Twp.	MDOT		As needed	High		X		
	35b	M-22 / Betsie Lake - historical high water/flooding in 2020 at the M-22 causeway and Betsie Valley Trail. (Per Gilmore Twp.: there is concern of the soundness of the steel wall along Betsie Lake in Elberta. Concern of vehicles reportedly buried in the area.) (Per Village of Elberta: an open-top hopper railcar is reportedly buried on the Willoughby Auto Property close to the Betsie Valley Trail parking lot on Lake Street; apparently the upper hatch is above ground).				X						Village of Elberta/ City of Frankfort	MDOT		As needed	High		X		
	35c	US 31 (Honor Hwy) South Street Bridge at the edge of the Village of Honor and Homestead Township				X						Village of Honor / Homestead Twp.	MDOT		As needed	High		X		
	35d	Betsie River and Crystal Lake Outlet Flood Zone around M-115 and Molineaux Rd.				X						Crystal Lake Township	BCRC, Crystal Lake Twp.		As needed	High		X		
	35e	Beach erosion and road washouts on south side of Crystal Lake, at the end of Figg and Bellows Road; culvert/possible road washout at Thomas Rd., east of Bellows Rd.				X						Crystal Lake Township	Crystal Lake Twp.		As needed	High		X		
	35f	Lower Herring Lake flooding due to high Lake MI water levels in 2020, flooding yards/septic fields of homes along the lake and Herring Creek flooding near Buena Rd. Continue to impose temporary "no wake" zones on the lake when needed.				X						Blaine Township	Blaine Twp.		As needed	High		X		
	35g	Pinewoods Subdivision off of Lake Ann Road has regular flooding due to high ground water table.				X						Almira Township	Almira Township		As needed	High		X		
	35h	Dirt road washouts on hilly roads, such as Weldon & Brownell; Valley Rd, N. of US 31				X						Homestead Township	BCRC		As needed	High		X		
	35i	Haze Road over the Platte River is due for rehabilitation of superstructure.				X						Homestead Township	BCRC		As needed	High		X		
	35j	US 31 (Honor Hwy) over Platte River				X						Village of Honor / Homestead Twp.	MDOT		As needed	High		X		
	35k	Platte River ice dams impact developed areas in Benzonia Township and Homestead Twp.				X						Benzonia Twp. / Homestead Twp.	Benzonia Twp. / Homestead Twp., MDNR		As needed	High		X		
	35l	Dirt road washouts on north side of Crystal Lake on Hidden Hollow Drive and south side of Crystal Lake on Lake St. due to straight downward slopes. Washouts end up in ditches on trailways and in the lake. Install "green" stormwater management infrastructure.				X						Benzonia Township	BCRC		As needed	High		X	X	

		BENZIE COUNTY HAZARD MITIGATION STRATEGIES	HAZARD TYPE								WHERE - Affected Locations or Groups	WHO - Responsible Parties	HOW - Resources	WHEN - Timeframe (Years)	PRIORITY TYPE (High, Med, or Low)	STRATEGY TYPE				
			Severe Winter Weather	T-Storm, High Winds, Hail, Tornado, Lightning	Wildfire	Inland Flooding and Erosion	Coastal Hazards: Flooding, Erosion, Rip Current, Seiche	Extreme Temperatures	Drought	Invasive Species						Public Health Emergency	1	2	3	4
Buildings, Roads & Dams	35m	High water table could impact businesses/multi-unit housing along US-31 between Narrow Gauge /East Road and on the north side of US-31 toward Crystal Drive. Install "green" stormwater management infrastructure.				X						Village of Beulah	Village of Beulah		As needed	High		X	X	
	35n	Occasional high water/flooding along the North Branch Platte River and Gudemoos Road and along the north end of Little Platte Lake & Saffron Rd.				X						Platte Township	BCRC		As needed	High		X		
	35o	Regular seasonal flooding issues with spring runoff/high ground water table along Betsie Valley Trail and other areas north of Main/Lindy Road. There is a culvert blocked under the railroad bed that holds the water back, causing flooding on roadways and possibly at the location of the new Dollar General store. This issue originates from a natural drain that runs into Thompsonville from Thurman Road in Colfax Twp. There are also seasonal water issues across Deer Track Trail toward the Betsie River with spring thaw/runoff and a high water table.				X						Village of Thompsonville; Colfax Twp.	BCRC; Village of Thompsonville		As needed	High		X		
	35p	Ice backups from Betsie River at road crossings at Wallin Rd., Thompsonville Highway, and at road crossings north of Lindy Road.				X						Colfax Twp., Village of Thompsonville, Weldon Twp.	BCRC; Village of Thompsonville		As needed	High		X		
	35q	Fewins Road over the Platte River is due for rehabilitation of superstructure and embankments.				X						Inland Township	BCRC		As needed	High		X		
	35r	The CR-669 (Maple City Highway) double culvert over the Platte River will need a complete replacement in 10-15 years.				X						Inland Township	BCRC		As needed	High		X		
	35s	The Lindy Road bridge over the Betsie River, just west of Haze Road in Weldon Township, is currently the most susceptible to failure and is due for replacement. The BCRC is pursuing funding for bridge rehabilitation.				X						Weldon Township	BCRC		As needed	High		X		
	35t	The Haze Road bridge over the Betsie River in Weldon Township has been removed and will be permanently closed with abutments removed, as part of BCRC's most recent Bridge Bundling program funds.				X						Weldon Township	BCRC		As needed	Low		X		
	35u	Reynolds Road bridge north of Wallin Rd. at Betsie River xing in Colfax Twp. is scheduled to be rebuilt as part of the BCRC's most recent Bridge Bundling program funds.				X						Colfax Township	BCRC		As needed	High		X		
	35v	Nostwick Rd. bridge crossing of Betsie River in Colfax Twp. is due for repair/replacement or re-route around crossing.				X						Colfax Township	BCRC		As needed	High		X		
	35w	Gorivan Road, located south of Heron/Mick Roads, floods sometimes along the east side of Upper Herring Lake. BCRC may choose to elevate the road with a few feet of fill from another ongoing road project. A complete rebuild of the road would require substantial funds.				X						Blaine Township	BCRC		As needed	High		X		
	36	Continue to regularly clean out plugged culverts (due to sediment deposits, beaver activity, invasive species, etc.)	X	X		X	X			X		Countywide	RC, MDOT, local villages		As needed	High	X		X	

Utilities & Technology

		BENZIE COUNTY HAZARD MITIGATION STRATEGIES	HAZARD TYPE								WHERE - Affected Locations or Groups	WHO - Responsible Parties	HOW - Resources	WHEN - Timeframe (Years)	PRIORITY TYPE (High, Med, or Low)	STRATEGY TYPE				
			Severe Winter Weather	T-Storm, High Winds, Hail, Tornado, Lightning	Wildfire	Inland Flooding and Erosion	Coastal Hazards: Flooding, Erosion, Rip Current, Seiche	Extreme Temperatures	Drought	Invasive Species						Public Health Emergency	1	2	3	4
Utilities & Technology	37	Continue work amongst the utility companies (Cherryland Electric, Consumers E.) to clear vegetation (particularly diseased or dead trees) along various road and utility right-of-ways to minimize power outages and road blockages from storm damage.	X	X		X	X			X		Countywide; Downed trees specifically noted as an issue along N. Pioneer Rd., south of Goose Rd. in Homestead Twp.	RC, MDOT, local fire, utility companies		Ongoing	High	X		X	
	38	Continue to maintain effective communications practices between electric utility companies regarding power restoration. (County EM to post and promote the electrical outage map on social media account.)	X	X	X	X		X				Countywide	Consumers Energy or Cherryland Electric; Benzie County EM		Ongoing	High				X
	39	Promote opportunities to bury overhead utilities, such as during new construction or in areas regularly prone to power outages.	X	X	X			X				Countywide	Consumers Energy or Cherryland Electric; Benzie County Building Dept.		As needed	Low	X	X		
	40	Document occurrences of electrical interruptions during storms and collaborate with electric companies to improve the resiliency of the infrastructure in these areas.	X	X	X	X		X				Countywide	Citizen volunteers, Consumers Energy or Great Lakes Energy		As needed	High	X			X
	41	Continue to maintain community water and/or sewer infrastructure at acceptable operating standards.				X					X	City of Frankfort, Village of Elberta, Village of Beulah, Village of Honor, Village of Thompsonville, Village of Benzonia	City of Frankfort, Village of Elberta, Village of Beulah, Village of Honor, Village of Thompsonville, Village of Benzonia		Ongoing	High	X		X	
	41a	Complete the major infrastructure projects (starting in the Spring of 2023) for the Village of Elberta: Replacing most of the service lines going into each home, replacing all of the circa 1935 water mains, and construction of a new well.				X					X	Village of Elberta	Village of Elberta	Village Funds	1-2 years	High		X		
	41b	Per the Village of Elberta 2017 Master Plan, plan for Village water, sewer and storm water drainage facilities to provide sufficient capacities needed to accommodate long-term needs.				X					X	Village of Elberta	Village of Elberta	Village Funds	Ongoing	High	X	X	X	
	41c	Install check valves on stormwater discharge locations in the City of Frankfort.				X					X	City of Frankfort	City of Frankfort	City funds	0-5 years	High		X	X	
	41d	Separate storm and sanitary sewer systems where applicable.	X	X		X	X				X	City of Frankfort, Village of Elberta, Village of Beulah, Village of Honor	City of Frankfort, Village of Elberta, Village of Beulah, Village of Honor	City or Village Funds; FEMA BRIC	As Needed	High	X	X	X	
	41e	Identify the locations of where backup generators on wastewater pump chambers are needed to alleviate manual pumping/hauling in the event of a power outage, and apply for funding.	X	X		X	X				X	City of Frankfort, Village of Beulah, Village of Honor, Village of Thompsonville, Village of Benzonia	City of Frankfort, Village of Beulah, Village of Honor, Village of Thompsonville, Village of Benzonia	City or Village Funds; FEMA BRIC	As needed	High		X		
41f	Continue to maintain the Village of Elberta's mobile back-up generator for use at the three water wells in case of a power outage, as well as a stationary generators at Well #1 and at the main Sanitary Sewer Lift Station on Lake St./M22.	X	X		X					X	Village of Elberta	Village of Elberta	Village Funds	Ongoing	High					
42	Per the 2010 Village of Lake Ann Master Plan, Develop a stormwater management ordinance that requires stormwater BMPs including: -- Eliminate direct stormwater discharge from village sewers & roads -- Daylight village and road sewer pipe wherever possible -- Install filter strips and other BMPs to filter discharges of contaminated runoff from roadway and village stormwater systems -- Promote the use of rain gardens, rain barrels, cisterns or other stormwater collection devices. -- Develop riparian setbacks standards -- Set impervious surface limits for new development • Work with Benzie County and MDNR to develop residential septic system inspection and monitoring, assess groundwater conditions and develop water demand projections. • Conduct a study to evaluate the long-term impact of residential septic systems on water quality and conduct a cost-benefit analysis of constructing a sanitary sewer system.				X					X	Village of Lake Ann	Village of Lake Ann		Ongoing	Low	X	X	X		

Benzie County Hazard Mitigation Strategies Page 7 of 11

		BENZIE COUNTY HAZARD MITIGATION STRATEGIES	HAZARD TYPE									WHERE - Affected Locations or Groups	WHO - Responsible Parties	HOW - Resources	WHEN - Timeframe (Years)	PRIORITY TYPE (High, Med, or Low)	STRATEGY TYPE			
			Severe Winter Weather	T-Storm, High Winds, Hail, Tornado, Lightning	Wildfire	Inland Flooding and Erosion	Coastal Hazards: Flooding, Erosion, Rip Current, Seiche	Extreme Temperatures	Drought	Invasive Species	Public Health Emergency						1	2	3	4
Utilities & Technology	43	Per the 2020 Village of Benzonia Master Plan, continue to explore options to provide a sewer system, even if it is an alternative or unconventional arrangement.				X					X	Village of Benzonia	Village of Benzonia		Ongoing	Med		X	X	
	43a	Continue evaluation of expanding the water/sewer service to out from the Village of Beulah to the Village of Benzonia and Benzonia Township, in an effort to mitigate ongoing issues with a high groundwater table affecting septic systems and water quality in the area.				X					X	Village of Beulah, Village of Benzonia, Benzonia Township	Village of Beulah, Village of Benzonia, Benzonia Township		As needed	Med	X	X	X	
	44	Per the 2020 Inland Twp. Master Plan, encourage development of sewer and/or water systems necessary to prevent pollution of the township's water resources.				X					X	Inland Township	Inland Township		0-7 Years	Low		X	X	
	45	Pursue the following strategies within the 2020 Weldon Township Master Plan as ways to mitigate issues with a high groundwater table/inland flooding: Continue to study the manner and cost of providing for public services; Examine ways in which Colfax Township, the Village and the Township could cooperate in providing for specific public services				X					X	Weldon Township	Weldon Township		Ongoing/ 5+ Years	Med		X	X	
	46	Update and maintain Continuity of Operations (COOP) plans and alternative "remote work" schedules.									X	County Government and Local Government Agencies; Public Schools	County Government and Local Government Agencies; Public Schools		Ongoing	High	X			
	47	Continue to expand the availability of high-speed internet service to allow for widely available remote work/learning.									X	Countywide	Local service providers; Connected Nation MI		Ongoing	High	X	X		X
Environment & Natural Resources	48	Continue to monitor, treat and remove aquatic and terrestrial invasive species.								X		Countywide			Ongoing	Med				
	48a	Investigate alternative, effective and less expensive invasive species control measures, such as livestock grazing.								X		Countywide	NWMISN, MSUE, NRCS		Ongoing	Med			X	X
	48b	Continue to utilize and implement the National Park Services' Great Lakes Invasive Plant Management Plan/Environmental Assessment for the Sleeping Bear Dunes National Lake Shore, which identifies strategies for park staff to manage terrestrial and emergent wetland invasive plants.									X	Lake Twp., Platte Twp.	NPS		Ongoing	Med	X		X	
	48c	Continue and improve collaboration regarding technical assistance, outreach and education about aquatic and terrestrial invasive species management.									X	Countywide	Grand Traverse Land Conservancy, NW MI Invasive Species Network, NRCS, MSUE, MNDR, NPS and/or lake & watershed associations		Ongoing	Med			X	X
	48d	Continue participation in EGLE's annual Great Lakes Aquatic Invasive Species "Landing Blitz" event at public boat launches, emphasizing the need to Clean, Drain, Dry boats whenever they come out of the water, and Dispose of any unwanted bait in the trash.									X	Countywide			Ongoing	Med			X	X
	48e	Promote MSUE's "Clean Boats, Clean Waters" comprehensive aquatic invasive species boater outreach program; apply for grant funding to communicate aquatic invasive species prevention information through outreach materials and in-person educational events to boaters.									X	Countywide			Annually	Med	X		X	X
	48f	Continue to promote EGLE's "NotMISpecies" webinars and resources on invasives control and management									X	Countywide			Ongoing	Med			X	X
48g	Consider installing permanent boat wash stations and boot wash stations at lake access points and trail access points, respectively									X	Countywide			As needed	Med		X	X	X	

Environment & Natural Resources

		BENZIE COUNTY HAZARD MITIGATION STRATEGIES	HAZARD TYPE								WHERE - Affected Locations or Groups	WHO - Responsible Parties	HOW - Resources	WHEN - Timeframe (Years)	PRIORITY TYPE (High, Med, or Low)	STRATEGY TYPE				
			Severe Winter Weather	T-Storm, High Winds, Hail, Tornado, Lightning	Wildfire	Inland Flooding and Erosion	Coastal Hazards: Flooding, Erosion, Rip Current, Seiche	Extreme Temperatures	Drought	Invasive Species						Public Health Emergency	1	2	3	4
Environment & Natural Resources	48h	Continue operation of the boat washing facility that CLWA installed at the public DNR Crystal Lake Boating Access Site, off Mollineaux Road and M-115 on the southern shore of the lake.								X		Benzonia Township	Crystal Lake Watershed Association	CLWA budget; volunteers	Ongoing	Med			X	X
	48i	Maintain the existing boot cleaning station next to the informational sign at the parking lot trailhead for the Elberta Dunes South Natural Area off of M-22.								X		Village of Elberta	GTRLC, Village of Elberta	Village funds; GTRLC funds; volunteers	Ongoing	Med			X	X
	49	Consider adoption of local ordinances that regulate activities to prevent the introduction of or the contribution to the spread of invasive species, such as prohibiting the use of invasive species in landscaping and/or vegetative riparian buffers, and permit treatment of existing infestations.								X		Countywide	Benzie County; Local jurisdictions		As needed	Low	X		X	
	50	Continue enforcement of local ordinances requiring that watercraft be washed before launching into Crystal Lake if they have recently been operated in other bodies of water.								X		Village of Beulah; Townships of Crystal Lake, Benzonia and Lake	Village of Beulah; Townships of Crystal Lake, Benzonia and Lake	Authorized local ordinance enforcement officers	Ongoing	Med	X		X	
	51	Continue implementation of the Crystal Lake Township Zoning Ordinance - ARTICLE XXII Environmental Provisions - which to identifies and protects those areas of the Township that are considered to be environmentally sensitive to development, improvement, or any alteration of land use.				X				X		Crystal Lake Township	Crystal Lake Township	Authorized local ordinance enforcement officers	Ongoing	Med	X		X	
	52	Continue enforcement of the Crystal Lake Watershed Overlay District zoning ordinance, applicable to the Village of Beulah, Benzonia Township, Crystal Lake Township and Lake Township. From 2019 to 2021 the CLWA Land Use committee reviewed the CLWOD ordinances to determine whether updates were needed to meet 21st century needs for preserving and protecting the unique Crystal Lake environment. Their recommendations were amended to the original ordinance in Crystal Lake Township in 2021; other CLWA communities are considering the updates as well. Key revisions include: submittal of a more developed site plan on any project within the watershed, especially on properties with steep slopes associated with them; issuance of a special land use permit for development on any property with a 18% slope grade; restrictions and requirements on the amount of non-permeable surfaces that can be installed, water discharge and tree management and landscaping; a limit on the number of trees and size of trees homeowners can remove without permits; a required 35 foot vegetative buffer between the lake and a property; and accessory buildings cannot be built within 35 feet of the ordinary high water mark				X				X		Village of Beulah, Benzonia Township, Crystal Lake Township, Lake Twp.	Village of Beulah, Benzonia Township, Crystal Lake Township, Lake Twp.	Authorized local ordinance enforcement officers	Ongoing	Med	X		X	
	53	Per p. 63 of the 2018 Village of Elberta Master Plan, consider zoning or other policies to regulate activities contributing to the spread of invasive species; educate landowners and developers on the importance of environmental conservation practice, such as low impact development, removal of invasive species, and conservation easements that contribute to preservation of natural systems; consider a community-engagement/volunteer-driven approach to invasive species removal.				X	X			X		Village of Elberta	Village of Elberta	Village operating funds	Ongoing	Med	X		X	X
	54	Per p.74 of the 2020 Village of Benzonia Master Plan, include a requirement for sustainable design and low impact development (LID) practices in the zoning ordinance and/or design standards. Include but not limited to; innovative stormwater techniques, green roofs, pervious pavements, native landscaping and preservation of existing trees.				X		X		X		Village of Benzonia	Village of Benzonia	Village operating funds	Ongoing	Med	X	X	X	

		BENZIE COUNTY HAZARD MITIGATION STRATEGIES	HAZARD TYPE									WHERE - Affected Locations or Groups	WHO - Responsible Parties	HOW - Resources	WHEN - Timeframe (Years)	PRIORITY TYPE (High, Med, or Low)	STRATEGY TYPE			
			Severe Winter Weather	T-Storm, High Winds, Hail, Tornado, Lightning	Wildfire	Inland Flooding and Erosion	Coastal Hazards: Flooding, Erosion, Rip Current, Seiche	Extreme Temperatures	Drought	Invasive Species	Public Health Emergency						1	2	3	4
Environment & Natural Resources	55	Per the Village of Elberta 2018 Master Plan, consider zoning changes that: establish minimum setbacks from and vegetative buffers around water bodies; minimize impervious surface coverage in new development; encourage or require innovative stormwater management systems that incorporate low-impact development features in order to minimize runoff and preserve water quality. Also consider the development and implementation of groundwater wellhead protection plans.				X						Village of Elberta	Village of Elberta	Village operating funds	Ongoing	Med	X	X	X	
	56	Per page 62 of the 2020 Weldon Township Master Plan: Encourage the use of pervious pavement where appropriate as a way to explore new opportunities to utilize alternative technologies				X						Weldon Township	Weldon Township	Township operating funds	Ongoing	Med		X	X	
	57	Per page E-17 of the Gilmore Twp. 2014 Master Plan, clean, dredge and remove invasives from the Betsie Bay.							X			Gilmore Township	Gilmore Township		Ongoing	Med			X	
	58	Continue to identify and prioritize sites for open space protection/preservation, green infrastructure and/or stormwater management, especially in areas prone to flooding or erosion.				X	X	X		X		Countywide	Benzie County; Local jurisdictions; Crystal Lake & Watershed Association, Grand Traverse Regional Land Conservancy, and the Benzie Conservation District.		Ongoing	Med	X		X	
	59	Per the 2021 City of Frankfort Master Plan, enhance the City's green infrastructure (which will help mitigate the urban "heat island" effect): • Utilize and maintain the list of appropriate street trees for planting on all public streets • Develop and implement maintenance standards and forestry procedures to ensure the long-term health of the City's street trees and provide these standards as information for residents to provide guidance for proper tree maintenance and optimal tree health • Work with residents, foundations, and other non-profit or funding agencies to create an endowed street tree fund, the sole purpose of which is to plant and maintain a full network of street trees throughout the City • Continue maintenance of a municipal tree nursery and maintain it in conjunction with local community partners to periodically provide nursery stock for the City				X		X				City of Frankfort	City of Frankfort		0-8 years	Med	X	X	X	X
	60	Per the 2021 City of Frankfort Master Plan, work with MSUE to encourage native landscaping, rain gardens and creation of "backyard habitats" which will help enhance connections between larger natural areas; in parks and civic properties use rain gardens, rain barrels and overland drainage in lieu of underground stormwater drains where possible.				X		X				City of Frankfort	City of Frankfort		0-8 years	Med		X	X	X
	61	Per the 2021 City of Frankfort Master Plan, a steep slope ordinance has been developed. Future actions should include: • Generate, by drone, a topographical map of the city at a minimum of two foot contour lines and use this map to identify steep slope areas. • Identify and inventory wetlands and significant tree cover. • Develop BMPs to protect the long-term water quality of the Betsie River, Betsie Bay and Lake Michigan. • Implement Stormwater Assessment Management				X	X	X				City of Frankfort	City of Frankfort		0-8 years	Med	X	X	X	X
62	Per the Village of Benzonia's 2020 Master Plan's Implementation Program/Action Plan: • Include standards for green infrastructure in the revised zoning ordinance per RRC requirements. • Explore programs to provide incentives to developers for implementing green infrastructure standards (tax incentives, fee incentives, density bonuses, etc.)				X	X	X		X		Village of Benzonia	Village of Benzonia		0-3 years	Med	X	X	X		

		BENZIE COUNTY HAZARD MITIGATION STRATEGIES	HAZARD TYPE									WHERE - Affected Locations or Groups	WHO - Responsible Parties	HOW - Resources	WHEN - Timeframe (Years)	PRIORITY TYPE (High, Med, or Low)	STRATEGY TYPE			
			Severe Winter Weather	T-Storm, High Winds, Hail, Tornado, Lightning	Wildfire	Inland Flooding and Erosion	Coastal Hazards: Flooding, Erosion, Rip Current, Seiche	Extreme Temperatures	Drought	Invasive Species	Public Health Emergency						1	2	3	4
Environment & Natural Resources	63	Promote EGLE webinars to educate and inform lakeshore residents about what they can do to help protect their property value and the health of the lake on which they live by protecting, stabilizing and beautifying their shorelines with nature-based solutions.				X	X					Countywide	GTRLC, BCD		Ongoing	Med	X	X	X	
	64	Consider the development of a County Forestry Management Plan that outlines mitigation efforts for invasive species.	X	X	X	X	X	X	X	X		Countywide	BCD		0-5 years	Low	X		X	X
	65	Consider options to increase flood resilience and reduce infrastructure damage caused by ice jams to properties along the Platte River and the Betsie River: Identify human-made constrictions that can be upgraded or removed to improve the form and function of the river; Restore sections of the river that have lost their natural sediment transport capacity, ensuring that ample undeveloped floodplains are available to allow overflow of water and ice; and understand ice formation and transport in each river system.				X						Almira, Inland, Homestead, Benzonia, Platte Lake, Benzonia, Crystal Lake, Gilmore, Weldon and Colfax Townships; Villages of Honor and Elberta	Local Communities, MDNR, BCD, Watershed Groups		As needed	Low			X	
	66	Per the 2020 Inland Twp. Master Plan, develop flood and erosion controls to minimize flood damage and maintain water quality levels.				X						Inland Township	Inland Township		0-7 years	Med	X		X	
	67	Continue efforts to regularly clean up river and lake debris.				X	X					Countywide	River & Lake Associations, GTRLC, BCD, MDNR		Ongoing	Med			X	X

VII. Implementation

Hazard mitigation is any action taken before, during, or after a disaster to permanently eliminate or reduce the long-term risk to human life and property from hazards. Mitigation is an essential element of emergency management, along with preparedness, response, and recovery. Emergency management includes four phases: actions to mitigate a disaster, a community prepares for a disaster; responds when it occurs; and then there is a transition into the recovery process. The process is cyclical and mitigation measures are evaluated and adopted constantly. The evaluation improves the preparedness posture of the County for the next incident, and so on. When successful, mitigation will lessen the impacts of natural hazards to such a degree that succeeding incidents will remain incidents and not become disasters.

Plan Review, Monitoring, and Evaluation

This Plan is intended to be a resource for building coordination and cooperation within a community for local control of future mitigation and community preparedness. The County Board will lead the implementation of the Natural Hazards Mitigation Plan with assistance from the Emergency Services Coordinator and the Administration. The Benzie County Local Emergency Planning Committee (LEPC) is an inter-agency partnership and will collaborate to accomplish the goals and objectives of the Plan. The LEPC meets on a regular basis to carry out its duties and has expanded its role to function as the Natural Hazards Task Force. The Natural Hazards Task Force will be responsible for monitoring and implementing the mitigation plan. Staff support will be provided by the Benzie County Emergency Services Coordinator and will coordinate with the County Board of Commissioners.

The Natural Hazards Task Force will perform an annual review of the Benzie County Hazard Mitigation Plan and consider the list of mitigation strategies identified in the plan. The Task Force will identify projects that have been completed and identify new projects to be completed. The following agencies have been encouraged to actively participate in revising, updating, and maintaining the plan.

- Benzie County Government Staff
- City, Villages, and Township Government Staff
- Benzie Conservation District
- Benzie County Drain Commissioner
- Benzie County Road Commission
- Grand Traverse Band of Ottawa and Chippewa Indians
- Grand Traverse Regional Land Conservancy
- Grand Traverse Conservation District
- Northwest Michigan Invasive Species Network
- Networks Northwest
- Benzie-Leelanau District Health Department
- Michigan State University Extension
- Michigan Department of Environment, Great Lakes, and Energy
- Michigan Department of Natural Resources
- Michigan Department of Transportation
- National Park Service – Sleeping Bear Dunes National Lakeshore
- U.S. Coast Guard
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- U.S. Department of Agriculture - Natural Resources Conservation Service
- Insurance Companies
- Real Estate Companies

In addition, the local units of government in Benzie County have indicated to the county emergency manager that they will follow the county's lead in identifying mitigation projects and developing grant applications to fund those projects. Land use issues associated with those projects (where applicable) will be handled by each jurisdiction that have an adopted Master Plan and regulate zoning in the project area.

Community planning services are provided by the professional staff of each municipality within the county. The respective planners assist communities in developing plans and zoning ordinances, provides resource information and technical assistance, and convenes communities to address land use issues of common interest.

Building permits and soil erosion permits are issued by the Benzie County Building Department. Permits related to water well and septic systems are issued by the Benzie-Leelanau District Health Department.

Plan Integration

All local governments, state and federal agencies in Benzie County will consider integrating information from the hazard mitigation plan into their comprehensive and operations plans. All communities in Benzie County administer their own planning and zoning. As part of the education and outreach aspect of the hazard mitigation effort, the local units of government will be encouraged to adopt zoning regulations to minimize the effect of hazards.

All natural hazards mitigation planning could be pursued using Michigan Public Act 226 of 2003, the Joint Municipal Planning Act. This Act provides for joint land use planning by cities, villages, and townships, and allows two or more municipalities' legislative bodies to create a single joint planning commission to address planning issues. This tool helps with planning for the "big picture" issues such as natural hazards that cross jurisdictional boundaries.

The intent of this legislation is for local governments to consider the following:

- Individual units of government modifying their ordinances simultaneously to include language that would incorporate aspects of protection
- Developing an overlay zoning district that would cross jurisdictional boundaries which would be incorporated into existing independent units of government's zoning ordinances
- Forming a new joint (multi-jurisdictional) planning commission or zoning board
- Sharing zoning administration and enforcement activities

The following communities in Benzie County are partners in inter-governmental agreement that form Joint Planning Commissions with shared master plans and jointly administered zoning ordinances:

- The Village of Thompsonville and Colfax Township
- Benzonia and Platte Townships (The West Benzie Joint Planning Commission)
- Homestead and Inland Township

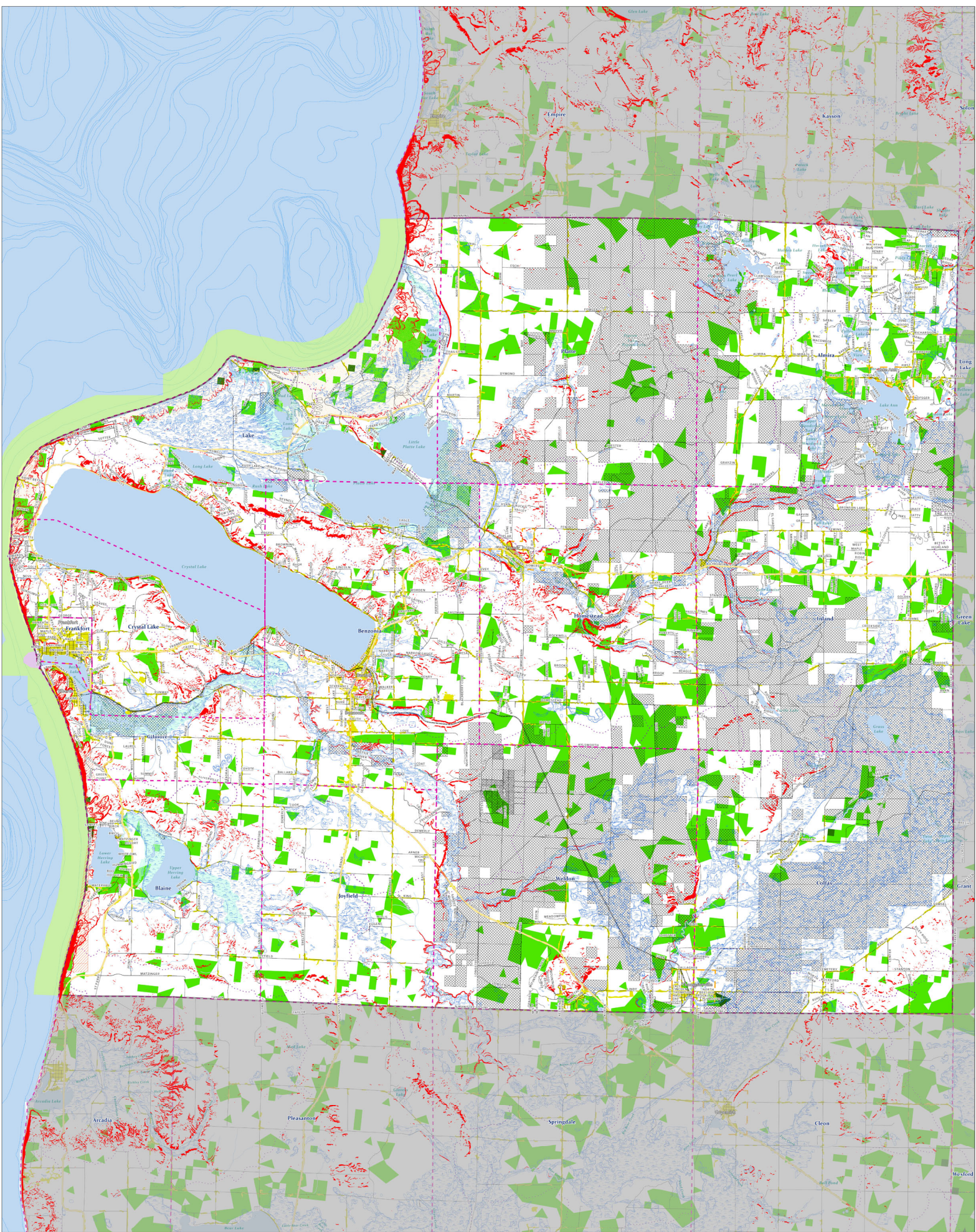
Five Year Plan Review and Update

The Stafford Act, as amended by the Disaster Mitigation Act of 2000, requires the Benzie County Hazard Mitigation Plan to be updated, adopted, and re-submitted for Federal Emergency Management Agency (FEMA) approval every five years. The plan will be reviewed by the Natural Hazards Task Force every five years in alignment with federal regulations. The update will include determining changes in the county, such as changes in development, an increase in exposure to hazards, an increase or decrease in the communities' capability to address hazards, addition and/or removal of mitigation actions and strategies, reviewing goals, and a change in federal or state legislation. Upon plan review and update completion, the plan will be sent to the State Hazard Mitigation Officer at the Michigan State Police for final review and approval in coordination with FEMA. When the plan has received an "approved pending adoption" status from FEMA, the Benzie County Board of Commissioners can review, approve, and adopt the plan, along with individual local units of government. In order to properly update the plan in the future, Benzie County will need to seek funding from appropriate state and/or federal agencies.

Continued Public Involvement

Benzie County is committed to keeping the public involved in the implementation and update of the Hazard Mitigation Plan. Copies of the plan will be available at the county libraries, county clerk's office, and all local government offices, and will be posted on the community websites and/or regional planning agency website. The Emergency Management Office will be responsible for keeping a record of public comments on the plan.

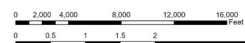
APPENDIX A: MAPS

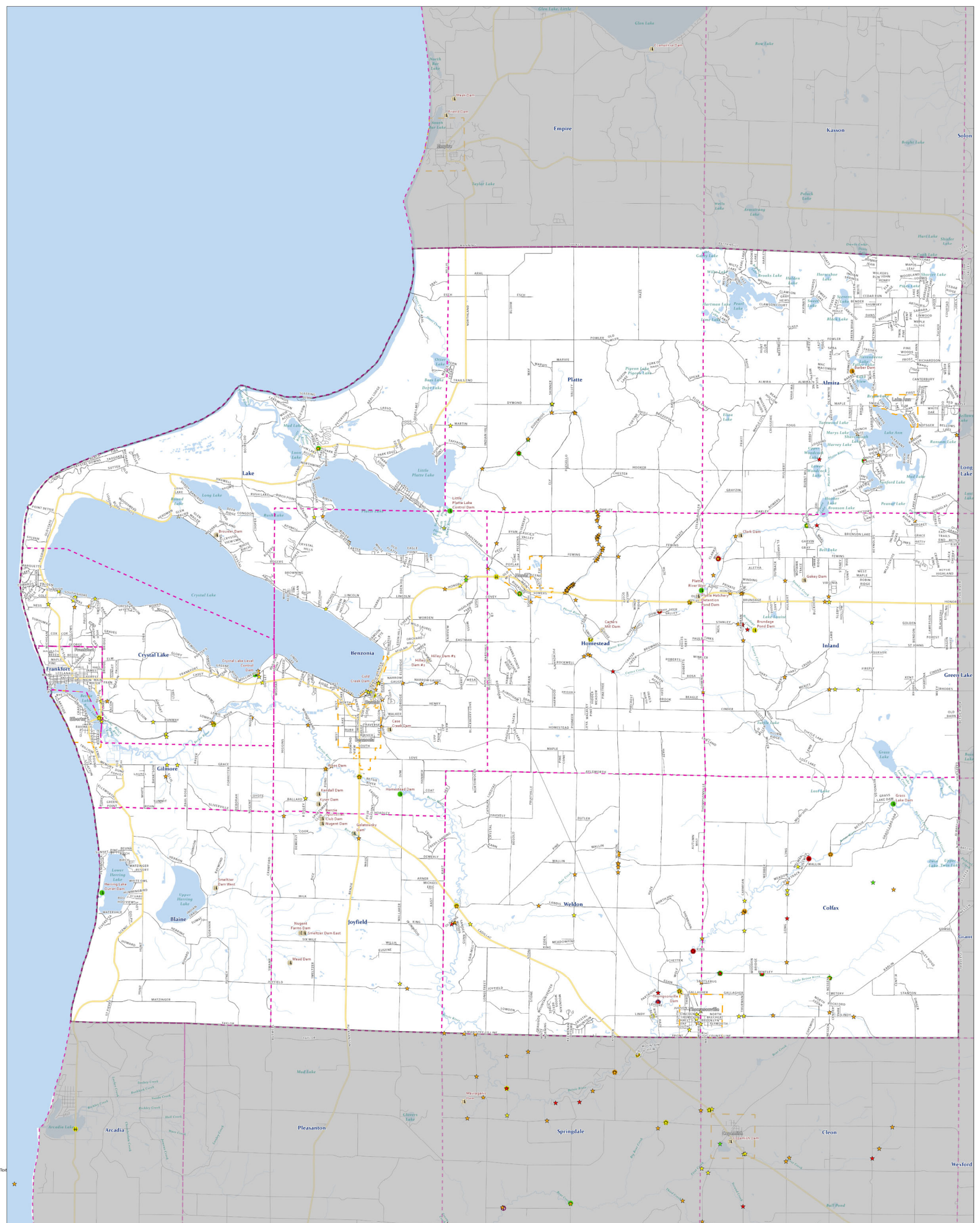


Benzie County **Environmental Features** 2023 Hazard Mitigation Plan

Legend

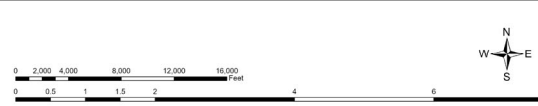
- | | | |
|---|---|--|
| <ul style="list-style-type: none"> Highways Roads Railroad Rivers/Streams Water Bodies Post 100 Wetlands Bathymetric Contours Intersect Boundary 12 Spot | <ul style="list-style-type: none"> High Risk Stream Critical Dams Stages 30% or Greater Flood Zone A AE VE | <ul style="list-style-type: none"> Developed Land Pine Forest Deciduous Forest Mixed Forest Water Land Village City County Benzie County Adjacent Counties |
|---|---|--|

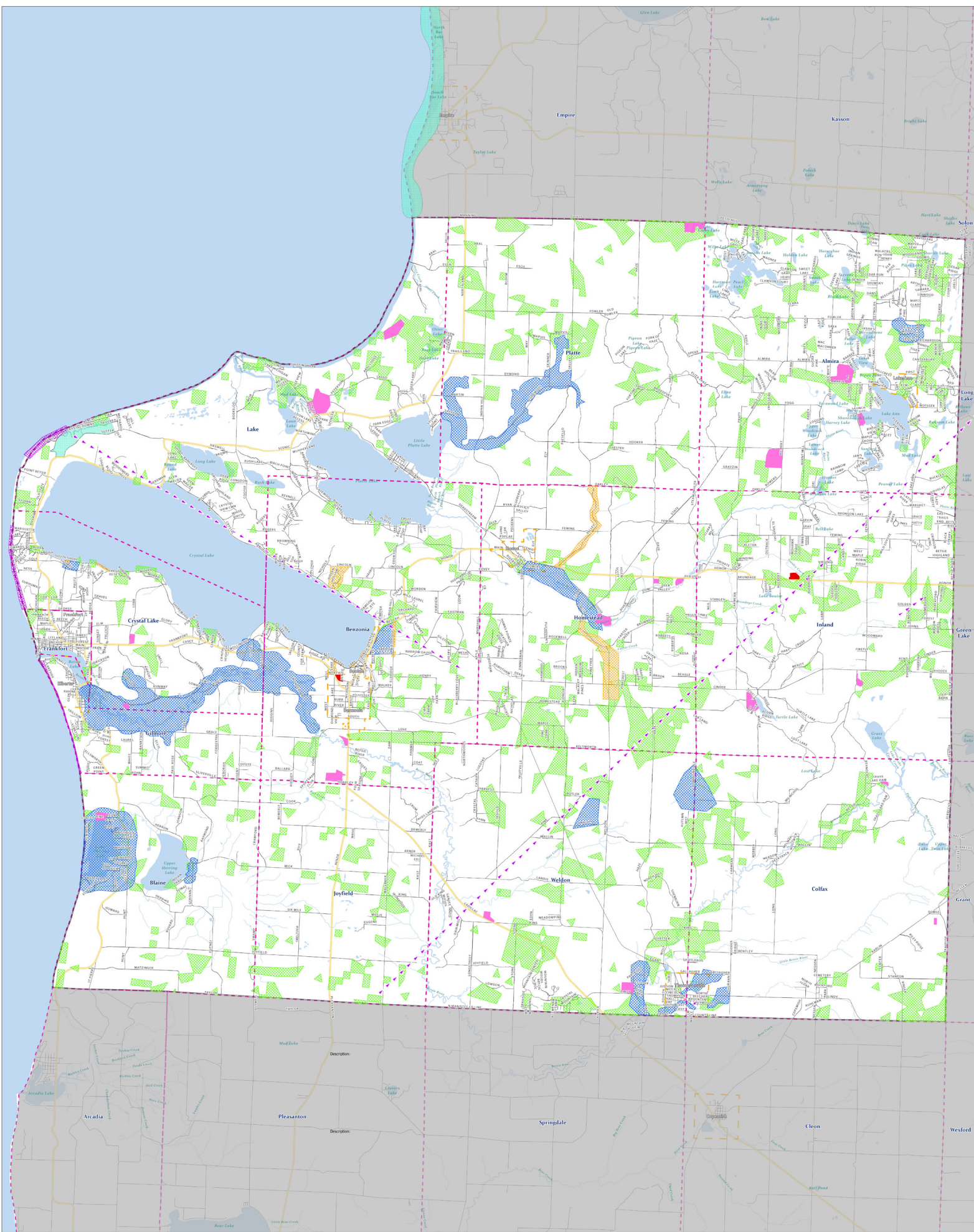




**Benzie County
Infrastructure**
2023 Hazard Mitigation Plan

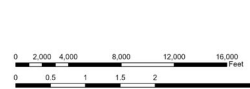
- Legend**
- Stream Crossings (CRA)**
- Severely
 - Restored
 - Minor
 - Moderate
 - Severe
 - Unknown
- Bridge Condition**
- Good
 - Fair
 - Poor
 - Serious
 - Critical
 - Closed
- MI Dam Inventory**
- Condition
 - Satisfactory
 - Fair
 - Poor
 - Unsatisfactory
 - Not Rated
- Other Symbols**
- Villages
 - Cities
 - County Boundaries
 - Benzie County
 - Adjacent Counties

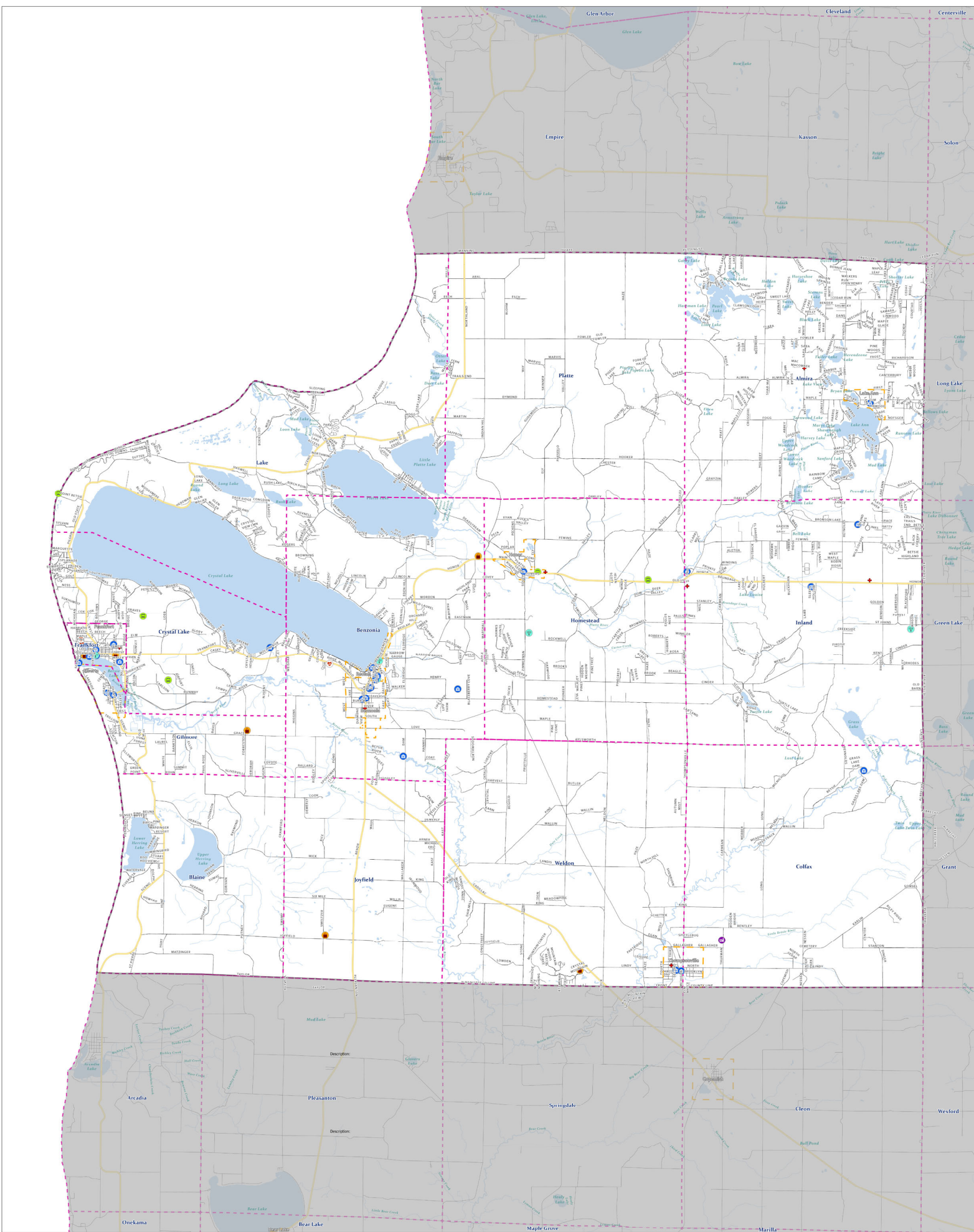


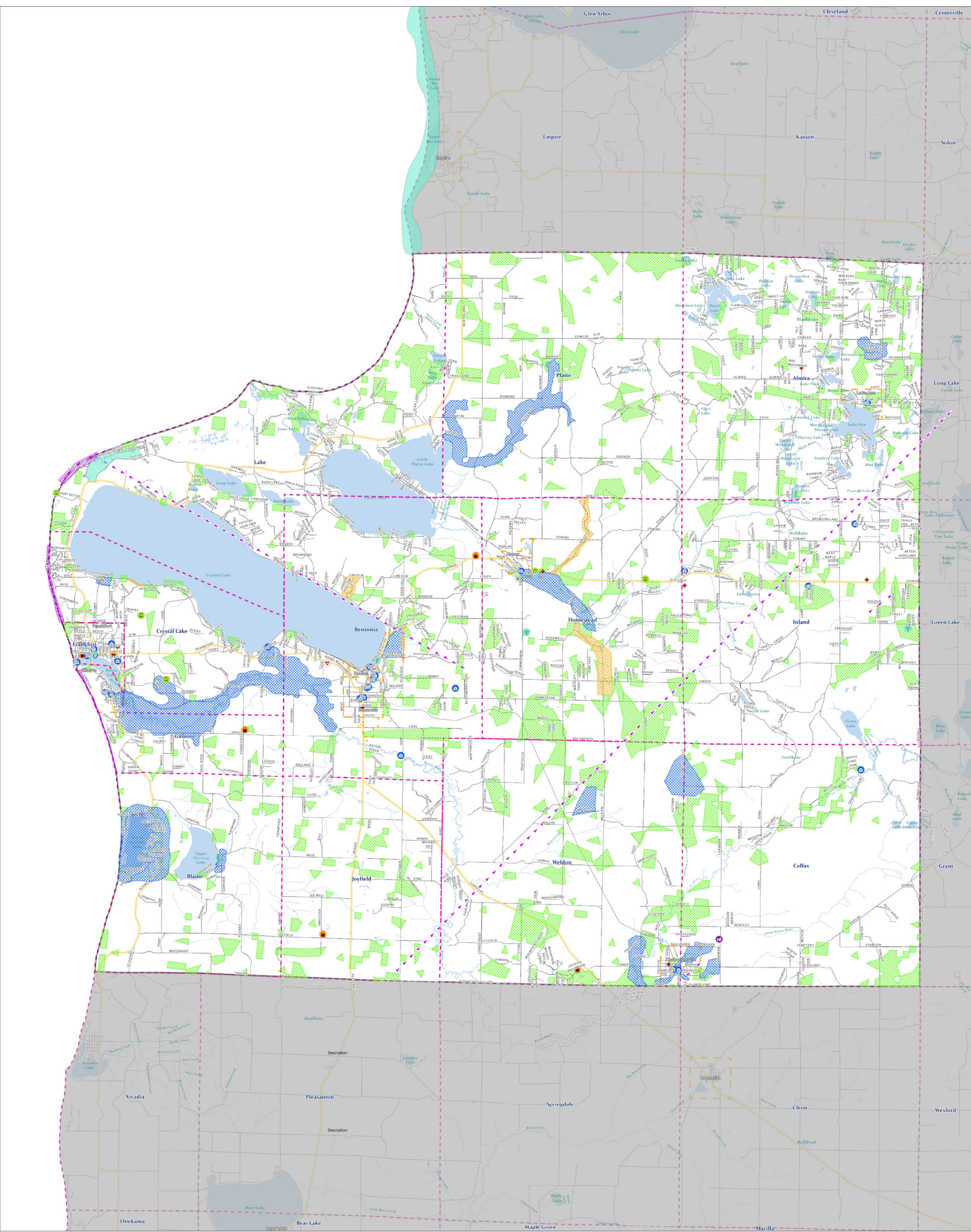


Benzie County **Vulnerable Populations** **& Hazard Areas** 2023 Hazard Mitigation Plan

Vulnerable Populations		Hazard Areas		Legend	
	House		Highway		Highway
	Campground		Road Washout		Roads
	Mobile Home		Shoreline Erosion		Water Bodies
			Pine Forest Hazard Area		Railroad
			Tornado Path		Benzie County
			Invasive Species		Adjacent Counties







APPENDIX B: COMMUNITY SURVEY RESULTS

Q1 Please indicate the organization you represent in Benzie County.

Answered: 44 Skipped: 0

#	RESPONSES	DATE
1	weldon township planning commission	1/6/2022 6:01 PM
2	Thompsonville Fire Department	12/11/2021 8:10 AM
3	Benzie County Central Dispatch	12/9/2021 12:43 AM
4	Homestead Township	12/4/2021 8:12 PM
5	Village of Beulah	12/2/2021 12:44 PM
6	Blaine Township	12/2/2021 11:07 AM
7	Weldon Township	12/2/2021 10:22 AM
8	Benzie County Sheriff's Office	12/2/2021 9:51 AM
9	Frankfort Police Department	12/2/2021 9:51 AM
10	City of Frankfort	12/2/2021 9:39 AM
11	Crystal Lake Township	12/2/2021 9:03 AM
12	Village of Beulah	11/5/2021 9:27 PM
13	American Red Cross Northern Michigan Chapter	11/1/2021 12:42 PM
14	Crystal Lake Township Planning Commission	10/28/2021 7:51 AM
15	Grand Traverse Band	10/25/2021 2:22 PM
16	Almira Township	10/25/2021 10:56 AM
17	Blaine Township	10/25/2021 10:18 AM
18	GTB MEMBER	10/22/2021 1:35 PM
19	EMS	10/22/2021 10:58 AM
20	Benzie County Office of Emergency Management	10/21/2021 1:31 PM
21	Homestead Township Fire Department	10/18/2021 1:32 PM
22	Benzie Conservation District	10/18/2021 9:37 AM
23	Village of Elberta	10/12/2021 4:52 PM
24	lake ann village	10/8/2021 11:46 AM
25	Benzie County Commissioners	10/8/2021 9:16 AM
26	Blaine Township	10/6/2021 10:49 AM
27	Benzie county	10/5/2021 3:52 PM
28	Inland Township	10/5/2021 2:44 PM
29	Inland Township	10/5/2021 1:35 PM
30	Benzonia Township	10/5/2021 12:55 PM
31	Crystal Lake Township	10/5/2021 12:31 PM
32	Benzie County Road Commission	10/5/2021 12:11 PM
33	Village of Beulah	10/5/2021 11:29 AM

Benzie County Hazard Mitigation Community Survey

34	Weldon Township	10/5/2021 11:20 AM
35	village gov.	10/5/2021 11:03 AM
36	Paul Oliver Memorial Hospital	10/4/2021 4:31 PM
37	Almira Township	10/4/2021 3:00 PM
38	Homestead township trustee	10/4/2021 1:25 PM
39	Homestead Township	10/4/2021 12:38 PM
40	Lake Township	10/4/2021 11:28 AM
41	Blaine Township	10/4/2021 11:08 AM
42	Benzie County Sheriff' Office	10/4/2021 10:38 AM
43	MSP Cadillac Post	10/4/2021 10:30 AM
44	Crystal Lake Twp Planning Commission	10/4/2021 10:16 AM

Q2 What is your role in this organization?

Answered: 44 Skipped: 0

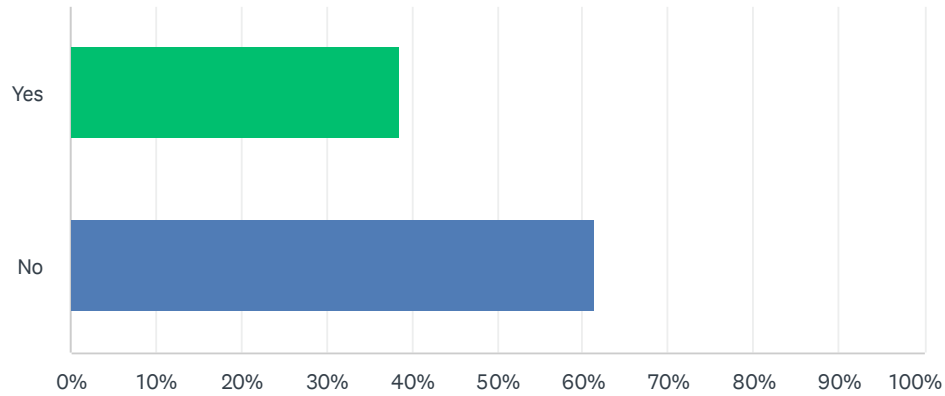
#	RESPONSES	DATE
1	chairperson	1/6/2022 6:01 PM
2	Fire Chief	12/11/2021 8:10 AM
3	Deputy Directory / ECS Supervisor	12/9/2021 12:43 AM
4	Supervisor	12/4/2021 8:12 PM
5	Trustee on the village council, chair of village Parks and Recreation.	12/2/2021 12:44 PM
6	Clerk	12/2/2021 11:07 AM
7	Township Clerk	12/2/2021 10:22 AM
8	Undersheriff	12/2/2021 9:51 AM
9	Chief of Police	12/2/2021 9:51 AM
10	City Superintendent (Chief Administrative Officer)	12/2/2021 9:39 AM
11	Supervisor	12/2/2021 9:03 AM
12	Trustee and Chair, Law & Finance	11/5/2021 9:27 PM
13	Disaster Program Manager	11/1/2021 12:42 PM
14	Commissioner	10/28/2021 7:51 AM
15	Emergency Manager and Public Safety	10/25/2021 2:22 PM
16	Township Clerk	10/25/2021 10:56 AM
17	Clerk	10/25/2021 10:18 AM
18	Tribal Member	10/22/2021 1:35 PM
19	Director	10/22/2021 10:58 AM
20	Emergency Management Coordinator	10/21/2021 1:31 PM
21	Fire Chief	10/18/2021 1:32 PM
22	Executive Director	10/18/2021 9:37 AM
23	Village President	10/12/2021 4:52 PM
24	village president	10/8/2021 11:46 AM
25	elected official District 2	10/8/2021 9:16 AM
26	Supervisor	10/6/2021 10:49 AM
27	Commissioner District 7	10/5/2021 3:52 PM
28	Township Supervisor	10/5/2021 2:44 PM
29	Treasurer	10/5/2021 1:35 PM
30	Supervisor	10/5/2021 12:55 PM
31	Treasurer	10/5/2021 12:31 PM
32	Manager	10/5/2021 12:11 PM
33	Trustee, chair of village Parks and Recreation	10/5/2021 11:29 AM

Benzie County Hazard Mitigation Community Survey

34	Treasurer	10/5/2021 11:20 AM
35	trustee	10/5/2021 11:03 AM
36	Manager - Safety, Security and Emergency Management	10/4/2021 4:31 PM
37	Zoning Administrator	10/4/2021 3:00 PM
38	Trustee	10/4/2021 1:25 PM
39	Treasurer	10/4/2021 12:38 PM
40	Supervisor	10/4/2021 11:28 AM
41	Trustee and planning commission	10/4/2021 11:08 AM
42	I am the elected Sheriff	10/4/2021 10:38 AM
43	Assistant Post Commander	10/4/2021 10:30 AM
44	PC Chair	10/4/2021 10:16 AM

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

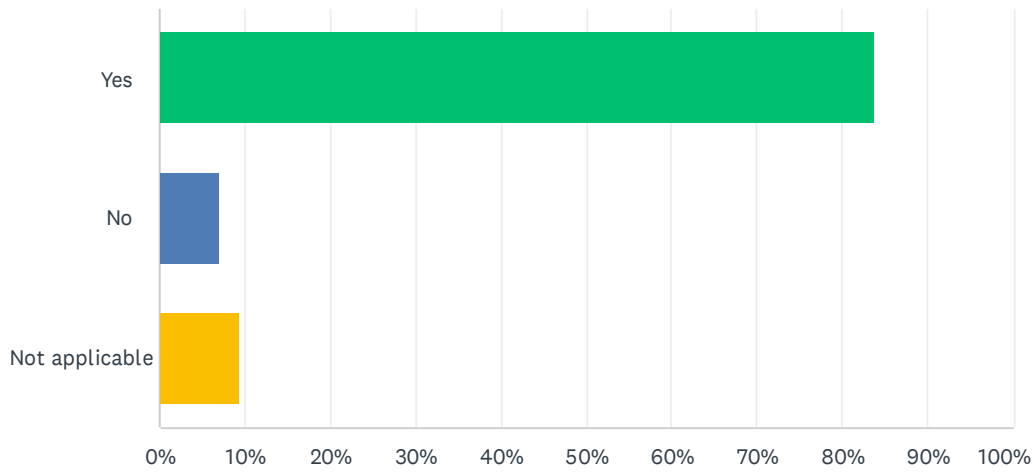
Answered: 44 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	38.64%	17
No	61.36%	27
TOTAL		44

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

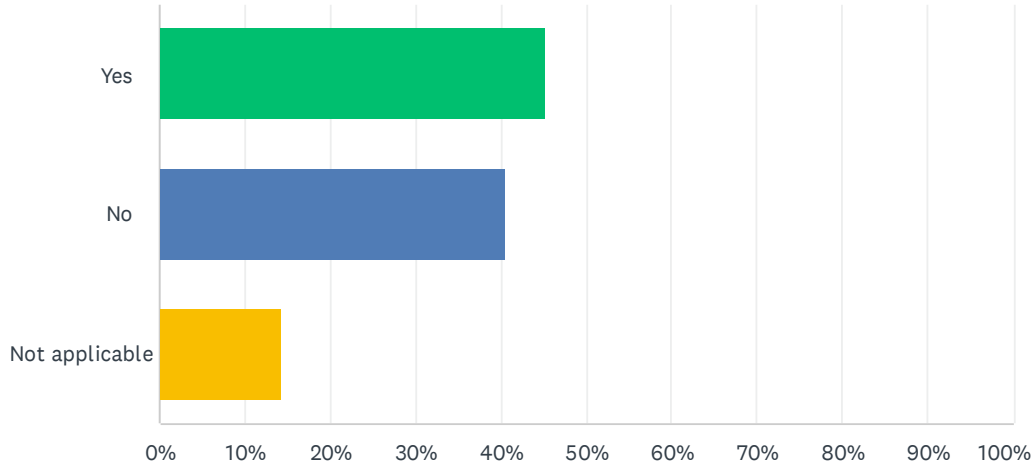
Answered: 43 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	83.72%	36
No	6.98%	3
Not applicable	9.30%	4
TOTAL		43

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

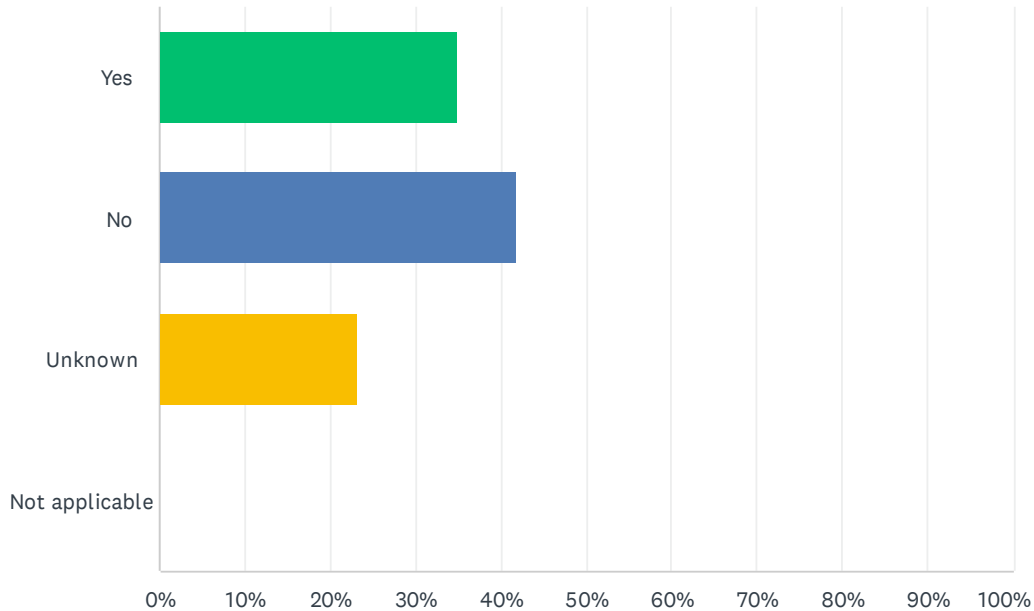
Answered: 42 Skipped: 2



ANSWER CHOICES	RESPONSES	
Yes	45.24%	19
No	40.48%	17
Not applicable	14.29%	6
TOTAL		42

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

Answered: 43 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	34.88%	15
No	41.86%	18
Unknown	23.26%	10
Not applicable	0.00%	0
TOTAL		43

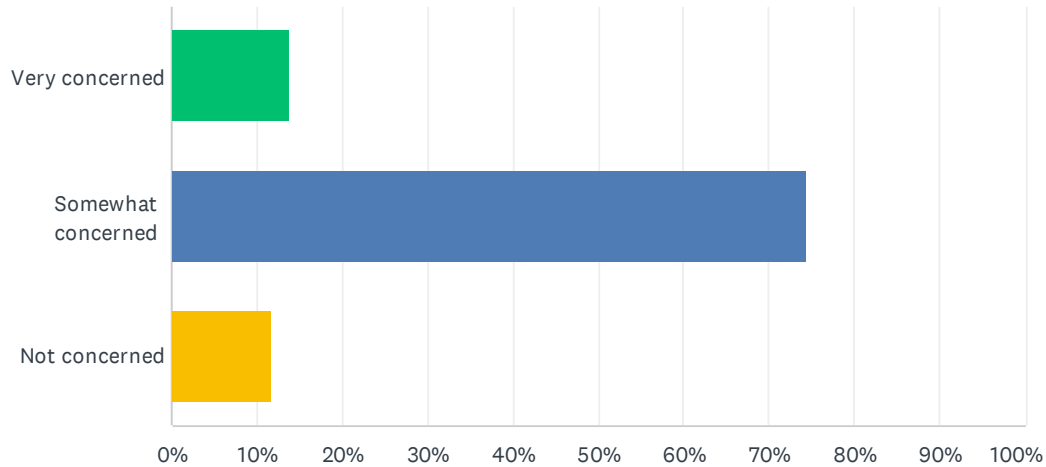
Q7 If so, what was the nature of the event?

Answered: 29 Skipped: 15

#	RESPONSES	DATE
1	Snowmaggodon of 2012. Straight line winds of August 2, 2016. There have been other various weather incidents since, but those are the two major ones that come to mind.	12/9/2021 12:43 AM
2	Much flooding and loss of shoreline along shores of Lower Herring lake.	12/2/2021 11:07 AM
3	None	12/2/2021 10:22 AM
4	Lakeshore erosion	12/2/2021 9:51 AM
5	None	12/2/2021 9:51 AM
6	Snow and wind storms causing significant tree damage. Flooding brought on by high water and groundwater.	12/2/2021 9:39 AM
7	unknown	11/1/2021 12:42 PM
8	Na	10/28/2021 7:51 AM
9	Snow storm 2012.	10/25/2021 2:22 PM
10	N/A	10/25/2021 10:56 AM
11	Flooding due to rising waters in Lake MI	10/25/2021 10:18 AM
12	Pandemic	10/22/2021 1:35 PM
13	Flooding in Frankfort/Elberta, Lake MI coastline in Benzie County.	10/22/2021 10:58 AM
14	flooding / erosion	10/21/2021 1:31 PM
15	Flooding, snow storm	10/18/2021 1:32 PM
16	snow	10/8/2021 11:46 AM
17	Na	10/6/2021 10:49 AM
18	Lake water levels, flooding and erosion	10/5/2021 3:52 PM
19	None	10/5/2021 1:35 PM
20	none	10/5/2021 12:31 PM
21	High water level - 2020	10/5/2021 12:11 PM
22	none	10/5/2021 11:20 AM
23	Unknown	10/4/2021 4:31 PM
24	NA	10/4/2021 3:00 PM
25	River ice over with large backup	10/4/2021 1:25 PM
26	High water levels.	10/4/2021 11:28 AM
27	Na	10/4/2021 11:08 AM
28	Extreme snow event 03/02/2012	10/4/2021 10:38 AM
29	High water, flooding	10/4/2021 10:16 AM

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

Answered: 43 Skipped: 1



ANSWER CHOICES	RESPONSES	
Very concerned	13.95%	6
Somewhat concerned	74.42%	32
Not concerned	11.63%	5
TOTAL		43

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: 43 Skipped: 1

#	RESPONSES	DATE
1	illness outbreak	1/6/2022 6:01 PM
2	Wildland fire	12/11/2021 8:10 AM
3	I feel that high winds, tornados, and other weather events that cut power to homes and businesses could potentially have the largest impact. I believe that our grid is fragile enough to start with, and severe weather that impacts a large region of the county could see people without power for multiple days, which is especially dangerous in the winter time.	12/9/2021 12:43 AM
4	flooding	12/4/2021 8:12 PM
5	Illness outbreak, weather calamities and degradation of the natural environment.	12/2/2021 12:44 PM
6	Flood and Fire	12/2/2021 11:07 AM
7	Illness, fire	12/2/2021 10:22 AM
8	Lakeshore erosion and illness break out	12/2/2021 9:51 AM
9	Flood	12/2/2021 9:51 AM
10	Fire, Flood, Wind and Erosion caused by flooding and wind.	12/2/2021 9:39 AM
11	Illness outbreak	12/2/2021 9:03 AM
12	Severe winter weather events	11/5/2021 9:27 PM
13	flood, fire, illness,	11/1/2021 12:42 PM
14	Pandemic	10/28/2021 7:51 AM
15	Flood, fire, illness outbreak.	10/25/2021 2:22 PM
16	unknown	10/25/2021 10:56 AM
17	Fire, Flood	10/25/2021 10:18 AM
18	Illness	10/22/2021 1:35 PM
19	Illness, floods, fires	10/22/2021 10:58 AM
20	flood/ erosion/ illness outbreak	10/21/2021 1:31 PM
21	Wildland Fire, Flooding, Heavy snow	10/18/2021 1:32 PM
22	I'm not very knowledgeable about these matters but I'd say fire and illness outbreak	10/18/2021 9:37 AM
23	possible flooding	10/12/2021 4:52 PM
24	fire	10/8/2021 11:46 AM
25	illness outbreaks, flooding, high winds downing power lines and tree damage	10/8/2021 9:16 AM
26	Fire, drought, illness	10/6/2021 10:49 AM
27	COVID, fire, and flooding	10/5/2021 3:52 PM
28	illness outbreak	10/5/2021 1:35 PM
29	Fire, heavy snow/snowstorms, wind damage	10/5/2021 12:55 PM
30	flood, high winds, illness	10/5/2021 12:31 PM

Benzie County Hazard Mitigation Community Survey

31	Flood	10/5/2021 12:11 PM
32	Illness outbreak	10/5/2021 11:29 AM
33	Tornado, fire	10/5/2021 11:20 AM
34	fire, flooding, landslide (we live at the base of an unstable hill filled with springs)	10/5/2021 11:03 AM
35	Water, Power, Weather, pandemic, ?	10/4/2021 4:31 PM
36	fire	10/4/2021 3:00 PM
37	Flood	10/4/2021 1:25 PM
38	Flood or Fire	10/4/2021 12:38 PM
39	High lake levels. High wind/winter storm events.	10/4/2021 11:28 AM
40	Tornado	10/4/2021 11:08 AM
41	I would day power outages in winter time. Maybe a tornado or heavy wind.	10/4/2021 10:38 AM
42	Severe weather	10/4/2021 10:30 AM
43	Flood	10/4/2021 10:16 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: 40 Skipped: 4

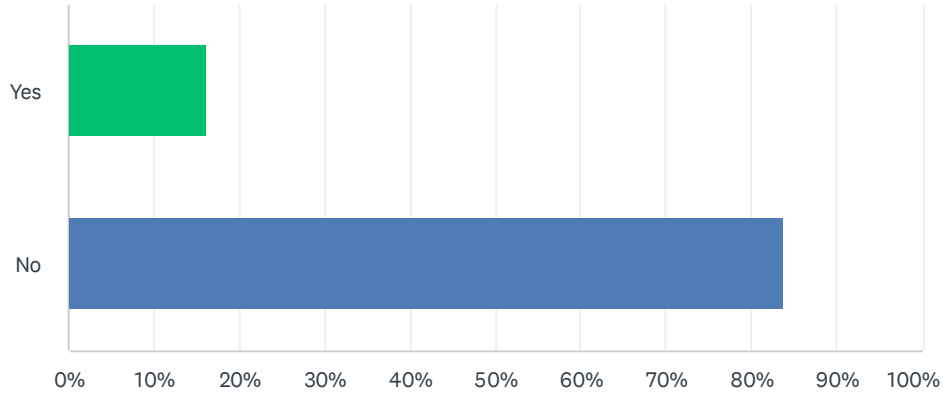
#	RESPONSES	DATE
1	no	1/6/2022 6:01 PM
2	No	12/11/2021 8:10 AM
3	Certainly utilities (power) is a concern, but roads in general are also a concern. If people are out of power, we would want them to go to a warming shelter. But if the roads are not passable, citizens may have difficulty getting to the shelters.	12/9/2021 12:43 AM
4	we have several bridges specifically related to the platte river, also potential power outages due to power lines, also limited availability to internet and heating sources	12/4/2021 8:12 PM
5	Hmmm, me personally, I'm concerned about my village of approximately 340 catering to several hundred thousand tourists a year and the dangers that can come with them.	12/2/2021 12:44 PM
6	Yes, concerns about dam integrity between Lake Michigan and Lower Herring Lake	12/2/2021 11:07 AM
7	We have a bridge that was taken removed and we have hoped that it would be replaced. We have residents that live on the other side of the river. Any emergency vehicles now have to go way out of their way to get to any residents or forest area on the other side of the former bridge location (Haze Road).	12/2/2021 10:22 AM
8	Yes, dams bridges etc in the event of a flood.	12/2/2021 9:51 AM
9	M-22 bridge over Bestie river.	12/2/2021 9:51 AM
10	Critical Infrastructure concerns include the water and sanitary sewer distribution systems. M-22 Bridge in Elberta.	12/2/2021 9:39 AM
11	Further bluff erosion	12/2/2021 9:03 AM
12	Sustained power outages will have a significant impact on our ability to sustain major DPW responsibilities.	11/5/2021 9:27 PM
13	unknown	11/1/2021 12:42 PM
14	Not too much	10/28/2021 7:51 AM
15	Flood and erosion and snow events.	10/25/2021 2:22 PM
16	unknown	10/25/2021 10:56 AM
17	Yes, somewhat concerned about structural integrity of the dam in Lower Herring Lake. Hasn't been a functioning dam in years, but if waters recede a lot it may be something to watch.	10/25/2021 10:18 AM
18	Unsure	10/22/2021 1:35 PM
19	Bridge issues, Frankfort Elberta causeway will flood over again. There are other aging bridges throughout the county as well.	10/22/2021 10:58 AM
20	yes - M22 bridge at Elberta vs water levels	10/21/2021 1:31 PM
21	Not sure	10/18/2021 1:32 PM
22	I don't know	10/18/2021 9:37 AM
23	We had some concerns on the M22 causeway when the water levels were really high in 2019-2020. Worries of washout. It could be a concern if and when the levels rise again.	10/12/2021 4:52 PM

Benzie County Hazard Mitigation Community Survey

24	no	10/8/2021 11:46 AM
25	NA	10/6/2021 10:49 AM
26	Bridges are old and some need to be replaced in the future	10/5/2021 3:52 PM
27	Bridges	10/5/2021 2:44 PM
28	No.	10/5/2021 1:35 PM
29	Just general concerns	10/5/2021 12:55 PM
30	none	10/5/2021 12:31 PM
31	The Platte and Betsie River both run through the county. BCRC currently maintains 17 bridges throughout the county (not counting bridges maintained by MDOT). Loosing a major bridge could have long term negative impacts to the county	10/5/2021 12:11 PM
32	un	10/5/2021 11:20 AM
33	unknown	10/4/2021 4:31 PM
34	utilities	10/4/2021 3:00 PM
35	No	10/4/2021 1:25 PM
36	unkown	10/4/2021 12:38 PM
37	no	10/4/2021 11:28 AM
38	No	10/4/2021 11:08 AM
39	power grid.	10/4/2021 10:38 AM
40	Shoreline erosion	10/4/2021 10:16 AM

Q11 Have you been involved in a natural hazard mitigation planning process before?

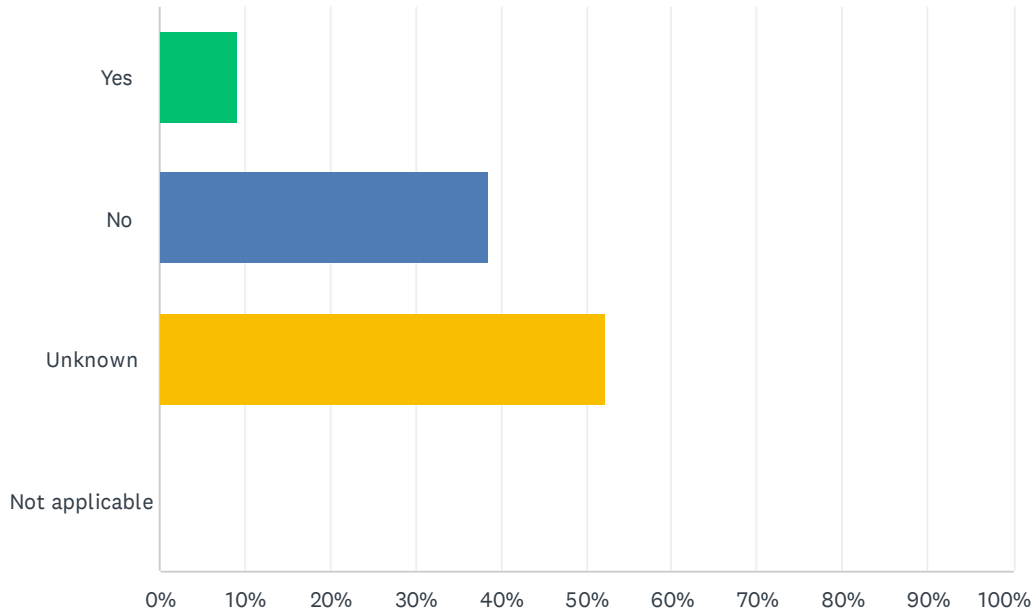
Answered: 43 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	16.28%	7
No	83.72%	36
TOTAL		43

Q12 Has your community requested assistance for mitigation projects in the past?

Answered: 44 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	9.09%	4
No	38.64%	17
Unknown	52.27%	23
Not applicable	0.00%	0
TOTAL		44

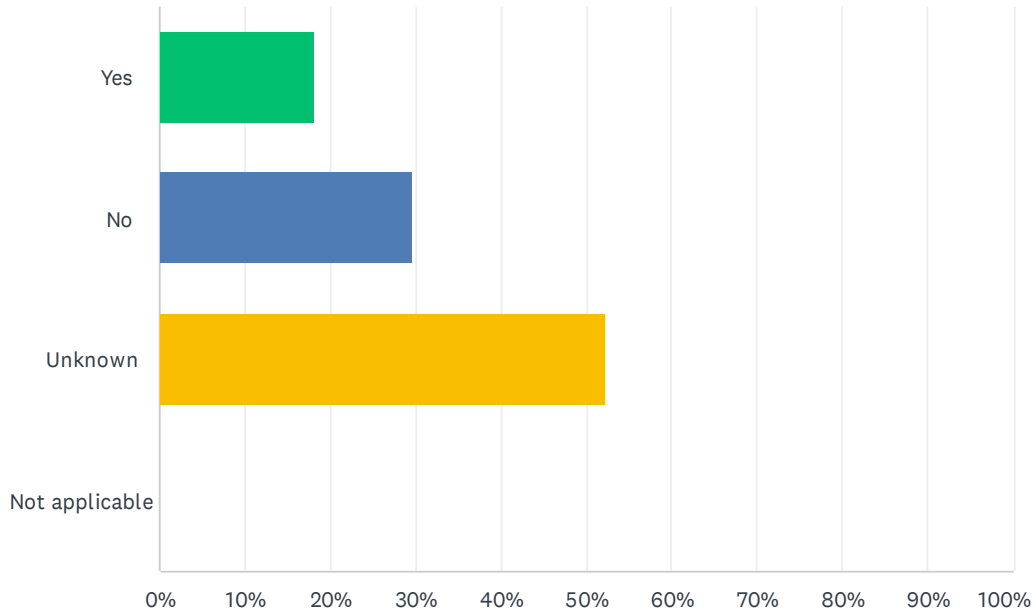
Q13 If so, was your request granted and what type of project did the request include?

Answered: 25 Skipped: 19

#	RESPONSES	DATE
1	Replacing the bridge after the dam on the Betsie river went out	12/11/2021 8:10 AM
2	n/a	12/9/2021 12:43 AM
3	I believe the village of Beulah requested and received a grant to do significant work on the village water/sewer system. The water/sewer system is working well right now but, for how long will this be true, with all of our out-of-town visitors?	12/2/2021 12:44 PM
4	none	12/2/2021 10:22 AM
5	Unknown	12/2/2021 9:51 AM
6	none	12/2/2021 9:51 AM
7	na	11/1/2021 12:42 PM
8	Na	10/28/2021 7:51 AM
9	Unknown.	10/25/2021 2:22 PM
10	N/A	10/25/2021 10:56 AM
11	Don't know	10/22/2021 1:35 PM
12	na	10/22/2021 10:58 AM
13	in past - funds were received for private property flooding - land purchase	10/21/2021 1:31 PM
14	N/A	10/18/2021 1:32 PM
15	guardrail replacement project, federal safety grant	10/8/2021 11:46 AM
16	NA	10/6/2021 10:49 AM
17	Not sure	10/5/2021 3:52 PM
18	None	10/5/2021 1:35 PM
19	none	10/5/2021 12:31 PM
20	none	10/5/2021 11:20 AM
21	yes granted. Control water run-off from storm events	10/5/2021 11:03 AM
22	unknown	10/4/2021 4:31 PM
23	na	10/4/2021 3:00 PM
24	Unk	10/4/2021 1:25 PM
25	Na	10/4/2021 11:08 AM

Q14 Has your community considered mitigation strategies for potential or current hazards?

Answered: 44 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	18.18%	8
No	29.55%	13
Unknown	52.27%	23
Not applicable	0.00%	0
TOTAL		44

Q15 If so, please identify potential strategies you would like to explore in the near future.

Answered: 23 Skipped: 21

#	RESPONSES	DATE
1	I feel that joint planning and/or training with the utilities companies to help them restoring power to our citizens could be beneficial.	12/9/2021 12:43 AM
2	I am concerned about our freshwater environment—Crystal Lake, the Betsie and Platte Rivers and, not to mention Lake Michigan.	12/2/2021 12:44 PM
3	..	12/2/2021 10:22 AM
4	none	12/2/2021 9:51 AM
5	Better establish a resilient shoreline to overcome high water cycles that create erosion concerns. Install check valves on storm discharge locations.	12/2/2021 9:39 AM
6	Fire, further effects of pandemic	12/2/2021 9:03 AM
7	preparedness	11/1/2021 12:42 PM
8	Na	10/28/2021 7:51 AM
9	Underground utilities, erosion and floods.	10/25/2021 2:22 PM
10	N/A	10/25/2021 10:56 AM
11	Not sure	10/22/2021 1:35 PM
12	na	10/22/2021 10:58 AM
13	N/A	10/18/2021 1:32 PM
14	none	10/8/2021 11:46 AM
15	TBD	10/6/2021 10:49 AM
16	FEMA grants	10/5/2021 3:52 PM
17	None	10/5/2021 1:35 PM
18	none	10/5/2021 12:31 PM
19	none	10/5/2021 11:20 AM
20	unknown	10/4/2021 4:31 PM
21	na	10/4/2021 3:00 PM
22	Unk	10/4/2021 1:25 PM
23	Na	10/4/2021 11:08 AM

Q16 Is there any additional information you would like us to consider as we update the county's Natural Hazard Mitigation Plan?

Answered: 23 Skipped: 21

#	RESPONSES	DATE
1	No additional information.	12/9/2021 12:43 AM
2	none	12/2/2021 10:22 AM
3	No	12/2/2021 9:51 AM
4	Natural resiliency strategies to critical areas of our shoreline.	12/2/2021 9:39 AM
5	na	11/1/2021 12:42 PM
6	Na	10/28/2021 7:51 AM
7	Underground infrastructure for continual power and erosion control along waterways.	10/25/2021 2:22 PM
8	Unknown	10/25/2021 10:56 AM
9	Not now	10/22/2021 1:35 PM
10	na	10/22/2021 10:58 AM
11	None at this time	10/18/2021 1:32 PM
12	High water level - flooding information.	10/12/2021 4:52 PM
13	unknown	10/8/2021 11:46 AM
14	TND	10/6/2021 10:49 AM
15	No	10/5/2021 2:44 PM
16	NO.	10/5/2021 1:35 PM
17	none	10/5/2021 12:31 PM
18	no	10/5/2021 11:20 AM
19	unknown	10/4/2021 4:31 PM
20	na	10/4/2021 3:00 PM
21	No	10/4/2021 1:25 PM
22	Unknown	10/4/2021 11:08 AM
23	no	10/4/2021 10:38 AM

2015 Benzie County Natural Hazard Mitigation Plan Action Strategies and 2023 Status

Priority and Action Strategies	Responsible Parties	Timeframe	2023-Emergency Manager Remarks
Priority Area 1: Flood Mitigation Strategies			
a. Reduce potential of flooding by identifying flood prone structures and raise foundations	FEMA Emergency Management Coordinator Private Land Conservancies or other Non-profit conservation organizations	1-3 years from adoption of the plan	Benzie County was awarded a 2015 FEMA Hazard Mitigation Planning Grant to assist in acquiring and demolishing a flood prone home at 4696 Frankfort Hwy. Work was completed between April 2016 and June 2019. Floodplain verification is required with new builds and additions.
b. Public education	County Planning Emergency Management Coordinator County Soil Conservation District Drain Commissioner Townships, Villages	1-3 years from adoption of the plan	No change; ongoing
c. Mapping of flood prone areas	FEMA Emergency Management Coordinator Drain Commissioner County Soil Conservation District MI Department of Environmental Quality	1-3 years from adoption of the plan	FEMA completed a countywide Flood Insurance Study and Flood Insurance Rate Maps for Benzie County in 2020.
d. Wetland protection	County Planning Emergency Management Coordinator County Soil Conservation District MI Department of Environmental Quality Townships, Villages Non-profit conservation organizations	2016	No change; ongoing
e. Enforcement of storm water and drainage control statutes and ordinances	County Planning County Building Inspector Emergency Management Coordinator Drain Commissioner County Soil Conservation District MI Department of Environmental Quality US Army Corps of Engineers	Ongoing	No permanent enforcement efforts have been undertaken; however temporary enforcement has been provided via the County Building Department enforcing soil erosion statues/permits during construction.

Priority and Action Strategies	Responsible Parties	Timeframe	2023-Emergency Manager Remarks
Priority Area 2: Shoreline Erosion Mitigation Strategies			
a. Public Education	County Planning Emergency Management Coordinator County Soil Conservation District Townships, Villages	1-3 years from adoption of the plan	Code RED implementation; Facebook page maintained for Benzie County Emergency Management.
b. Promote the relocation of structures	FEMA Emergency Management Coordinator County Planning MI Department of Environmental Quality U.S. Army Corps of Engineers Townships, Villages	2-5 years from adoption of the plan	See 1a.
c. Drainage control and placement of vegetation, utilizing native vegetation	County Conservation District Drain Commissioner County Planning Emergency Management Coordinator Townships, Villages	1-3 years from adoption of the plan	Education efforts through Benzie Conservation District and NMISN programs; Benzie County Master Plan update of 2017 – Water Quality Improvement Objectives, page 51
d. Enforcement of soil erosion statutes/permits	County Soil Conservation District County Planning Emergency Management Coordinator MI Department of Environmental Quality U.S. Army Corps of Engineers	Ongoing	Ongoing; See 1e.
e. Enforcement of building codes	County Building Inspector	Ongoing	Ongoing; also EGLE requires permits regarding new builds or additions in designated High-Risk Erosion Areas along Lake Michigan.
Priority Area 3: Wildfire Mitigation Strategies			
a. Public education, awareness, alertness – become a FIREWISE community	County Planning Department Emergency Management Coordinator Building Inspector Township, Village	1-4 years from adoption of the plan	No progress. Lack of community interest/engagement.
b. Work with campgrounds on a notification system regarding fire danger; create areas of refuge involving imminent fire dangers at campgrounds; and establish evacuation routes from campgrounds	Emergency Management Coordinator County Conservation District State/County Campground Managers Township, Village	1-3 years from adoption of the plan	No progress.

Priority and Action Strategies	Responsible Parties	Timeframe	2023-Emergency Manager Remarks
Priority Area 3: Wildfire Mitigation Strategies			
c. Develop new building and zoning codes	County Planning Department Emergency Management Coordinator Building Inspector Township, Village	1-3 years from adoption of the plan	No Progress. Part of this strategy is no longer applicable. The county implements the State of MI Building Code. Local governments are responsible for developing and revising their own zoning codes.
d. Adjustments in the planning, design, and development process for area structure County Building Inspector	County Building Inspector County Planning Department Emergency Management Coordinator Township, Village	1-3 years from adoption of the plan	No Progress. This strategy is no longer applicable. The county implements the State of MI Building Code.
e. Continue Building code enforcement for new construction	County Building Inspector	Ongoing	Ongoing
Priority Area 4: Snow Load and Ice Build Up Mitigation Strategies			
a. Continue Building code enforcement for new construction	Building Inspector	Ongoing	Ongoing
b. Public education	County Building Inspector County Planning Emergency Management Coordinator Townships, Villages	1-3 years from adoption of the plan	Benzie County website maintains a page for Building Safety & Code Enforcement Dept. information
Priority Area 5: High Winds Mitigation Strategies			
a. Continue Building code enforcement for new construction	County Building Inspector	Ongoing	Ongoing
b. Tree management by power companies	Emergency Management Coordinator Power Companies	Ongoing	Ongoing
c. Create shelters for campground areas	Emergency Management Coordinator County Planning County Building Inspector Townships, Villages	2-5 years from adoption of the plan	No progress.
d. Public education for structural elements and tree management	Emergency Management Coordinator County Building Inspector County Soil Conservation District Townships, Villages	1-3 years from adoption of the plan	Facebook page maintained for Benzie County Emergency Management posting of emergency notices/prevention & preparedness education.

Other Strategies	2023 Emergency Manager Remarks
Work on a multi-hazard warning plan	CodeRED Emergency Communications network service is now available for the County.
Work with other governmental entities, organizations, businesses, and the public	Ongoing.
Incorporate the Plan's natural hazards mitigation concepts, strategies, and policies into existing elements of Benzie County's Master Comprehensive Plan 2020.	The County Master Plan was updated in 2017. Hazard Mitigation Plan elements incorporated into master plan objectives related to Water Quality, Wetlands, Invasive Species, and Sensitive Lands.

Finance Report

BILLS TO BE APPROVED October 25th

Motion to approve Vouchers in the amount of:

\$ 58,624.77 General Fund (101)

\$ 118,671.17 Jail Fund (213)

\$ 9,559.26 Ambulance Fund & ALS (214)

\$ 14,759.26 Funds 105-238

\$ 825.53 ACO Fund (247)

\$ 31,193.00 Building (249)

\$ 6,380.79 Dispatch 911 Fund (261)

\$ 131,265.10 Funds 239-292

\$ 15,244.22 Funds 293-640

\$ 23,956.88 701 Fund

\$ 700.00 Trust and Agency Funds & MSU Trust and Agency Fund (702-771)

\$ 411,179.98

JOURNALIZED

BOTH OPEN AND PAID

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 101 GENERAL FUND					
Dept 101 BOARD OF COMMISSIONERS					
101-101-860.00	TRAVEL	NYE, RHONDA	MILEAGE APRIL 2023	41.92	89736
Total For Dept 101 BOARD OF COMMISSIONERS				41.92	
Dept 131 CIRCUIT COURT					
101-131-702.00	SALARY - ELECTED OFFICIALS	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	1,524.13	89814
101-131-702.03	SALARY-COURT ADMINISTRATOR	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	2,138.20	89814
101-131-704.00	WAGES-COURT REPORTER	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	1,160.25	89814
101-131-704.01	WAGES - ADR CLERK	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	1,502.15	89814
101-131-704.02	WAGES-CLERICAL ASSISTANT	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	1,160.25	89814
101-131-712.00	WAGES - RESEARCH ATTORNEY	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	1,509.82	89814
101-131-725.00	COST OF FRINGE BENEFITS - TO MAN	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	5,562.82	89814
101-131-727.00	OFFICE SUPPLIES	MANISTEE COUNTY	REIMBURSEMENT TO MANISTEE CIRCUIT CRT C	168.69	89813
101-131-800.00	CONTRACTED SERV - THINKING MATTE	CATHOLIC HUMAN SERVICES, I	THINKING MATTERS GROUP BENZIE SPLIT	357.16	89786
101-131-802.00	TRANSCRIPTS	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	141.10	89814
101-131-810.00	LEGAL FEES	SPILLAN, JOHN	COURT APPOINTED ATTY - NA FEES	1,515.00	89751
101-131-810.00	LEGAL FEES	SPILLAN, JOHN	COURT APPOINTED ATTY - NA FEES	100.00	89751
101-131-810.00	LEGAL FEES	NICHOLAS BROWN LAW, PLLC	COURT APPOINTED ATTY FOR VARIOUS NA CAS	1,200.00	89818
101-131-812.00	APPEALS COURT - LEGAL FEES	DAVID HERSKOVIC P68897	APPELLATE ATTY FEES 2021,2023,2023 19-2	935.36	89796
101-131-962.00	JIS RELATED COSTS	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	638.08	89814
101-131-967.00	PROJECT EXPENSES - DRUG COURT GR	BENZIE COUNTY SHERIFF OFFI	DRUG TESTS APRIL 2023 HOFFMAN	52.00	89696
101-131-967.00	PROJECT EXPENSES - DRUG COURT GR	BENZIE COUNTY SHERIFF OFFI	DRUG TESTS APRIL 2023 THORPE	44.00	89696
Total For Dept 131 CIRCUIT COURT				19,709.01	
Dept 136 DISTRICT COURT					
101-136-727.00	OFFICE SUPPLIES	MCCARDEL WATER CONDITIONIN	COOLER RENTAL PROBATE APRIL '23	11.00	89725
101-136-805.10	PROBATE CT APPOINTED ATTORNEY	LAW OFFICES OF WESTFALL, I	ATTY FEES N VOGT #23-0057 CA & 23-0058	150.00	89721
101-136-805.10	PROBATE CT APPOINTED ATTORNEY	LAW OFFICES OF WESTFALL, I	ATTY FEES M & M RICHARDS 22-057GM, 220C	105.00	89721
101-136-805.10	PROBATE CT APPOINTED ATTORNEY	LAW OFFICE OF HEATHER DYK	GUARDIAN 34662 REMAINING BALANCE	30.00	89811
101-136-805.10	PROBATE CT APPOINTED ATTORNEY	NORTHERN MICHIGAN ELDER L	ELDER LAW GREENE FEB - MAY 10, 2023	242.50	89820
101-136-805.10	PROBATE CT APPOINTED ATTORNEY	NORTHERN MICHIGAN ELDER L	ELDER LAW SIMERSON MARCH-MAY 2, 2023	95.00	89820
101-136-806.00	SCREENING FEES	OPEN DOOR ASSESSMENTS, LLC	COURT SCREENING BH23-079SD, NC23-049SD	150.00	89823
101-136-807.00	JURY FEES	MOILANEN, JACOB ANDREW	JURY DUTY	17.80	89731
101-136-853.00	CELLULAR PHONES	VERIZON WIRELESS	652-001 CELLPHONES MAR 13-APRIL 14.23	195.07	89761
101-136-860.00	TRAVEL	BEILFUSS, HOLLY	REIMBURSEMENT MEALS,MILEAGE & LODGING C	227.94	89778
101-136-900.00	PRINTING & PUBLISHING	THE EBCO COMPANY	1/3 TAB FOLDERS 250	430.00	89834
101-136-955.00	STAFF DEVELOPMENT/CONFERENCES	BEILFUSS, HOLLY	REIMBURSEMENT MEALS,MILEAGE & LODGING C	149.10	89778
Total For Dept 136 DISTRICT COURT				1,803.41	
Dept 142 JUVENILE DIVISION					
101-142-704.01	SALARY-DIRECTOR OF YOUTH SERVICE	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	1,498.68	89814
101-142-727.00	OFFICE SUPPLIES	WELLS FARGO FINANCIAL LEA	S 603-0236145-000 2023	79.90	89763
Total For Dept 142 JUVENILE DIVISION				1,578.58	
Dept 172 ADMINISTRATOR					
101-172-900.00	PRINTING & PUBLISHING	THE PIONEER GROUP	ADS BID ADDITION AND NOTICE OF AVAILABI	414.10	89756
Total For Dept 172 ADMINISTRATOR				414.10	
Dept 215 COUNTY CLERK					
101-215-727.00	OFFICE SUPPLIES	RR DONNELLEY	NON-BIRTH GENERIC	171.77	89746
101-215-807.00	JURY BOARD FEES	DREWYOUR, RICK	JURY BOARD AND MILEAGE MAY 8, 2023	105.25	89707
101-215-807.00	JURY BOARD FEES	MICK, JANICE	JURY BOARD AND MILEAGE MAY 8, 2023	83.75	89729
101-215-807.00	JURY BOARD FEES	SHRAKE, ELIZABETH	JURY BOARD AND MILEAGE MAY 8, 2023	84.38	89747
101-215-807.00	JURY BOARD FEES	DREWYOUR, RICK	JURY BOARD PER DIEM AND MILEAGE 5.18.23	66.25	89799

05/18/2023 12:53 PM
User: RLYnn
DB: Benzie County

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 05/05/2023 - 05/18/2023

Page: 2/10

JOURNALIZED

BOTH OPEN AND PAID

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 101 GENERAL FUND					
Dept 215 COUNTY CLERK					
101-215-807.00	JURY BOARD FEES	MICK, JANICE	JURY BOARD PER DIEM AND MILEAGE 5.18.23	43.75	89815
101-215-807.00	JURY BOARD FEES	SHRAKE, ELIZABETH	JURY BOARD PER DIEM AND MILEAGE	44.38	89830
Total For Dept 215 COUNTY CLERK				599.53	
Dept 253 COUNTY TREASURER					
101-253-727.00	OFFICE SUPPLIES	GOVERNMENTAL PRODUCTS LLC	BINDERS WITH POST FOR TAX BOOKS	1,456.00	89712
Total For Dept 253 COUNTY TREASURER				1,456.00	
Dept 257 EQUALIZATION DEPARTMENT					
101-257-860.00	TRAVEL	W.A.S LLC	MILEAGE TO MAED MEETING 5.5.23 AND TRAN	133.40	26
101-257-860.00	TRAVEL	LINDSAY, BRIANNE	MILEAGE FOR EQUALIZATION 103 & 104 CLAS	210.26	89722
Total For Dept 257 EQUALIZATION DEPARTMENT				343.66	
Dept 262 ELECTIONS					
101-262-860.00	TRAVEL	KIM CHILDS	TRAVEL REIMB MPJRA CONF MAY 2023	146.72	89809
Total For Dept 262 ELECTIONS				146.72	
Dept 265 BUILDING & GROUNDS					
101-265-750.00	MAINTENANCE SUPPLIES	BETSIE VALLEY SALES & SERV	REPAIR BACKPACK BLOWER	21.17	89697
101-265-750.00	MAINTENANCE SUPPLIES	KSS	409 CLEANER	56.04	89719
101-265-750.00	MAINTENANCE SUPPLIES	KSS	ICE MELT AND KLEENEX	77.81	89719
101-265-750.00	MAINTENANCE SUPPLIES	NUGENT ACE HARDWARE	HOSE MENDER AND MULCH	63.99	89734
101-265-800.00	CONTRACTED SERVICES	KONE INC.	MAINTENANCE 05.01.23-07.31.23	233.49	89718
101-265-820.00	SNOW REMOVAL	KSS	ICE MELT AND KLEENEX	638.05	89719
101-265-821.00	GARBAGE DISPOSAL-MAIN BUILDING 2	GFL ENVIRONMENTAL	ACCT #2126461 WASTE MANAGEMENT (BCSO, JF	41.66	89711
101-265-850.00	TELEPHONE	CENTURYLINK	30343955 COMMUNICATION	42.00	89700
101-265-853.00	CELLULAR PHONES	VERIZON WIRELESS	652-001 CELLPHONES MAR 13-APRIL 14.23	87.04	89761
101-265-924.00	ELECTRIC	CONSUMERS ENERGY	ACCT #100000514313 MAIN SHERIFF/JAIL EI	811.45	89792
101-265-924.00	ELECTRIC-MAIN BUILDING 1000 0051	CONSUMERS ENERGY	ACCT # 100000514248 MAIN BUILDING ELECT	5,058.58	89793
101-265-924.00	ELECTRIC- GARAGE 1000 0586 8649	CONSUMERS ENERGY	ACCT #100005868649 MAIN BUILDING ELECT	80.89	89794
101-265-930.00	EQUIPMENT REPAIR	NAPA AUTO SUPPLY, INC.	MOWER BATTERY	66.38	89732
101-265-930.00	EQUIPMENT REPAIR	BETSIE VALLEY SALES & SERV	LAWNMOWER FILTER	4.27	89782
101-265-935.00	BUILDING REPAIRS	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	99.79	25
101-265-935.00	BUILDING REPAIRS	BETSIE VALLEY SALES & SERV	RENTED STUMP BUCKET & LOADER	106.24	89697
101-265-935.00	BUILDING REPAIRS	BLUEWATER ELECTRIC LLC	HTR POLE BARN, PRKG LOT LIGHT, REPRD WIRE	1,158.00	89698
Total For Dept 265 BUILDING & GROUNDS				8,646.85	
Dept 266 LEGAL & CONTRACTED SERVICES					
101-266-810.00	LEGAL FEES	COHL, STOKER, TOSKEY, P.C.	CORPORATE & LABOR RETAINER FOR APRIL 20	4,334.14	89789
101-266-815.20	ADMINISTRATION FEES - MANISTEE	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	1,166.67	89814
Total For Dept 266 LEGAL & CONTRACTED SERVICES				5,500.81	
Dept 267 PROSECUTING ATTORNEY					
101-267-808.00	WITNESS FEES	DIETZ, DENNIS	WITNESS FEES 21-2769-FH M RIDER	18.20	89797
101-267-808.00	WITNESS FEES	OHMART, CANDICE	WITNESS FEES AND MILEAGE 21-2769-FH M F	18.20	89822
101-267-853.00	CELLULAR PHONES	VERIZON WIRELESS	652-001 CELLPHONES MAR 13-APRIL 14.23	87.04	89761
Total For Dept 267 PROSECUTING ATTORNEY				123.44	
Dept 285 CENTRAL SERVICES					
101-285-727.10	PAPER SUPPLIES	JACKPINE BUSINESS CENTERS	20 CASES COPY PAPER CENTRAL SERVICES	959.40	89806
101-285-940.20	EQUIPMENT LEASE-40033811	TEAM FINANCIAL GROUP, INC.	CUSTOMER #40033811 CONTRACT #40033811-1	73.19	89754
101-285-940.20	EQUIPMENT LEASE-40023293	TEAM FINANCIAL GROUP, INC.	CUSTOMER # 40023293 CONTRACT #40023293-	122.00	89754
101-285-940.20	EQUIPMENT LEASE	APPLIED INNOVATION	SUM OF EQUIPMENT BASE CHARGES	76.62	89774

05/18/2023 12:53 PM

User: Rlynn

DB: Benzie County

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 05/05/2023 - 05/18/2023

Page: 3/10

JOURNALIZED

BOTH OPEN AND PAID

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 101 GENERAL FUND					
Dept 285 CENTRAL SERVICES					
101-285-940.20	EQUIPMENT LEASE-40032368	TEAM FINANCIAL GROUP, INC.	CUSTOMER # 40032368 CONTRACT # 40032368	375.75	89833
		Total For Dept 285 CENTRAL SERVICES		1,606.96	
Dept 286 TECHNOLOGY SUPPORT					
101-286-963.10	WEBSITE SUPPORT	REVIZE LLC	ANNUAL TECH SUPPORT WEBSITE, CMS 2023	4,300.00	89744
		Total For Dept 286 TECHNOLOGY SUPPORT		4,300.00	
Dept 301 SHERIFF					
101-301-727.00	OFFICE SUPPLIES	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	130.52	25
101-301-727.00	OFFICE SUPPLIES	AMAZON CAPITAL SERVICES, I	OFF CHAIR MAT - SGT	41.90	89692
101-301-727.00	OFFICE SUPPLIES	AMAZON CAPITAL SERVICES, I	OFFICE SUPPLIES	40.48	89692
101-301-727.00	OFFICE SUPPLIES	AMAZON CAPITAL SERVICES, I	UNIFORMS/ OFF SUPP - ROAD AND JAIL	8.71	89692
101-301-748.00	GAS, OIL & GREASE	WATSON BENZIE LLC	20-1 OC TR CONTRACT X 3	245.00	89762
101-301-749.00	VEHICLE REPAIRS	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	3.89	25
101-301-749.00	VEHICLE REPAIRS	WATSON BENZIE LLC	18-3 AIR COND CONDENSER R&R	100.00	89762
101-301-749.00	VEHICLE REPAIRS	WATSON BENZIE LLC	21-1 UP CNTRL ARM/ENG MOUNT R&R	771.50	89762
101-301-749.00	VEHICLE REPAIRS	BAYSHORE TIRE & AUTO	22-1 NEW TIRE	200.00	89777
101-301-749.00	VEHICLE REPAIRS	HEIGES PERFORMANCE, INC.	16-1 HEADLIGHT ASSEMBLY	1,058.86	89804
101-301-752.10	DRY CLEANERS	ROBBIE'S DRY CLEANERS, INC	DRY CLEANING APRIL 2023	213.25	89745
101-301-961.00	TRAINING & SCHOOLS	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	54.36	25
101-301-961.00	TRAINING & SCHOOLS	BENZIE COUNTY SHERIFF OFFI	APRIL PETTY CASH BCSO	32.98	89780
101-301-970.00	EQUIPMENT	AMAZON CAPITAL SERVICES, I	MOLLE ATTACHMENTS - MB	14.99	89692
101-301-970.00	EQUIPMENT	AMAZON CAPITAL SERVICES, I	MOLLE DOUBLE MAG - MB	23.99	89692
101-301-970.00	EQUIPMENT	CMP DISTRIBUTORS	3X BULLET PROOF VEST MB/MM/JK2	3,366.85	89788
		Total For Dept 301 SHERIFF		6,307.28	
Dept 334 ZERO TOLERANCE, BAILIFF					
101-334-751.00	UNIFORMS	AMAZON CAPITAL SERVICES, I	UNIFORMS/ OFF SUPP - ROAD AND JAIL	79.98	89692
101-334-751.00	UNIFORMS	AMAZON CAPITAL SERVICES, I	UNIFORMS - BAILIFF	77.96	89771
101-334-751.00	UNIFORMS	AMAZON CAPITAL SERVICES, I	UNIFORMS - BAILIFF	129.00	89771
		Total For Dept 334 ZERO TOLERANCE, BAILIFF		286.94	
Dept 426 EMERGENCY MANAGEMENT					
101-426-850.00	TELEPHONE	AT & T MOBILITY	OEM, EMS & DISPATCH MOBILE DEVICES APRIL	100.79	89775
		Total For Dept 426 EMERGENCY MANAGEMENT		100.79	
Dept 648 MEDICAL EXAMINER					
101-648-800.00	CONTRACTED SERVICES	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	2,127.94	89814
101-648-835.00	LAB FEES	NMS LABS	LAB FEES ME MARCH 2023	1,003.00	89819
		Total For Dept 648 MEDICAL EXAMINER		3,130.94	
Dept 670 DHHS BOARD					
101-670-721.00	PER DIEM - DHS BOARD	HARRISON, SCOTT	DHHS PER DIEM 4.27.23 HARRISON	40.00	89803
101-670-721.00	PER DIEM - DHS BOARD	JOWETT, GAYLORD	PER DIEM DHHS MEETING 4.27.2023	40.00	89807
101-670-721.00	PER DIEM - DHS BOARD	SCHAFER, DONALD E.	DHHS PER DIEM APRIL 27, 2023	40.00	89827
101-670-860.00	TRAVEL - DHS BOARD	SCHAFER, DONALD E.	DHHS PER DIEM APRIL 27, 2023	5.90	89827
		Total For Dept 670 DHHS BOARD		125.90	
Dept 851 INSURANCE & BONDS					
101-851-828.30	INSURANCE CLAIMS	OTEC	RADIO ANTENNA EQUIP REPAIRS FROM LIGHTE	1,000.00	89738
		Total For Dept 851 INSURANCE & BONDS		1,000.00	
Dept 852 MEDICAL INSURANCE					

05/18/2023 12:53 PM

User: Rlynn

DB: Benzie County

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 05/05/2023 - 05/18/2023

Page: 4/10

JOURNALIZED

BOTH OPEN AND PAID

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 101 GENERAL FUND					
Dept 852 MEDICAL INSURANCE					
101-852-717.01	MEDICAL INSURANCE TO MANISTEE	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	1,401.93	89814
		Total For Dept 852 MEDICAL INSURANCE		1,401.93	
		Total For Fund 101 GENERAL FUND		58,624.77	
Fund 206 SHERIFF'S K-9 FUND					
Dept 000					
206-000-967.00	PROJECT EXPENSES	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	54.99	25
		Total For Dept 000		54.99	
		Total For Fund 206 SHERIFF'S K-9 FUND		54.99	
Fund 209 SCHOOL RESOURCE OFFICER					
Dept 000					
209-000-749.00	VEHICLE REPAIRS	THIRLBY AUTOMOTIVE - SHERI	18 - 1 BATTERY	172.08	89757
209-000-749.00	VEHICLE REPAIRS	WATSON BENZIE LLC	17-1 IDLER PULLEY R&R	262.35	89762
209-000-751.00	UNIFORMS	EMBROID ME OF TRAVERSE CI	SRO - MAUL UNIFORM - EMBROIDERY	25.00	89708
209-000-970.00	EQUIPMENT	GRAND TRAVERSE MOBILE COM	23-1 SRO EQUIP INSTAL	11,054.93	89713
		Total For Dept 000		11,514.36	
		Total For Fund 209 SCHOOL RESOURCE OFFICER		11,514.36	
Fund 213 JAIL OPERATIONS FUND					
Dept 265 BUILDING & GROUNDS					
213-265-783.00	EQUIP. SERVICES & SUPPLIES	BETSIE VALLEY SALES & SER	REPAIR BACKPACK BLOWER	51.82	89697
213-265-783.00	EQUIP. SERVICES & SUPPLIES	KSS	MOPS - JAIL	164.43	89719
213-265-783.00	EQUIP. SERVICES & SUPPLIES	BETSIE VALLEY SALES & SER	LAWNMOWER FILTER	10.46	89782
213-265-784.00	GARBAGE PICK-UP	GFL ENVIRONMENTAL	ACCT #2126461 WASTE MANAGEMENT (BCSO, JF	101.99	89711
213-265-924.00	ELECTRIC-JAIL 1000 0051 4313	CONSUMERS ENERGY	ACCT #100000514313 MAIN SHERIFF/JAIL EI	1,986.50	89792
213-265-935.00	JAIL REPAIRS	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	244.32	25
213-265-935.00	JAIL REPAIRS	AMAZON CAPITAL SERVICES, I	KITCHEN FAUCET JAIL - FIX	45.44	89692
213-265-935.00	JAIL REPAIRS	BETSIE VALLEY SALES & SER	RENTED STUMP BUCKET & LOADER	260.09	89697
213-265-935.00	JAIL REPAIRS	AMAZON CAPITAL SERVICES, I	JAIL REPAIRS KITCHEN AND CONTROL ROOM	146.96	89771
213-265-935.00	JAIL REPAIRS	SHERWIN-WILLIAMS	PAINT FOR JAIL	368.27	89829
		Total For Dept 265 BUILDING & GROUNDS		3,380.28	
Dept 351 JAIL - CORRECTIONS					
213-351-727.00	OFFICE SUPPLIES	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	35.89	25
213-351-727.00	OFFICE SUPPLIES	AMAZON CAPITAL SERVICES, I	OFFICE SUPPLIES	40.46	89692
213-351-727.00	OFFICE SUPPLIES	AMAZON CAPITAL SERVICES, I	UNIFORMS/ OFF SUPP - ROAD AND JAIL	8.70	89692
213-351-740.00	FOOD SUPPLIES	CANTEEN SERVICES	FOOD SUPPLIES 04/30/2023 TO 05/06/2023	2,450.18	89699
213-351-740.00	FOOD SUPPLIES	CANTEEN SERVICES	FOOD SUPPLIES 04/23 TO 04/29/2023	2,548.95	89699
213-351-740.00	FOOD SUPPLIES	CANTEEN SERVICES	FOOD SUPPLIES 05072023 TO 05132023	2,505.10	89785
213-351-751.00	UNIFORMS	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	131.00	25
213-351-751.00	UNIFORMS	AMAZON CAPITAL SERVICES, I	UNIFORMS/ OFF SUPP - ROAD AND JAIL	455.16	89692
213-351-751.00	UNIFORMS	NYE UNIFORM COMPANY	CLASS A PANTS - ES	109.03	89735
213-351-752.10	DRY CLEANERS	ROBBIE'S DRY CLEANERS, INC	DRY CLEANING APRIL 2023	72.00	89745
213-351-834.00	PRISONER MEDICAL - BENZIE CO	CORRECTIONAL RECOVERY	CLAIMS & CR FEE DH/KD	5,909.85	89704
213-351-834.00	PRISONER MEDICAL - BENZIE CO	CORRECTIONAL RECOVERY	CLMS BAL AND CR FEES - BCSO INMATE KD	1,721.67	89795
213-351-834.01	PRISONER MEDICAL - JAIL INS CONT	ALL ACCESS CARE PLLC	BC JAIL INMATES APRIL MEDICAL 2023	11,507.32	89689
213-351-834.01	PRISONER MEDICAL - JAIL INS CONT	ALL ACCESS CARE PLLC	GT CO INMATE MED APRIL 2023	1,386.53	89690
213-351-834.01	PRISONER MEDICAL - JAIL INS CONT	ALL ACCESS CARE PLLC	GT CO INMATE MED MARCH 2023	1,084.07	89691
213-351-940.20	EQUIPMENT LEASE - COPIER	NETLINK BUSINESS SOLUTIONS	COPIES 02/03/2023 TO 05/04/2023	273.29	89733

JOURNALIZED

BOTH OPEN AND PAID

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 213 JAIL OPERATIONS FUND					
Dept 351 JAIL - CORRECTIONS					
213-351-961.00	TRAINING & SCHOOLS	BENZIE COUNTY SHERIFF OFFI	APRIL PETTY CASH BCSO	16.04	89780
213-351-961.00	TRAINING & SCHOOLS	RISEN STUN DYNAMICS, LLC	RISEN STUN TRG - WEXFORD CO - DC	580.00	89825
213-351-963.00	COMPUTER EQUIPMENT	VC3 INC	BOOKING ROOM PC	1,861.73	89686
213-351-970.00	EQUIPMENT	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	70.92	25
213-351-970.00	EQUIPMENT	OD SECURITY NORTH AMERICA,	JAIL FULL BODY SCANNER PURCHASE 2023	82,000.00	89737
213-351-970.00	EQUIPMENT	SPIDERCUFF USA	HAND CUFFS - JAIL 2X	458.00	89750
213-351-970.00	EQUIPMENT	LESS LETHAL, LLC	RACC VEST BATTERY	65.00	89812
Total For Dept 351 JAIL - CORRECTIONS				115,290.89	
Total For Fund 213 JAIL OPERATIONS FUND				118,671.17	
Fund 214 EMERGENCY MEDICAL SERVICES (EMS) FUND					
Dept 265 BUILDING & GROUNDS					
214-265-750.00	MAINTENANCE SUPPLIES-EMS 2115152	GFL ENVIRONMENTAL	ACCT # WASTE MANAGEMENT (DEPARTMENT)	130.71	89710
214-265-750.00	MAINTENANCE SUPPLIES	HONOR BUILDING SUPPLY, INC	NUT-BOLTS ST ADD EXTRA SUPPORT RAIL FOF	28.15	89715
214-265-750.00	MAINTENANCE SUPPLIES	MI PEST	ST 3 PEST CONTROL	61.00	89727
214-265-850.01	INTERNET SERVICE	CHARTER COMMUNICATIONS	ST 3 CHARTER	543.28	89701
214-265-850.01	INTERNET SERVICE	DIRECT TV	S2 TV	133.98	89798
214-265-853.00	CELLULAR PHONES	AT & T MOBILITY	OEM, EMS & DISPATCH MOBILE DEVICES APRI	962.30	89775
214-265-922.00	WATER & SEWER	CITY OF FRANKFORT	ST 3 WATER AND SEWER	68.55	89787
214-265-924.00	ELECTRIC	CHERRYLAND ELECTRIC	ST 2 ELECTRIC	177.29	89703
214-265-924.00	ELECTRIC-STATION 3 GARAGE 1000 1	CONSUMERS ENERGY	ACCT # 100013543937 PINE ST MTR 3068714	81.84	89790
214-265-924.00	ELECTRIC-STATION 3 1000 1354 355	CONSUMERS ENERGY	ACCT # 100013543556 PARK ST 30697231 EI	117.46	89791
Total For Dept 265 BUILDING & GROUNDS				2,304.56	
Dept 655 ADVANCED LIFE SUPPORT (ALS)					
214-655-735.00	MEDICAL SUPPLIES	BOUND TREE MEDICAL, LLC	MED SUPPLIES	192.20	89784
214-655-735.00	MEDICAL SUPPLIES	BOUND TREE MEDICAL, LLC	MED SUPPLIES	219.67	89784
214-655-735.10	MEDICAL SUPPLIES - GAS	AIRGAS	OXYGEN	71.67	89688
214-655-735.10	MEDICAL SUPPLIES - GAS	AIRGAS	OXYGEN	671.23	89770
214-655-749.00	VEHICLE REPAIRS	QUALITY CAR & TRUCK REPAIR	A21 SERVICE, OIL, HEAT	1,330.93	89742
214-655-749.00	VEHICLE REPAIRS	QUALITY CAR & TRUCK REPAIR	A31 SERVICE	2,043.55	89742
214-655-800.01	CONTRACTED SERVICES - BILLING	FIRE RECOVERY EMS	BILLING INVOICE	2,518.29	89801
214-655-860.00	TRAVEL	THOMAS KING	WORK TRAVEL AND EMS EXPO	207.16	89835
Total For Dept 655 ADVANCED LIFE SUPPORT (ALS)				7,254.70	
Total For Fund 214 EMERGENCY MEDICAL SERVICES (EMS) FUND				9,559.26	
Fund 220 MARINE PATROL FUND					
Dept 000					
220-000-961.00	TRAINING & SCHOOLS	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	454.77	25
220-000-961.00	TRAINING & SCHOOLS	BENZIE COUNTY SHERIFF OFFI	APRIL PETTY CASH BCSO	128.57	89780
Total For Dept 000				583.34	
Total For Fund 220 MARINE PATROL FUND				583.34	
Fund 228 SOLID WASTE/RECYCLING FUND					
Dept 000					
228-000-703.05	WAGES-ATTENDANT	WOOD, MARLENE	SITE DEEP CLEAN APRIL '23	300.00	89764
228-000-850.00	TELEPHONE	VERIZON WIRELESS	652-001 CELLPHONES MAR 13-APRIL 14.23	43.52	89761
228-000-900.00	PUBLIC RELATIONS-PRINTG/PUBLISHN	BENZIE TRANSPORTATION AUTH	BUS ADVERTISING	187.50	89781
228-000-934.00	OTHER REPAIRS/ MAINTENANCE - SIT	NUGENT ACE HARDWARE	SITE MAINTENANCE	75.55	89821
Total For Dept 000				606.57	

05/18/2023 12:53 PM
User: RLynn
DB: Benzie County

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 05/05/2023 - 05/18/2023

Page: 6/10

JOURNALIZED

BOTH OPEN AND PAID

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 228 SOLID WASTE/RECYCLING FUND					
		Total For Fund 228 SOLID WASTE/RECYCLING FUND		606.57	
Fund 231 SOIL EROSION (SESSC) FUND					
Dept 723 SOIL EROSION CONTROL					
231-723-800.00	SOIL EROSION PERMITS	ASSOCIATED GOVERNMENT SER\ PERMIT FEES MAY 2023		2,000.00	89695
		Total For Dept 723 SOIL EROSION CONTROL		2,000.00	
		Total For Fund 231 SOIL EROSION (SESSC) FUND		2,000.00	
Fund 247 ANIMAL CONTROL FUND					
Dept 265 BUILDING & GROUNDS					
247-265-853.00	CELLULAR PHONES	VERIZON WIRELESS	652-001 CELLPHONES MAR 13-APRIL 14.23	88.53	89761
		Total For Dept 265 BUILDING & GROUNDS		88.53	
Dept 430 ANIMAL CONTROL					
247-430-970.00	EQUIPMENT	KYLE'S WELDING AND FABRICZ DIVIDER FOR REAR SEAT KENNEL		737.00	89720
		Total For Dept 430 ANIMAL CONTROL		737.00	
		Total For Fund 247 ANIMAL CONTROL FUND		825.53	
Fund 249 BUILDING DEPARTMENT FUND					
Dept 371 BUILDING INSPECTOR					
249-371-800.00	BUILDING PERMITS	ASSOCIATED GOVERNMENT SER\ PERMIT FEES MAY 2023		13,781.00	89695
		Total For Dept 371 BUILDING INSPECTOR		13,781.00	
Dept 372 PLUMBING INSPECTOR					
249-372-800.00	PLUMBING PERMITS	ASSOCIATED GOVERNMENT SER\ PERMIT FEES MAY 2023		3,344.00	89695
		Total For Dept 372 PLUMBING INSPECTOR		3,344.00	
Dept 373 MECHANICAL INSPECTOR					
249-373-800.00	MECHANICAL PERMITS	ASSOCIATED GOVERNMENT SER\ PERMIT FEES MAY 2023		6,383.00	89695
		Total For Dept 373 MECHANICAL INSPECTOR		6,383.00	
Dept 375 ELECTRICAL INSPECTOR					
249-375-800.00	ELECTRICAL PERMITS	ASSOCIATED GOVERNMENT SER\ PERMIT FEES MAY 2023		7,685.00	89695
		Total For Dept 375 ELECTRICAL INSPECTOR		7,685.00	
		Total For Fund 249 BUILDING DEPARTMENT FUND		31,193.00	
Fund 256 REG OF DEEDS AUTOMATION FUND					
Dept 000					
256-000-963.00	COMPUTER SUPPORT	FIDLAR TECHNOLOGIES INC	AVID LIFE CYCLE ANNUAL MAINT APRIL 23-M	21,386.00	89709
		Total For Dept 000		21,386.00	
		Total For Fund 256 REG OF DEEDS AUTOMATION FUND		21,386.00	
Fund 261 911 EMERGENCY SERVICE FUND					
Dept 325 DISPATCH/COMMUNICATION					
261-325-727.00	OFFICE SUPPLIES	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	5.67	25
261-325-727.00	OFFICE SUPPLIES	AMAZON CAPITAL SERVICES, I	LABEL TAPE AND TV REPLACEMENT	18.59	89692
261-325-727.00	OFFICE SUPPLIES	AMAZON CAPITAL SERVICES, I	EQUIPMENT FOR BACKUP CAD AND GENERAL OF	14.99	89771
261-325-727.00	OFFICE SUPPLIES	AMAZON CAPITAL SERVICES, I	OFFICE SUPPLIES	91.80	89771
261-325-727.00	OFFICE SUPPLIES	BETSIE VALLEY SALES & SER\	LAWNMOWER FILTER	0.24	89782
261-325-853.00	CELLULAR PHONES	VERIZON WIRELESS	VERIZON CREDIT FOR CLOSING ACCOUNT 3867	(5.60)	89761
261-325-853.00	CELLULAR PHONES	AT & T MOBILITY	OEM, EMS & DISPATCH MOBILE DEVICES APRI	1,796.94	89775

05/18/2023 12:53 PM

User: Rlynn

DB: Benzie County

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 05/05/2023 - 05/18/2023

Page: 7/10

JOURNALIZED

BOTH OPEN AND PAID

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 261 911 EMERGENCY SERVICE FUND					
Dept 325 DISPATCH/COMMUNICATION					
261-325-930.00	EQUIPMENT REPAIR	AMAZON CAPITAL SERVICES, I	LABEL TAPE AND TV REPLACEMENT	399.99	89692
261-325-954.10	RENT	BETSIE VALLEY SALES & SER	REPAIR BACKPACK BLOWER	1.20	89697
261-325-954.10	RENT	BETSIE VALLEY SALES & SER	RENTED STUMP BUCKET & LOADER	6.03	89697
261-325-954.10	RENT	GFL ENVIRONMENTAL	ACCT #2126461 WASTE MANAGEMENT (BCSO, JF	2.36	89711
261-325-954.10	RENT	CONSUMERS ENERGY	ACCT #100000514313 MAIN SHERIFF/JAIL EI	46.00	89792
261-325-961.00	TRAINING & SCHOOLS	CORY ELLIS	REIMBURSEMENT FOR ICS 400 CLASS AND RAI	173.65	89705
261-325-961.00	TRAINING & SCHOOLS	NATIONAL EMERGENCY NUMBER	ENP MANUAL	100.00	89817
261-325-970.00	EQUIPMENT	VC3 INC	DELL LAPTOP LESS INV 97065 \$1,052.06	3,620.67	89686
261-325-970.00	EQUIPMENT	AMAZON CAPITAL SERVICES, I	EQUIPMENT FOR BACKUP CAD AND GENERAL OF	108.26	89771
Total For Dept 325 DISPATCH/COMMUNICATION				6,380.79	
Total For Fund 261 911 EMERGENCY SERVICE FUND				6,380.79	
Fund 269 LAW LIBRARY FUND					
Dept 000					
269-000-901.00	RESOURCE MATERIALS	THOMSON REUTERS - WEST	WESTLAW DATABASE APRIL '23	251.43	89758
269-000-901.00	RESOURCE MATERIALS	THOMSON REUTERS - WEST	MAY 2023 LIBRARY SUB BOOKS TANGIBLE PEF	1,008.85	89758
269-000-901.00	RESOURCE MATERIALS	MANISTEE COUNTY	REIMBURSEMENT TO MANISTEE CIRCUIT CRT C	361.80	89813
Total For Dept 000				1,622.08	
Total For Fund 269 LAW LIBRARY FUND				1,622.08	
Fund 286 AMERICAN RESCUE PLAN ACT (ARPA) GRANT					
Dept 000					
286-000-967.00	PROJECT EXPENSES	CHERRY CAPITAL CONNECTION	INTERNET FOR ALL 4TH PMT	100,000.00	89702
Total For Dept 000				100,000.00	
Total For Fund 286 AMERICAN RESCUE PLAN ACT (ARPA) GR				100,000.00	
Fund 292 CHILD CARE FUND					
Dept 000					
292-000-704.02	SALARY - CASEWORKER	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	4,555.31	89814
292-000-725.00	FRINGE BENEFITS - JUVENILE OFFIC	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	485.58	89814
292-000-725.06	FRINGE BENEFITS - CASEWORKER	MANISTEE COUNTY - ADMINIS	MANISTEE COURT COST REIMB APRIL 2023	2,533.25	89814
292-000-850.00	TELEPHONE	ROBINSON, KELLIE	APRIL '23 PH REIMBURSEMENT	50.00	89826
292-000-860.00	TRAVEL/GAS CARDS	ROBINSON, KELLIE	APRIL '23 PH REIMBURSEMENT	435.01	89826
292-000-862.01	INCENTIVES	ROBINSON, KELLIE	APRIL '23 PH REIMBURSEMENT	197.87	89826
Total For Dept 000				8,257.02	
Total For Fund 292 CHILD CARE FUND				8,257.02	
Fund 293 VETERAN'S RELIEF FUND					
Dept 000					
293-000-727.00	OFFICE SUPPLIES	AMAZON CAPITAL SERVICES, I	TABLE CLOTH AMERICAN FLAG	29.95	89692
293-000-839.00	VETERANS BURIALS & MARKERS	SMITH, MOLLY	VA BURIAL BENEFIT - G SMITH	300.00	89749
293-000-839.10	VETERANS FINANCIAL AID	BLARNEY CASTLE OIL COMPAN	PREV BAL AND NEW FILL VA C CARRIS	944.79	89783
293-000-900.00	PRINTING & PUBLISHING	MIDWESTERN BROADCASTING	RADIO ADVERTISING APRIL 2023	1,260.00	89730
293-000-900.00	PRINTING & PUBLISHING	THE PIONEER GROUP	VETERAN'S AD 4.12, 4.7.23	120.00	89756
293-000-955.00	CONVENTIONS & MEETINGS	THE AMERICAN LEGION DEPT	C ADVOCACY TRAINING VA 8.16-18.23	200.00	89755
293-000-970.00	EQUIPMENT	AMAZON CAPITAL SERVICES, I	VA BLUETOOTH LOUDSPEAKER FOR PA SYSTEM	199.90	89771
293-000-970.00	EQUIPMENT	AMAZON CAPITAL SERVICES, I	VA PUBLIC ANNOUNCEMENT SYSTEM COMPONENT	579.89	89771
Total For Dept 000				3,634.53	

05/18/2023 12:53 PM
User: RLynn
DB: Benzie County

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 05/05/2023 - 05/18/2023

Page: 8/10

JOURNALIZED
BOTH OPEN AND PAID

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 293 VETERAN'S RELIEF FUND					
		Total For Fund 293 VETERAN'S RELIEF FUND		3,634.53	
Fund 296 JUVENILE JUSTICE FUND					
Dept 000					
296-000-800.00	CONTRACTUAL SERVICES	LORI R. WADE	SOCIAL WORK SVCS MAY 2023	3,750.00	89723
		Total For Dept 000		3,750.00	
		Total For Fund 296 JUVENILE JUSTICE FUND		3,750.00	
Fund 401 CAPITAL IMPROVEMENT FUND					
Dept 000					
401-000-967.00	PROJECT EXPENSES	VISA	SHERIFF'S OFFICE 6262 APRIL 2023	(30.30)	25
401-000-967.00	PROJECT EXPENSES	VC3 INC	DELL LAPTOP LESS INV 97065 \$1,052.06	1,052.06	89686
401-000-967.00	PROJECT EXPENSES	VC3 INC	SONICWALL TZ670 SECURITY EQUIP, LICENSI	4,322.16	89686
401-000-967.00	PROJECT EXPENSES	JOHNSON CONTROLS FIRE PRO1	SALLY PORT DOOR PROJECT NEW LOCKS INSTP	1,710.80	89717
		Total For Dept 000		7,054.72	
		Total For Fund 401 CAPITAL IMPROVEMENT FUND		7,054.72	
Fund 516 DELINQUENT TAX REVOLVING FUND					
Dept 000					
516-000-694.00	CASH OVER/SHORT	MARTINDALE JEFFERY & BARB	OVERPAID ON DLQ TAXES FOR 07-002-003-0C	18.88	89724
516-000-694.00	CASH OVER/SHORT	TORTI, ANTHONY JOHN	OVERPAID ON DLQ TAXES FOR 10-130-003-0C	30.42	89759
		Total For Dept 000		49.30	
		Total For Fund 516 DELINQUENT TAX REVOLVING FUND		49.30	
Fund 532 TAX FORECLOSURE FUND					
Dept 253 COUNTY TREASURER					
532-253-801.00	CONTRACTED SERVICES	TITLE CHECK LLC	PARCEL ADMIN FEES 2021 TAX CYCLE	580.67	89836
532-253-810.00	LEGAL FEES	BENZIE COUNTY CLERK	FILING FEE COURT PETITION OF FORECLOSUF	175.00	89779
		Total For Dept 253 COUNTY TREASURER		755.67	
		Total For Fund 532 TAX FORECLOSURE FUND		755.67	
Fund 701 GENERAL AGENCY FUND					
Dept 136 DISTRICT COURT					
701-136-214.01	DUE TO SHERIFF'S DEPT - OWI REIM	BENZIE COUNTY SHERIFF OFFI	OWI REIMBURSEMENT APRIL 2023	768.50	89696
701-136-228.07	DUE STATE - FILING/REINSTATEMEN	STATE OF MICHIGAN	FEE TRANSMITTAL TO STATE DIST CT	7,863.60	89753
701-136-265.00	CASH BONDS PAYABLE	MESKES, JILL	BOND REIMB T ANDERSON 20-211-SM-2	200.00	89685
701-136-265.00	CASH BONDS PAYABLE	MESKES, JILL	REIMB BOND T ANDERSON 20-211-SM-2	500.00	89685
701-136-265.00	CASH BONDS PAYABLE	85TH DISTRICT COURT	BOND APPL TO FINES M EVAN 23-028-2D-2	500.00	89687
701-136-265.00	CASH BONDS PAYABLE	JACKSON, DEMARCO	REIMB BOND D JACKSON 23-008-SM-2	200.00	89716
701-136-265.00	CASH BONDS PAYABLE	19TH CIRCUIT COURT - BENZI	BOND FOR BIRDSALL, ADAM 23-076-FD-2	500.00	89767
701-136-265.00	CASH BONDS PAYABLE	85TH DISTRICT COURT	BOND COSTS APPLIED TO FINES MULTIPLE,	2,551.00	89769
701-136-265.00	CASH BONDS PAYABLE	ANDERSON, TOMMY	BOND ANDERSON T 20-211-SM-2	25.00	89773
701-136-265.00	CASH BONDS PAYABLE	ELZINGA, STORM	BOND FEALA, E 23-112-SM-2	250.00	89800
701-136-265.00	CASH BONDS PAYABLE	PARKEY, CANNON JAMES	BOND 23-029-SD-2 PARKEY, CANNON	75.00	89824
701-136-265.00	CASH BONDS PAYABLE	SCHWARTZ, JOHN PAUL	BOND SCHWARTZ, J 23-100-SD-2	549.00	89828
701-136-266.01	COURT ORDER - ESCROW	PATTERSON CROSSING LLDHA I	ESCROW FUNDS 22-261-LT	705.00	89740
701-136-271.00	RESTITUTIONS PAYABLE	DOLLAR GENERAL	RESTITUTION H SNYDER 22-328-SM	8.00	89706
701-136-271.00	RESTITUTIONS PAYABLE	HOMAN, LYNN	RETITUITION 18-351-SM	150.00	89714
701-136-271.00	RESTITUTIONS PAYABLE	SMARTLINKS, INC	RESTITUTION 20-009-SM N BALLARD	5.00	89748
701-136-271.00	RESTITUTIONS PAYABLE	AMICA MUTUAL INS CO	RESTITUTION ROWE M 18-226-ST	100.00	89772
701-136-271.00	RESTITUTIONS PAYABLE	AUTO-OWNERS INSURANCE	RESTITUTION PELL S 18-336-SM	75.00	89776

05/18/2023 12:53 PM
User: RLynn
DB: Benzie County

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 05/05/2023 - 05/18/2023

Page: 9/10

JOURNALIZED
BOTH OPEN AND PAID

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
Fund 701 GENERAL AGENCY FUND					
Dept 136 DISTRICT COURT					
701-136-271.00	RESTITUTIONS PAYABLE	GLEN LAKE ELECTRIC IN	RESTITUTION CIKITY S 52523	100.00	89802
701-136-271.00	RESTITUTIONS PAYABLE	KRISTY MANNING	RESTITUTION J STEVENS 15-125-SM	50.00	89810
701-136-271.00	RESTITUTIONS PAYABLE	STATE SAVINGS BANK	RESTITUTION VOICE T 18-107-FY	40.00	89831
701-136-275.00	REFUNDS	KELLER, MATTHEW	OVERPAYMENT OF FINES & COSTS	1.00	89808
Total For Dept 136 DISTRICT COURT				15,216.10	
Dept 148 PROBATE COURT					
701-148-228.56	DUE STATE - EFILING FEE	STATE OF MICHIGAN	PROBATE FEES DUE TO STATE FOR APRIL 202	1,589.91	89752
Total For Dept 148 PROBATE COURT				1,589.91	
Dept 215 COUNTY CLERK					
701-215-271.00	RESTITUTIONS PAYABLE	ANNIE BROWNING	RESTITUTION J STREETER 18-2548 FC	25.00	89694
701-215-271.00	RESTITUTIONS PAYABLE	BENZIE COUNTY SHERIFF OFF	RESTITUTION A MYSLIWIEC 212766FH	15.00	89696
701-215-271.00	RESTITUTIONS PAYABLE	BENZIE COUNTY SHERIFF OFF	RESTITUTION MYSLIWIEC 21-2766-FH	30.00	89780
701-215-271.00	RESTITUTIONS PAYABLE	STEFAN GRAVIS	RESTITUTION B PIPER 17-2534-FH	50.00	89832
Total For Dept 215 COUNTY CLERK				120.00	
Dept 253 COUNTY TREASURER					
701-253-274.19	APPEALS/CHARGEBACKS/REFUNDS	MOONEY, GRETCHEN C	PRE ADJUSTMENTS FOR 0450102200,04502025	1,087.30	89816
701-253-275.00	TAX OVERPAYMENTS/REFUNDS	AMERICAN RETIREMENT LIFE	REFUND AMBULANCE - OTHER AGENCY PAID	129.03	89693
701-253-275.00	TAX OVERPAYMENTS/REFUNDS	MERIDIAN MICHIGAN -MDR	REFUND AMBULANCE - AUTO CARRIER PAID	542.97	89726
701-253-275.00	TAX OVERPAYMENTS/REFUNDS	PARRETT, CLAUDE	REFUND AMBULANCE - MEDICAID PAID	20.00	89739
701-253-275.00	TAX OVERPAYMENTS/REFUNDS	PRIORITY HEALTH	REFUND AMBULANCE - OTHER AGENCY PAID	279.98	89741
701-253-275.00	TAX OVERPAYMENTS/REFUNDS	RENNIE, JACQUELYN	REFUND AMBULANCE - INSURANCE PAID	1,570.00	89743
701-253-275.00	TAX OVERPAYMENTS/REFUNDS	RENNIE, JACQUELYN	REFUND AMBULANCE - INSURANCE PAID	1,541.60	89743
701-253-275.00	TAX OVERPAYMENTS/REFUNDS	UNITED HEALTHCARE	REFUND AMBULANCE - AUTO INSURANCE PAID	857.93	89760
701-253-275.00	TAX OVERPAYMENTS/REFUNDS	WPS GHA	REFUND AMBULANCE - OTHER AGENCY PAID	516.09	89765
701-253-275.00	TAX OVERPAYMENTS/REFUNDS	WPS GHA	REFUND AMBULANCE - OTHER AGENCY PAID	533.72	89766
701-253-275.00	TAX OVERPAYMENTS/REFUNDS	HETCEL, NATHAN	OVERPAID ON DOG LICENSE REFUND	30.00	89805
Total For Dept 253 COUNTY TREASURER				7,108.62	
Dept 261 MSU EXTENSION					
701-261-235.00	DUE TO MSU	4-H LEADERS ASSOCIATION	10 PLAT BOOKS SOLD	350.00	89768
Total For Dept 261 MSU EXTENSION				350.00	
Dept 301 SHERIFF					
701-301-228.16	DUE STATE - FINGER PRINT FEES	MICHIGAN STATE POLICE - C/	LIVESCAN APRIL 2023	212.25	89728
701-301-228.63	DUE STATE - SEX OFFENDER'S REG.	MICHIGAN STATE POLICE - C/	SEX OFF APRIL 2023	60.00	89728
Total For Dept 301 SHERIFF				272.25	
Total For Fund 701 GENERAL AGENCY FUND				24,656.88	

05/18/2023 12:53 PM
User: RLynn
DB: Benzie County

INVOICE GL DISTRIBUTION REPORT FOR BENZIE COUNTY
EXP CHECK RUN DATES 05/05/2023 - 05/18/2023

Page: 10/10

JOURNALIZED
BOTH OPEN AND PAID

GL Number	Invoice Line Desc	Vendor	Invoice Description	Amount	Check #
-----------	-------------------	--------	---------------------	--------	---------

Fund Totals:

Fund 101 GENERAL FUND	58,624.77
Fund 206 SHERIFF'S K-9 I	54.99
Fund 209 SCHOOL RESOURCE	11,514.36
Fund 213 JAIL OPERATIONS	118,671.17
Fund 214 EMERGENCY MEDIC	9,559.26
Fund 220 MARINE PATROL I	583.34
Fund 228 SOLID WASTE/REC	606.57
Fund 231 SOIL EROSION (S	2,000.00
Fund 247 ANIMAL CONTROL	825.53
Fund 249 BUILDING DEPAR	31,193.00
Fund 256 REG OF DEEDS A	21,386.00
Fund 261 911 EMERGENCY S	6,380.79
Fund 269 LAW LIBRARY FUN	1,622.08
Fund 286 AMERICAN RESCUE	100,000.00
Fund 292 CHILD CARE FUNI	8,257.02
Fund 293 VETERAN'S RELIEF	3,634.53
Fund 296 JUVENILE JUSTICE	3,750.00
Fund 401 CAPITAL IMPROV	7,054.72
Fund 516 DELINQUENT TAX	49.30
Fund 532 TAX FORECLOSURE	755.67
Fund 701 GENERAL AGENCY	24,656.88

Total For All Funds:	411,179.98
----------------------	------------

Payable May 6 to May 31

DATE	FUND 101 GENERAL	FUND 213 JAIL	FUND 214 EMS	FUND 105-238	FUND 247 ACO	FUND 249 BUILDING	FUND 261 DISPATCH	FUND 239-292	FUND 293-690	FUND 701 TRUST/ AGENCY	FUND 702-771	TOTALS
5/5/2023											\$700.00	\$ 700.00
5/11/2023	\$ 14,551.10	\$ 110,789.04	\$ 4,386.58	\$ 13,857.88	\$ 825.53	\$ 31,193.00	\$ 4,216.89	\$ 122,646.28	\$ 12,794.27	\$ 18,093.58		\$ 333,354.15
5/11/2023 EFT	\$ 421.96	\$ 482.13		\$ 509.76			\$ 5.67		\$ (30.30)			\$ 1,389.22
5/18/2023	\$ 43,651.71	\$ 7,400.00	\$ 5,172.68	\$ 391.62			\$ 2,158.23	\$8,618.82	\$ 2,480.25	\$ 5,863.30		\$ 75,736.61
												\$ -
												\$ -
												\$ -
												\$ -
												\$ -
												\$ -
												\$ -
												\$ -
												\$ -
												\$ -
												\$ -
												\$ -
												\$ -
												\$ -
Totals	\$ 58,624.77	\$118,671.17	\$ 9,559.26	\$ 14,759.26	\$ 825.53	\$ 31,193.00	\$ 6,380.79	\$ 131,265.10	\$ 15,244.22	\$ 23,956.88	\$ 700.00	\$411,179.98

206-K-9 Fund
207-Sheriff Reserve's
208-Dive Team
209-Resourse Officer
210-Benzie Kids
211-D.A.R.E. Fund
215-FOC

230-BVTMC
232-Planning/Zoning
235-CBDG
238-EDC
245-Remonumentation
256-Reg of Deeds
262-911-Training

269-Law Library
270-Platte River Bridge
271-Housing Grant
276-Council on Aging
285-Pt. Betsie Lighthouse
292-Child Care Fund
293-Soldiers Relief Fund

310-Gov't Ctr Addition-Debt
315-Benzie Leelanau Health
321-Jail Bond
371-Jail Bldg Debt Millage
425-Equipment Replace

Elected Officials And Department Heads



Benzie County Equalization Department
Polly Watson Cairns, Director of Record
Brianne Lindsay, Equalization Department Head
448 Court Place, Beulah, MI 49617
Phone: (231)882-0013 Fax: (231)882-0033

To: Benzie County Board of Commissioners

May 23, 2023

From: Brianne Lindsay, Equalization Department Head

cc: Polly Watson Cairns, Equalization Director of Record

Re: Recap of April/May 2023

April/May 2023

- Equalization report was prepared and presented to County Commission at their meeting April 11th and the signed L-4024 has been uploaded to MEG.
- Department has filed Form 2164 (L-4023) for each unit within the county.
- Department has filed Form 4626 for each unit within the county.
- Database has been rolled over, balancing verified, and appraisal parcels have now been marked in the 2024 database. We have cleaned up some information in our database to match township parcel counts.
- Department has finalized the L-4028 and provided this information to neighboring counties.
- Preparing L-4028 I.C. for submission to County Treasurer and STC
- Prepared information for Truth in Taxation publication and provided it to the Clerk's office.
- Preparing the Personal Property Summary Report (PPSR) and Personal Property Inter-County Summary Report (PPSR-IC) for submission to the Department of Treasury.
- PTA's received by assessors are reviewed and entered into the database. Equalization sends form 2766 to those that fail to file or if sale price is not stated on deed.
- Trish continues to send RPS's (Form L-4182R) to Ag, Com & Ind properties on a monthly basis, as deeds are received for additional sales information and for possible use in future appraisal studies.
- Building permit exports sent to the assessors at the beginning of each month, staff will continue to send building permit information to assessors on a monthly basis.
- BS&A backup have been uploaded to the State to provide updates on work progress.

- Have begun the planning and selection process for the upcoming 2023/2024 studies.
- Land Value and ECF Studies are in the preliminary stages - parcels are being identified for land value & ECF analysis for the new year.
- Department is working through the STC 2023 Property Tax, Collections, & Equalization Calendar, to keep on task.
- Cleaning up the website, making it more user friendly.
- Working with the GIS company hired for splits and tax descriptions.



Signature

Brianne Lindsay, MAAO
Equalization Department Head

Benzie County Equalization Department
E: blindsay@benzieco.net



Signature

Polly Watson Cairns, MMAO
Equalization Director of Record

Benzie County Equalization Department
E: pcairns@benzieco.net



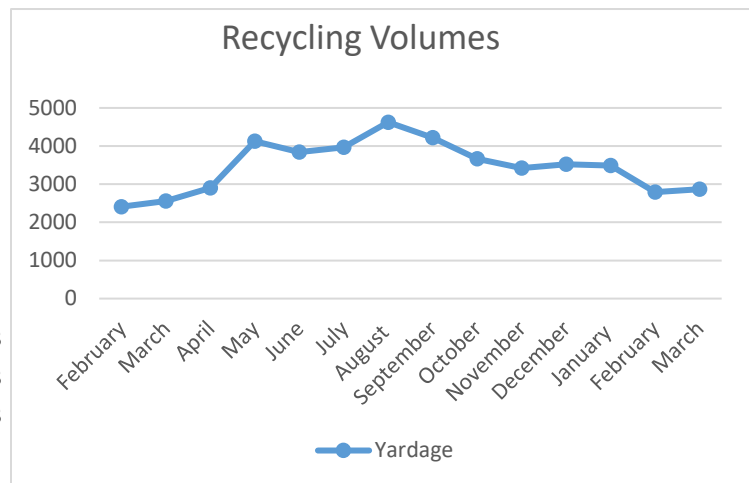
Memo To: Board of Commissioners
From: Jesse Zylstra, Solid Waste and Recycling Coordinator
Date: May 17th, 2023
Subject: Recycling Coordinator's Activities

- **Recent Recycling Numbers:**

February: Tonnage: 76.73 tons
Yardage: 2,790 yards

March: Tonnage: 78.93 tons
Yardage: 2,870 yards

Single Stream: FY 2022: 41,500 yards
FY 2021: 46,825 yards
FY 2020: 41,787 yards



- **HHW/Electronics/Scrap Tire Collections – 2023 – Saturdays 9:00 am – 1:00 pm**

June 3rd Frankfort High School

July 15th (Tire Only) Thompsonville DPW

August 12th Honor Road Commission

- **Materials Management Plan Update: Part 115 -**

The process is now expected to begin early 2024. Once the EGLE Director calls for the initiation of the process, Counties will have 180 days from that date to file a Notice of Intent and declare the entity who will be responsible for preparing the Plan. EGLE funding will be available in the amount of \$60,000 with an additional \$10,000 per County for those working on a Regional Plan Update. Regional Collaboration is strongly encouraged. Discussion is taking place with Leelanau and Grand Traverse County regarding a joint planning process.

- **Ongoing Activities:**

Scrap Tire Grant – **2023 Grant Awarded in the amount of \$12,000 – Contract Signed**

Cardboard Trailers – Currently experiencing interrupted service due to maintenance.

County-wide Battery Bucket pickups and sorting. **(1,584 lbs)**

Jesse Zylstra Solid Waste and Recycling Coordinator

Benzie Senior Resources
Board of Directors Meeting
April 19th, 2023 Meeting Minutes
The Gathering Place Senior Center and Conference Call-in

Call to Order: Nancy Mullen Call called the meeting to order at 4:33pm

Pledge of Allegiance: Said by all present

Nancy Mullen Call recognized Doug Durand's 10-year work anniversary on April 8th and the group congratulated him.

Roll Call:

In Person: Nancy Mullen Call, Victor Dinsmoore, Dinah Haag, Pam Howe-Perry, Leo Hughes, Linda Ringleka, Ingrid Turner, and Paul Turner

Via Conference Call: None

Also, In-Person:, Sabra Boyle, Doug Durand, and Tim Markey

Excused: Dawn Bousamra and Rosemary Russell

Approval of the April 19, 2023 Agenda – A motion to approve the agenda as amended (added potential Board Member support to make presentations of the BSR Annual Report at various community entities) was made by Victor Dinsmoore and seconded by Ingrid Turner. All in-person board members said Aye. Motion approved.

Approval of Minutes from the March 15, 2023 Board Meeting – A motion to accept the minutes as presented was made by Ingrid Turner and seconded by Linda Ringleka. All in-person board members said Aye. Motion approved.

Public Input: No public at the meeting

Information Items:

- A. Leadership Committee Report – Quarterly Report Update:** Nancy Mullen Call summarized the fiscal year 2nd Quarter accomplishments and plans for the 3rd Quarter. The written report will be distributed with next month's BOD Meeting packet.
- B. Fund Development Committee Report – Quarterly Report Update:** Ingrid Turner summarized the fiscal year 2nd Quarter accomplishments and plans for the 3rd Quarter. The written report will be distributed with next month's BOD Meeting packet. Additionally, Ingrid Turner advised the following: The BSR Golf Outing that Jamie Gray organizes is scheduled for Sunday, June 11th at Crystal Lake Golf Course; Two potential BSR Interns have been identified for this summer; The Fund Development Committee has added two members (Dinah Haag – current board member and Deb Rogers – a prior board member).
- C. Governance Committee Report – Quarterly Report Update:** Leo Hughes summarized the fiscal year 2nd Quarter accomplishments and plans for the 3rd Quarter. The written report will be distributed with next month's BOD Meeting packet.
- D. Program/Personnel Committee Report – Quarterly Report Update:** Paul Turner summarized the fiscal year 2nd Quarter accomplishments and plans for the 3rd Quarter. The written report will be distributed with next month's BOD Meeting packet. Paul Turner also advised that 36 sections of the employee handbook have been reviewed/updated and they are making good progress with approximately 80% of the handbook being completed. There was good general discussion around this effort and appreciation of the hard work involved.
- E. Director's Report** – Doug Durand summarized the key elements of his report which include: The Home Healthcare Client Handbook is in the final stages of review and is planned for implementation by May 1st, 2023; He advised that he will be presenting at the Benzie County Human Services Collaborative this month; A new fulltime CNA was hired and another Home Healthcare Aide may have been identified; BSR is in contact with Michigan Shores regarding the potential for a weekly footcare clinic; State Representative Coffia has been invited to join on a ride along for home delivered meals in the near future.

- F. Program/Services Report – February 2023** – Doug Durand general comments included: The waiting list for homemakers is currently only 6 clients; HDM are down 248 meals in total over the last 6 months. Many clients have moved from HDM to Congregate meals; Program participant numbers are up for all activities; Oral healthcare is the only service that is slow to get going again in Benzie County; The Emergency Needs program is very active.
- G. Assistant Director’s Report – Communications and Public Relations** – Dawn Bousamra did not attend the Board Meeting so Doug Durand provided a brief update on the Community Leader HDM ride along participation and summarized that the Record Patriot and the Benzie Current will begin running BSR articles.
- H. Board of Commissioners Update** – Tim Markey, County Commissioner, provided the following update: The Maples director advised they are now serving 72 families and all is going well; Sheriff Rosa updated the Commissioners that they have a new Centra Wellness special deputy that started March 27th and 2 new deputies that graduated from the Academy at West Shore; Sheriff Rosa also mentioned that Sargent Ketz, the K9 dog handler, is retiring April 15th along with his dog Rexo and the Sheriff is planning to replace both; the Commissioners approved ARPA funds in the amount of \$38k for 50% of the cost to pave Henry Road to the new elementary school and Benzonia Township has agreed to pay the other 50%; The Commissioners also approved: \$80,000 for the Crystal Lake Outlet Project; the lease of a body scanner for the jail; Phase II of the lower level of the dispatch center. Additionally, Benzie County administration is continuing to update Benzie County Employee policies.

Action Items:

- 1. Finance Committee Report on the March 2023 Financials and Year to Date Financial Quarterly Report with Board Approval of the March 2023 and Year to Date Quarterly Financial Reports** – Victor Dinsmoore advised that the Finance Committee has reviewed the financial report and are recommending the Board approve the report. A motion to approve the March and YTD 2023 Financials was made by Pam Howe-Perry and seconded by Leo Hughes. Roll Call: Victor Dinsmoore – Yes; Dinah Haag – Yes; Pam Howe-Perry – Yes; Leo Hughes – Yes; Linda Ringleka – Yes; Ingrid Turner – Yes; Paul Turner – Yes; and Nancy Mullen Call – Yes. Motion approved.
- 2. Working session for BOD with Elaine Wood** – Nancy Mullen Call summarized the need for updating the Strategic Plan and to have an in-depth BOD discussion on the need for a larger facility for BSR. She proposed utilizing Elaine Wood who previously worked with the Board on the strategic plan development. Nancy then asked the BOD what timing was most convenient, and most members preferred a weekday evening.
- 3. Executive Director Evaluation Approval** – Nancy Mullen Call had previously provided all Board members with a copy of the evaluation. A motion to approve the Executive Director Evaluation was made by Paul Turner and seconded by Linda Ringleka. All in-person board members said Aye. Motion approved.
- 4. Review and Approve Adjustment of When Full Time Employee Benefits Become Effective After Hire** – Doug Durand highlighted a recent example of where he was unable to convince a fully qualified candidate to accept a position with BSR due to our policy of a 90-day waiting period for benefits take effect. Good general discussion by all on this issue and that we need to ensure our competitiveness in the marketplace to enable us to attract qualified personnel. Nancy Mullen Call then proposed that we change our policy so that benefits (health insurance, short and long-term disability insurance, and life insurance) become effective on the first of the month following a 30-day waiting period from the date of hire. A motion to approve this policy change was made by Paul Turner and seconded by Victor Dinsmoore. Roll Call: Victor Dinsmoore – Yes; Dinah Haag – Yes; Pam Howe-Perry – Yes; Leo Hughes – Yes; Linda Ringleka – Yes; Ingrid Turner – Yes; Paul Turner – Yes; and Nancy Mullen Call – Yes. Motion approved.

New Business:

- 1. Report on BWAC meeting and Benzie County Central School Board Meeting** - Nancy Mullen Call introduced the topic and asked Leo Hughes to summarize our discussions with both BWAC and the BCCS School Board. Leo Hughes reminded the BSR Board of the letter they previously reviewed that was sent to Brian Childs, President of the Benzie Central Schools Board of Education, outlining our potential interest in the Crystal Lake Elementary School facility and property. Leo then summarized that Nancy Mullen Call briefly addressed the School Board during the public comment section of their meeting requesting their patience on taking any action on the disposition of the

Crystal Lake Elementary School as we explore potential collaboration opportunities with BWAC. Leo Hughes further summarized that he, Nancy Mullen Call, Victor Dinsmoore, and Doug Durand had preliminary discussions with members of the BWAC organization regarding what such a collaboration might look like and that we have scheduled a two-hour working session to begin dialogue with 2 members of the BWAC group.

Old Business:

- 1. Potential Board Member support to make presentations of the BSR Annual Report at various community entities** – Nancy Mullen Call requested all Board members consider how they could support community presentations of our annual report to further build community awareness of what BSR provides to Benzie County residents. Doug Durand to provide a copy of his presentation as an example.

Board Round Table Discussion/Evaluation of Meeting – None

Adjournment: There being no further business to discuss a motion to adjourn at 6:30pm was made by Victor Dinsmoore and seconded by Linda Ringleka. All in-person board members said Aye. Motion approved.

Respectfully submitted:

Leo Hughes

Secretary, Benzie Senior Resources Board

NEXT MEETING: Wednesday, May 17th, 2023 at 4:30 p.m.

Location: The Gathering Place Senior Center, 10579 Main Street, Honor, MI 49640

**Benzie Senior Resources
Executive Directors Report
April 2023 – May 2023**

Items of Information

- The Jamie Gray Group and the Crystal Lake Golf Course will be hosting a Charity Day Event for BSR on June 11th. This is an 18 Hole Four Person Scramble with the Shotgun start at 8:30am. All proceeds will benefit BSR. The Fund Development Committee and I are working with Jamie Gray.
- On April 13th, Northern Healthcare Management conducted a on-site monitoring visit to review eighty-five targeted areas of the BSR Home Healthcare Program. We ended up with 2 findings, one for a new policy regarding Client Satisfaction Surveys and the creation of a Client In-Home Journal for staff to document their tasks performed and the next scheduled appointment. Both items have been created and submitted to NHC and they have approved our corrective action plan.
- The Personnel/Program Committee and I have completed the review of the BSR Employee Handbook. I will be reviewing the final changes and updating the content of the handbook. After those items are completed, I will then send the new Employee Handbook to our attorney for review.
- The Home Healthcare Director and I will be working to create a new Home Care Assistant Guide for our Home Healthcare staff.
- I have started early planning for the Walk-a-Thon Event that will be held on Saturday, August 5th, at the 7th Street Beach Park in Frankfort. This is our largest fundraising event, and this event will become the focus of the Fund Development Committee for the next 2 ½ months.
- As part of the Strategic Plan in looking at expanding our programs/services to other regions of the County, I worked with Michigan Shores at their request to have a foot care clinic. I am happy to report that the foot care clinic is scheduled for May 18th with another one on May 30th.

Staffing Updates

- We have hired a new part-time RN. The main role for this position starting out will be to conduct assessments on clients with significant changes in their condition. We have also hired a new Homemaker Contractor, which will alleviate the waiting list and give us the opportunity to take on new clients.

Volunteer Report

- We had one new HDM volunteer complete their orientation.

Legislative News

Federal – Paying close attention to the budget process in D.C. with implications for potential cuts to the Nutritional Programs and other senior services. I will be following the lead of the advocacy efforts with Meals on Wheels America for guidance in my responses to our Federal Legislators.

State – I have provided information regarding the challenges of providing services in a rural community. This information will be used as part of a group testimony to the State legislature.

Program Report for April 2023

Nutritional Programs

Home Delivered Meals

A total of 5,590 meals were provided to 198 clients in April 2023. The number of meals delivered also includes 70 shelf stable meals to new clients.

Congregate Meals

In April 2023, we provided 1,333 congregate and takeout meals.

Year to date we have provided/delivered 51,239 meals. Overall, we are down by 665 meals as compared to the same period a year ago.

Other Programs

Homemaker Program – In April 2023, we provided 322 service hours to 98 clients. This is a 26.3% increase over April 2022. The waiting list is now down to 4.

Guardian Medical Monitoring – Currently we are paying for thirty-five clients in April 2023. The waiting list has three clients.

Snow Removal – Contractors turned in 179 vouchers for reimbursement for snow plowing.

Benzie Bus Senior Rides – In April 2023, we paid for 1,881 regular senior rides in Benzie County; paid for 310 rides for regular in county medical appointments; 22 rides for the Healthrides for non-emergency appointments and 37 rides into Traverse City. This is a 36.5% increase as compared to April 2022. Seven new riders signed up in April 2023.

Information & Assistance - The agency handled 996 calls in April 2023 regarding Information and Assistance for services and questions related to older adults. This represents a 1% increase as compared to April 2022.

Senior Oral Healthcare Program – We provided financial assistance to two clients during the month of April 2023.

Medicare/MMAP's – Our certified MMAP's counselor assisted two clients in April 2023 with their Medicare/Medicaid questions/concerns at no cost to them.

Foot Care – Two clients received in-home foot care and forty-nine clients attended the foot care clinic in April 2023.

Hearing Clinic – No one signed up for the hearing clinic in April 2023. Higgins Hearing Clinic is doing presentations at TGP to promote their free hearing aide cleaning and evaluations.

Estate Planning – Three individuals received services in April 2023 at no cost to them.

Income Tax Services – Through April, 272 were provided with this free income tax return service.

Emergency Senior Essential Needs Fund – BSR assisted two clients for financial assistance in April 2023. Financial support was used for emergency medical device machine and a propane fill.

The Gathering Place Senior Center – The Gathering Place Senior Center offered 20 core activities that 671-cumulative number of individuals participated in in April 2023. **This is a 12.6% increase over April 2022.**

In-Home Care Services for April 2023 – Compared to April 2022 we had an increase of 20 new clients.

Number of Home Health Care Clients

Month	Medicaid Waiver Care Management PACENorth	Sliding Scale Fee	Private Pay	Total Clients
October 2022	26	61	3	90
November 2022	27	66	3	96
December 2022	25	70	3	98
January 2023	26	72	3	101
February 2023	25	68	3	96
March 2023	24	74	2	100
April 2023	28	70	2	100
May 2023				
June 2023				
July 2023				
August 2023				
September 2023				

Client Total Hours

Month	Medicaid Waiver Care Management PACENorth	Sliding Scale Fee	Private Pay	Assessments And Wound Care	Total Hours
October 2022	409	459.5	9.25	61	938.75
November 2022	410.25	472.25	20	49	951.5
December 2022	367.25	525.5	11.25	25	929
January 2023	325.5	541.5	17.5	38	922.5
February 2023	320	449	7.5	80	856.5
March 2023	395	532.5	7.75	76	1011.25
April 2023	321.25	469.5	9.5	74	874.25
May 2023					
June 2023					
July 2023					
August 2023					
September 2023					
TOTALS	2548.25	3449.75	82.75	409	6483.75

Client Total Visits

	RN Assessments	RN Med Management	Personal Care	Respite	Homemaking	In home Foot Care/ Wound care	Totals
October 2022	61	50	366	13	27	12	529
November 2022	49	51	368	7	37	8	520
December 2022	25	55	365	3	43	3	494
January 2023	38	53	367	5	39	1	503
February 2023	80	41	320	9	32	8	490
March 2023	76	45	423	3	25	6	578
April 2023	74	41	372	5	14	2	508
May 2023							
June 2023							
July 2023							
August 2023							
September 2023							
Totals	403	336	2581	45	217	40	3622

Benzie Senior Resources Agency Update 6 Month Comparison Service/Program Report

Service/Program	2022	2023	Difference +/-
Homemaking	1,652 Service Hrs	1,712 Service Hrs	+62 Service Hours
Home Delivered Meals	36,977 Meals	35,422 Meals	-1,555 Meals
Congregate Meals	7,287 Meals	8,894 Meals	+1,607 Meals
Senior Transportation	6,990 Rides	10,608 Rides	+3,618 Rides
Snow Removal	Clients-150 1,090 Plows	Clients-167 1,153 Plows	+17 Clients +63 Plows
Activity Participants	2,232 Attendance	3,540 Attendance	+1,308 Attendance
MMAF's	133 Clients	91 Clients	-42 Clients
Income Taxes	167 Packets Done	183 Packets Done	+16 Packets Done
Estate Planning	28 Clients	25 Clients	-3 Clients
I & A phone calls	6,368 Phone Calls	6,243 Phone Calls	-125 Phone Calls
Personal Care Visits	1,494 Visits	2,209 Visits	+715 Visits
Respite Care Visits	235 Visits	243 Visits	+8 Visits
RN Visits	741 Visits	662 Visits	-79 Visits
HHC Total Client Hours	5,292.75 Hrs	5,609.50 Hrs	+316.75 Hours

BENZIE SENIOR RESOURCES
Statement of Financial Position
As of April 30, 2023

	Apr 30, 23	Sep 30, 22	\$ Change
ASSETS			
Current Assets			
Checking/Savings			
001 · STATE SAVINGS BANK CHECKING	129,439.85	165,669.05	(36,229.20)
003 · STATE SAVINGS BANK HRA	1,799.37	1,871.09	(71.72)
011 · AMERICAN DEPOSIT MANAGEMENT	113,064.59	57,477.18	55,587.41
011.3 · BOARD DESIGNATED OP RESERV FUND	565,700.00	470,350.00	95,350.00
Total Checking/Savings	810,003.81	695,367.32	114,636.49
Accounts Receivable			
1200 · Accounts Receivable	21,557.96	37,809.99	(16,252.03)
Total Accounts Receivable	21,557.96	37,809.99	(16,252.03)
Other Current Assets			
109 · INVENTORY	14,792.40	12,432.04	2,360.36
125 · PREPAID EXPENSE	0.00	5,451.42	(5,451.42)
1499 · Undeposited Funds	11,643.00	114,897.12	(103,254.12)
Total Other Current Assets	26,435.40	132,780.58	(106,345.18)
Total Current Assets	857,997.17	865,957.89	(7,960.72)
Fixed Assets			
150 · BUILDING	480,375.70	480,375.70	0.00
151 · VEHICLES	173,363.00	173,363.00	0.00
152 · EQUIPMENT	165,017.48	152,634.03	12,383.45
157 · LAND IMPROVEMENTS	1,800.00	1,800.00	0.00
160 · ACCUMULATED DEPRECIATION	(460,217.21)	(436,425.05)	(23,792.16)
Total Fixed Assets	360,338.97	371,747.68	(11,408.71)
TOTAL ASSETS	1,218,336.14	1,237,705.57	(19,369.43)
LIABILITIES & EQUITY			
Liabilities			
Current Liabilities			
Accounts Payable			
2000 · Accounts Payable	32,664.05	35,699.82	(3,035.77)
Total Accounts Payable	32,664.05	35,699.82	(3,035.77)
Other Current Liabilities			
GARNISHMENT PAYABLE	238.19	0.00	238.19
2100 · Payroll Liabilities	3,352.86	7,478.21	(4,125.35)
220 · ACCRUED VACATION LIABILITY	0.00	53,721.86	(53,721.86)
239 · ACCRUED WAGES	0.00	37,818.32	(37,818.32)
Total Other Current Liabilities	3,591.05	99,018.39	(95,427.34)
Total Current Liabilities	36,255.10	134,718.21	(98,463.11)
Long Term Liabilities			
250 · MORTGAGE PAYABLE	97,255.78	102,768.18	(5,512.40)
253 · LEASE PAYABLE	4,805.70	5,740.27	(934.57)
260 · NET PENSION LIABILITY	503,007.00	503,007.00	0.00
Total Long Term Liabilities	605,068.48	611,515.45	(6,446.97)
Total Liabilities	641,323.58	746,233.66	(104,910.08)
Equity			
3900 · FUND BALANCE	491,471.91	513,668.45	(22,196.54)
Net Income	85,540.65	(22,196.54)	107,737.19
Total Equity	577,012.56	491,471.91	85,540.65
TOTAL LIABILITIES & EQUITY	1,218,336.14	1,237,705.57	(19,369.43)

BENZIE SENIOR RESOURCES
Statement of Financial Income & Expense
April 2023

	April 2023	Budget	\$ Change
ORDINARY INCOME/EXPENSE			
INCOME			
519.03 · TITLE III C2 INCOME	9,774.00	9,774.00	0.00
519.05 MIPPA (MMAPI)	150.00	130.00	20.00
519.06 WAIVER SNOW REMOVAL	225.00	0.00	225.00
540 · GRANTS	6,500.00	9,585.00	(3,085.00)
561 - HDM WAIVER	2,483.00	1,773.00	710.00
642 · CHARGES FOR SERVICES/CONT	207.00	412.00	(205.00)
642.01 · FEE FOR SERVICE/CHORE	5,802.00	8,500.00	(2,698.00)
642.02 · FEE FOR SERVICE/HOMEMAKER	4,264.00	3,800.00	464.00
642.03 - FEE FOR SERV/SNOW REMOVAL	(413.00)	0.00	(413.00)
642.06 - BENZIE BUS HEALTH RIDE	55.00	150.00	(95.00)
642.1 - FEE FOR SLIDING SCALE CLIENTS	7,137.01	6,665.00	472.01
642.05 - FEE FOR PRIVATE PAY & INS	227.25	185.00	42.25
670 - CLIENT INCOME	9,428.68	10,370.00	(941.32)
671 - PACE NORTH Client Income	539.50	550.00	(10.50)
673 · NEWSLETTER SUB	10.00	35.00	(25.00)
675 · DONATIONS	10,253.50	14,195.00	(3,941.50)
676 · MILLAGE	102,577.17	102,577.00	0.17
680 · VOLUNTEER WAGES (IN-KIND).	9,887.50	7,350.00	2,537.50
681 - IN-KIND (non-volunteer)	0.00	6,000.00	(6,000.00)
690 - TRIP INCOME	1,599.00	0.00	1,599.00
SPONSORSHIP INCOME	1,000.00	1,090.00	(90.00)
TOTAL INCOME	171,706.61	183,141.00	(11,434.39)
GROSS PROFIT	171,706.61	183,141.00	(11,434.39)
EXPENSE			
705 · SALARY AND WAGES	80,344.42	79,796.00	548.42
705.1 TRAVEL TIME	1,342.92	1,308.00	34.92
708 · PAYROLL TAX EXPENSE	6,071.60	5,231.00	840.60
708.1 UNEMPLOYMENT INSURANCE AGEN	453.01	500.00	(46.99)
709 · EDUCATION/TRAINING	37.00	315.00	(278.00)
710 · EVENTS	0.00	300.00	(300.00)
711 · TGPSC ACTIVITIES	481.91	350.00	131.91
717 · DUES/SUBSCRIPTIONS	2,795.08	1,200.00	1,595.08
721 · COMPUTER EXPENSES	605.19	2,850.00	(2,244.81)
725 · FRINGE BENEFITS	25,858.67	13,246.00	12,612.67
726 - FUNDRAISING/MARKETING EXP	0.00	400.00	(400.00)
727 · SUPPLIES	3,179.89	3,330.00	(150.11)
727.2 · OFFICE EXP	2,208.72	1,185.00	1,023.72
727.3 - POSTAGE	1,032.89	390.00	642.89
727.4 - ADVERTISING	249.40	550.00	(300.60)
740 · FOOD	19,961.49	19,665.00	296.49
819 · CONTRACTUAL	20,857.00	18,065.00	2,792.00

BENZIE SENIOR RESOURCES
Statement of Financial Income & Expense
April 2023

	April 2023	Budget	\$ Change
820 · VOLUNTEER WAGES (IN-KIND)	9,887.50	7,350.00	2,537.50
825 · VOLUNTEER EXPENSES	2,326.96	3,360.00	(1,033.04)
850 · TELEPHONE	977.56	520.00	457.56
861 · TRAVEL/MILEAGE/GAS	2,963.92	3,220.00	(256.08)
900 · INTEREST EXPENSE	247.22	265.00	(17.78)
910 · INSURANCE	4,105.80	4,100.00	5.80
915 · PROJECTS	1,162.20	835.00	327.20
920 · UTILITIES	4,574.26	2,865.00	1,709.26
940 · DEPRECIATION EXPENSE	3,398.88	3,550.00	(151.12)
980 · EQUIPMENT/REPAIRS	3,316.15	2,100.00	1,216.15
980.1 - OUTDOOR MAINTENANCE	1,455.00	90.00	1,365.00
980.2 - INDOOR MAINTENANCE	0.00	150.00	(150.00)
981-HDM FLEET MAINTENANCE/GAS	1,146.63	1,720.00	(573.37)
			0.00
TOTAL EXPENSE	201,041.27	178,806.00	22,235.27
NET ORDINARY INCOME	(29,334.66)	4,335.00	(33,669.66)
OTHER INCOME/EXPENSES			
OTHER INCOME			
990 · INTEREST/DIVIDEND INCOME	2,244.36	375.00	1,869.36
999 - OTHER INCOME	0.00	350.00	(350.00)
TOTAL OTHER INCOME	2,244.36	725.00	1,519.36
OTHER EXPENSE			
999.1 · OTHER EXPENSE	0.00	80.00	(80.00)
99999 - LEGAL EXPENSE	0.00	165.00	(165.00)
TOTAL OTHER EXPENSE	0.00	245.00	(245.00)
NET OTHER INCOME	2,244.36	480.00	1,764.36
NET INCOME	(27,090.30)	4,815.00	(31,905.30)

BENZIE SENIOR RESOURCES
Statement of Financial Income & Expense
October 2022 - April 2023

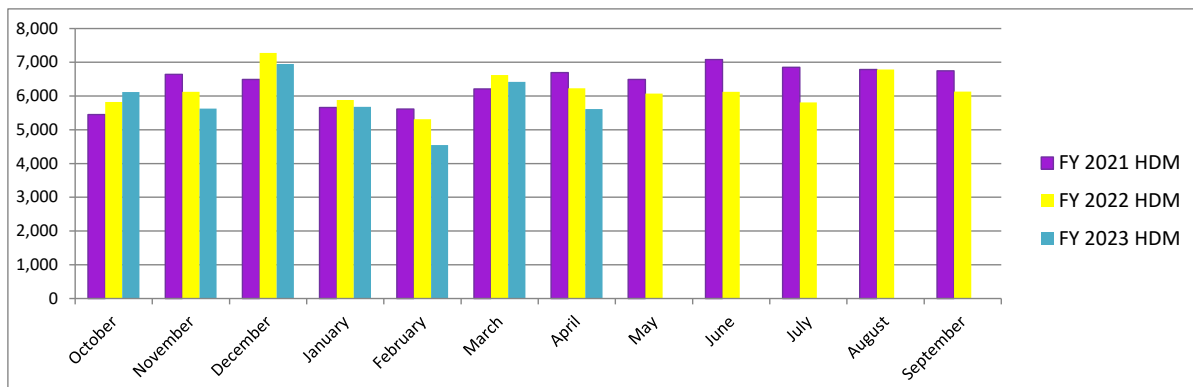
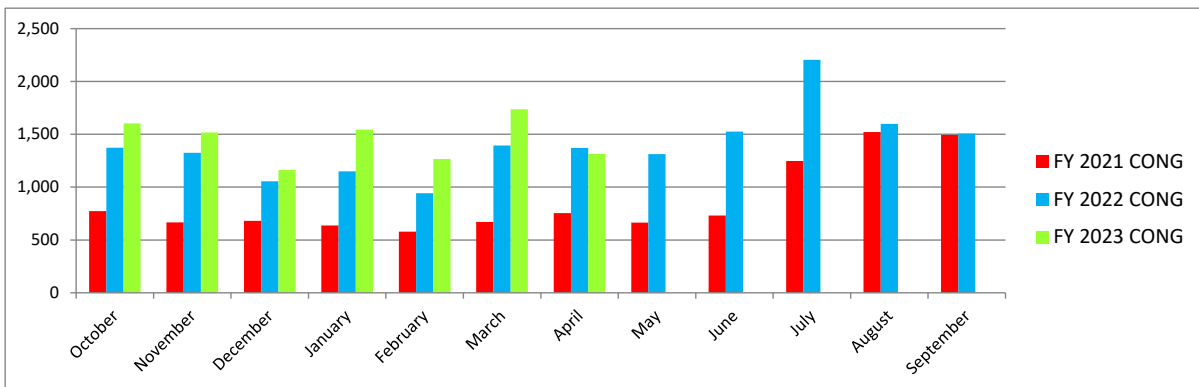
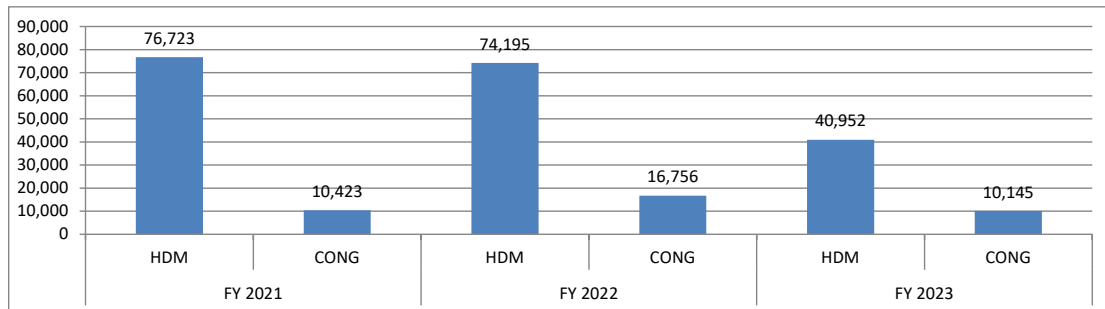
	Oct-Apr 2023	Budget	\$ Change
ORDINARY INCOME/EXPENSE			
INCOME			
519.03 · TITLE III C2 INCOME	68,418.00	68,418.00	0.00
519.04 · FEDERAL USDA	57,338.76	32,000.00	25,338.76
519.05 MIPPA (MMAP)	1,700.00	1,080.00	620.00
519.06 WAIVER SNOW REMOVAL	2,530.00	1,080.00	1,450.00
540 · GRANTS	95,350.00	67,095.00	28,255.00
561 - HDM WAIVER	13,351.00	10,635.00	2,716.00
642 · CHARGES FOR SERVICES/CONT	1,881.51	2,860.00	(978.49)
642.01 · FEE FOR SERVICE/CHORE	5,504.00	9,500.00	(3,996.00)
642.02 · FEE FOR SERVICE/HOMEMAKER	21,201.00	20,600.00	601.00
642.03 · FEE FOR SERV/SNOW REMOVAL	23,751.00	23,400.00	351.00
642.06 · BENZIE BUS HEALTH RIDE	620.00	1,050.00	(430.00)
642.1 · FEE FOR SLIDING SCALE CLIENTS	44,830.39	39,990.00	4,840.39
642.05 · FEE FOR PRIVATE PAY & INS	2,353.75	1,085.00	1,268.75
670 · CLIENT INCOME	59,198.46	62,985.00	(3,786.54)
671 · PACE NORTH Client Income	2,730.00	3,040.00	(310.00)
673 · NEWSLETTER SUB	290.00	225.00	65.00
675 · DONATIONS	85,170.65	95,035.00	(9,864.35)
676 · MILLAGE	718,040.19	718,039.00	1.19
677 · FUNDRAISING INCOME	70,206.44	63,870.00	6,336.44
680 · VOLUNTEER WAGES (IN-KIND).	59,322.96	51,450.00	7,872.96
681 · IN-KIND (non-volunteer)	5,549.44	10,900.00	(5,350.56)
690 · TRIP INCOME	1,599.00	0.00	1,599.00
SPONSORSHIP INCOME	2,630.00	2,290.00	340.00
TOTAL INCOME	1,343,566.55	1,286,627.00	56,939.55
GROSS PROFIT	1,343,566.55	1,286,627.00	56,939.55
EXPENSE			
700 · ACCOUNTING FEES	8,625.00	8,400.00	225.00
705 · SALARY AND WAGES	555,290.63	565,471.00	(10,180.37)
705.1 TRAVEL TIME	9,633.06	10,009.00	(375.94)
708 · PAYROLL TAX EXPENSE	37,439.07	40,384.00	(2,944.93)
708.1 UNEMPLOYMENT INSURANCE AGENCY	4,073.01	4,000.00	73.01
709 · EDUCATION/TRAINING	905.90	2,205.00	(1,299.10)
710 · EVENTS	941.32	2,100.00	(1,158.68)
711 · TGPSC ACTIVITIES	2,061.42	2,450.00	(388.58)
717 · DUES/SUBSCRIPTIONS	7,321.08	5,175.00	2,146.08

BENZIE SENIOR RESOURCES
Statement of Financial Income & Expense
October 2022 - April 2023

	Oct-Apr 2023	Budget	\$ Change
720 - BAD DEBT	61.00	0.00	61.00
721 - COMPUTER EXPENSES	21,219.02	19,950.00	1,269.02
725 - FRINGE BENEFITS	45,592.09	48,901.00	(3,308.91)
726 - FUNDRAISING/MARKETING EXP	2,688.46	2,800.00	(111.54)
727 - SUPPLIES	24,187.60	23,325.00	862.60
727.2 - OFFICE EXP	9,492.77	8,295.00	1,197.77
727.3 - POSTAGE	4,080.59	2,730.00	1,350.59
727.4 - ADVERTISING	2,517.15	3,850.00	(1,332.85)
740 - FOOD	148,296.68	137,670.00	10,626.68
819 - CONTRACTUAL	145,225.63	158,455.00	(13,229.37)
820 - VOLUNTEER WAGES (IN-KIND)	59,322.96	51,450.00	7,872.96
825 - VOLUNTEER EXPENSES	10,220.53	9,255.00	965.53
850 - TELEPHONE	4,588.56	3,640.00	948.56
861 - TRAVEL/MILEAGE/GAS	22,944.95	24,945.00	(2,000.05)
900 - INTEREST EXPENSE	1,732.60	1,855.00	(122.40)
910 - INSURANCE	32,210.92	33,700.00	(1,489.08)
915 - PROJECTS	17,353.73	12,925.00	4,428.73
920 - UTILITIES	22,320.23	20,070.00	2,250.23
940 - DEPRECIATION EXPENSE	23,792.16	24,850.00	(1,057.84)
980 - EQUIPMENT/REPAIRS	16,989.50	14,700.00	2,289.50
980.1 - OUTDOOR MAINTENANCE	4,243.14	6,060.00	(1,816.86)
980.2 - INDOOR MAINTENANCE	254.02	1,050.00	(795.98)
981-HDM FLEET MAINTENANCE/GAS	24,775.64	12,040.00	12,735.64
TOTAL EXPENSE	1,270,400.42	1,262,710.00	7,690.42
NET ORDINARY INCOME	73,166.13	23,917.00	49,249.13
OTHER INCOME/EXPENSES			
OTHER INCOME			
990 - INTEREST/DIVIDEND INCOME	11,126.06	2,625.00	8,501.06
999 - OTHER INCOME	1,248.46	2,450.00	(1,201.54)
TOTAL OTHER INCOME	12,374.52	5,075.00	7,299.52
OTHER EXPENSE			
999.1 - OTHER EXPENSE	0.00	575.00	(575.00)
99999 - LEGAL EXPENSE	0.00	1,165.00	(1,165.00)
TOTAL OTHER EXPENSE	0.00	1,740.00	(1,740.00)
NET OTHER INCOME	12,374.52	3,335.00	9,039.52
NET INCOME	85,540.65	27,252.00	58,288.65

Benzie Senior Resources
HDM/Cong comparison
Units Served 2021-2022-2023

	FY 2021		FY 2022		FY 2023	
	HDM	CONG	HDM	CONG	HDM	CONG
October	5,451	774	5,827	1,374	6,116	1,603
November	6,644	666	6,124	1,324	5,627	1,518
December	6,490	682	7,274	1,055	6,949	1,162
January	5,658	638	5,881	1,149	5,682	1,544
February	5,616	579	5,314	942	4,547	1,266
March	6,212	671	6,622	1,394	6,417	1,737
April	6,695	754	6,230	1,370	5,614	1,315
May	6,495	664	6,073	1,313		
June	7,079	731	6,123	1,526		
July	6,853	1,247	5,810	2,204		
August	6,786	1,522	6,786	1,599		
September	6,744	1,495	6,131	1,506		
total meals	76,723	10,423	74,195	16,756	40,952	10,145



April 2023 Journal Entry Summary

- 893. JE to record monthly depreciation expense (non-cash transaction) *
- 894. JE to record inventory at month end *
- 895. JE to record 401K payroll deferrals across all programs - original payroll entry posts to one class *
- 896. JE to record payroll wages/taxes across all programs – original payroll entry posts to one class *
- 897. JE to reclass payroll health insurance deductions from “uncategorized” to appropriate class, i.e. Home Health and Admin *
- 898. JE to reclass payroll mileage reimbursements from “uncategorized” to appropriate class, i.e. Home Health and Admin *
- 899. JE to record trip income
- 900. JE to record volunteer hours in-kind wages *

* **Monthly recurring Journal Entries.**

April 2023

[illegible]

BENZIE SENIOR RESOURCES**Monthly Journal Entries**

April 2023

Trans #	Type	Date	Num	Memo	Debit	Credit
					1,599.00	1,599.00
133910	General Journal	04/30/2023	900	TO RECORD INKIND WAGES	9,184.00	9,184.00
				TO RECORD INKIND WAGES	703.50	703.50
				TO RECORD INKIND WAGES		
				TO RECORD INKIND WAGES		
					9,887.50	9,887.50
TOTAL					69,295.43	69,295.43



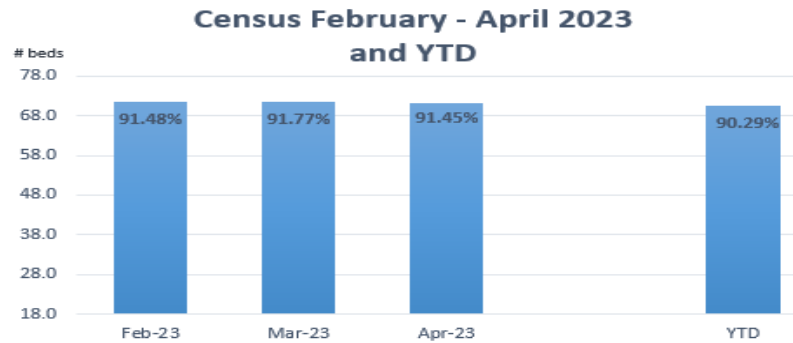
Benzie County Medical Care Facility
Serving Benzie County since 1965

Operations Dashboard

Census: 75

Occupancy: 96%

Benzie Families: 78%



CMS 5-Star Ratings

	Overall	Health Inspections	Staffing	Quality Measures
The Maples	*****	****	*****	****
Paul Oliver	****	****	****	***
Manistee MCF	****	***	*****	****
Pavilions GTCF	**	*	*****	**

Total Referrals MTD: 29

Admissions MTD: 9

Conversion Ratio: 75%

Discharges MTD: 10

Percentage of Referrals from Benzie County: 100%

Current Staff: 95 Employees (80% Benzie Residents)

Open positions: 27

- 19 Certified Nurse Aides
- 2 Nurses
- 2 Environmental Services
- 2 Dining Services
- 2 Life Enrichment

Contract Staff: 18 Certified Nurse Aides



**Benzie County Medical Care Facility
Serving Benzie County since 1965**

Operations Dashboard

	January-March 2023	YTD
MEDICAID	1,302,985.00	2,719,095.00
PRIVATE PAY	368,452.00	599,043.00
MEDICARE	217,407.00	513,124.00
OTHER PAYERS	354,326.00	655,840.00
MISC	424,527.00	873,970.00
TOTAL REVENUE	2,667,697.00	5,361,072.00
ADMINISTRATIVE	1,009,357	1,995,591
MAINTENANCE	142,900	289,281
LAUNDRY	16,725	33,920
HOUSEKEEPING	62,166	119,569
DIETARY	242,300	491,767
NURSING	1,274,734	2,518,293
PROFESSIONAL SERVICE	6,750	13,500
SOCIAL WORK	14,055	39,021
ACTIVITIES	113,620	229,701
XRAY	88	455
LAB & DIAG	2,224	2,903
ENTERALS	526	1,326
THERAPY	91,196	183,435
PHARMACY	36,707	70,079
NATCEP	0	250
TOTAL EXPENSES	3,013,348	5,989,090
GAIN/(LOSS)	-345,651	-628,017

Needs for Capital Improvements/Equipment Next Five Years	
Landscaping/Trees Needs Parking Lot/water main changes	\$ 29,000.00
Large Kitchen Equipment Replacements	\$ 86,000.00
2016 Replace Transport Van	\$ 42,000.00
1964 EE Breakroom Renovation	\$ 15,000.00
1964 Window Replacement (est.)	\$235,460.00
Resident Beds replacement staggered 5 year	\$ 48,040.00
2 Crash Carts with AED's, 2 chair scales	\$ 15,140.00
Computer & Software replacement	\$ 20,200.00
Resident Living Rooms furniture replace worn	\$101,160.00
Resident Rooms furniture replace worn (19 rms.)	\$ 57,000.00
Resident Room televisions replace 72	\$ 25,200.00
Door System Upgrade	\$ 75,000.00
Replace Water Softeners	\$ 18,750.00
2017 Replace Resident Transport Van	\$ 65,000.00
Replace worn Carpeting/Flooring budget est.	\$100,000.00
Exterior issues with New Building	pending
Total	\$932,950.00

Days Cash on Hand



Days Cash on Hand: 115.09

ACTION ITEMS

Memorandum



To: Board of Commissioners

From: Katie Zeits, County Administrator *Katie Zeits*

Date: May 17, 2023

Subject: **Acceptance of Fiscal Year 2021/2022 Audit**

At the May 9, 2023, Board of Commissioners meeting, the County's auditing firm gave an overview of the audit. I recommend that the Board formally accepts the audit.

Recommendation:

That the Audited Financial Statements for Benzie County's Fiscal Year 2021/2022, be accepted.

Memorandum



To: Board of Commissioners

From: Katie Zeits, County Administrator *Katie Zeits*

Date: May 17, 2023

Subject: **2023 Goals**

Once again, I want to thank the Board for participating in the discussions to formulate goals to provide Administration and the Board with focus for the next two-three fiscal years. Attached are the goals identified in our discussions with actions associated.

I have also included Commissioner Cunninghams' email at her request to be discussed as part of this action item.

Recommendation:

That the Board of Commissioners adopts the Benzie County Strategic Priorities, Goals, and Actions dated May 9, 2023.

BENZIE COUNTY BOARD OF COMMISSIONERS

STRATEGIC PRIORITIES, GOALS, AND ACTIONS



OVERVIEW

The Board of Commissioners has met in several meetings to explore and set strategic priorities and goals to guide the County's actions and investments over the next two to four years. All decisions impact the long-term plans for Benzie. The notes below document the outcomes of these meetings, as well as the next steps.

HIGH-LEVEL THEMES

Commissioners discussed their motivations and intentions and established a “big picture” framework. Their intentions included:

- Focusing on long-term impacts.
- Approaching challenges with optimism and collaboration.
- Focusing on solutions in the short-term and long-term future.
- Considering future generations when making short-term decisions.
- Considering goals and actions through the lens of community and economic growth.
- Understanding constituents may want to oppose things and keeping this in mind while making decisions.

STRATEGIC PRIORITIES

The following high priority issues emerged during the strategy sessions:

1. Infrastructure and Space Needs
2. Fiscal Health and Responsibility
3. Enhanced County Services
4. Public Spaces and Public Lands
5. Economic Development Activities

Commissioners acknowledged that these are long-term issues and that a variety of short-term and long-term actions will be required to address needs and opportunities.

INFRASTRUCTURE AND SPACE NEEDS

Strategic Priority: Ensure proper infrastructure maintenance and development and adequate space for the performance of county services, including cyber security infrastructure.

Goal Statement: Evaluate the needs to perform services for the Benzie County community and ensure its appropriateness with County fiscal health.

Actions:

- Staff will consider whether there is a need to provide non-mandated services to the community and make recommendations to the Board of Commissioners.
- Staff will explore options for providing services to the community which are non-mandated, through partnership activities and make recommendations to the Board of Commissioners.
- The Board of Commissioners will create and empower ad hoc committees and subcommittees to explore the potential of additional services, enhancement of current services, and the development of necessary infrastructure to perform these services.
- The Board of Commissioners will consider selling or contracting existing infrastructure and services to protect the County's liability, enhance fiscal health and stability.
- Bolster technology infrastructure to increase cyber security for all county hardware and software.

Resources Required:

- Removing barriers to allow for robust discussion.
- Continuing to identify needs of the community through public participation.
- Additional staff to explore grant opportunities and other funding.
- Building awareness of responsibilities of County government and potential partnerships in the community.

FISCAL HEALTH AND RESPONSIBILITY

Strategic Priority: We have an obligation to maintain Benzie County's fiscal condition and financial statements in a healthy state.

Goal Statement: Benzie County will maintain a balanced budget while supporting professional development and expanding resources for elected officials and staff.

Actions:

- Continue to implement a sustainable planning and budgeting process in which key stakeholders gather information on performance and cost structure of services.
- Establish a budgeting process that will utilize this data to optimize resource allocation.
- Build a budget process that is data driven.
- Develop a budget timeline with specific guidelines on when and how.
- Develop with key stakeholders an expenditure priority list that is guided by county goals. Define tradeoffs if needed to maintain a balanced budget. Examine with stakeholders which financial decisions have the greatest impact on county services.

- Work with elected officials and appointed staff to strengthen and further define a long-term capital needs plan.
- Create a quarterly financial update by department and at the Board level that will compare the most recent quarter to the same quarter for the previous three years in order to analyze changes and ensure proper resource allocation.

Resources Required:

- Staff time.
- Elected Official time.
- BS&A Accounting Software
- Professional development opportunities related to public accounting.

ENHANCED COUNTY SERVICES

Strategic Priority: We will evaluate current services and consider other services to be provided to the Community, including partnering with private agencies to provide services.

Goal Statement: To provide exceptional service; enhance and protect the quality of life for all Benzie County citizens; facilitate a vibrant economy with an abundance of workforce opportunities; and exercise fiscal responsibility, while using innovative approaches and making well-planned decisions.

Actions:

- Provide professional, cost-effective, and innovative service delivery, by continually evaluating the county's programs and services, soliciting feedback, reinforcing positive examples of customer service and work ethic.
- Implementing technology enhancements and providing job-enhancing training for employees.
- Encourage and facilitate internal communications and coordination between departments, in order to strengthen the organization and provide opportunities for efficiency and collaboration.
- Achieve effective external communication with the community by engaging in positive outreach; facilitating community awareness and involvement; publicizing the availability of county services; and providing timely notice of changes in services which may affect customers.
- Explore additional countywide services, such as Fire protection and expansion of Emergency Medical Services.
- Manage capital assets and facilities in a manner that assures longevity; maximizes cost-feasible energy efficiency and natural resource protection.
- Explore innovative financial strategies to fund programs and services offered to customers that leverage county tax dollars with non-local funding sources.
- Engage in long-range planning to assure that capital funding needs are met; maintain prudent financial reserves to provide operational continuity in the event of an emergency or natural disaster.
- Ensure that the state-mandated capital needs are provided for constitutional offices.

Resources Required:

- Community support.
- Staff time.
- Elected Official time.

- Consultants.
- Partners' time.
- County Wide Millage.

PUBLIC SPACES AND PUBLIC LAND

Strategic Priority: Provide safe and accessible public spaces where people may recreate, socialize, or enjoy being alone in nature.

Goal Statement: Invest in facilities and amenities in order to create vibrant County spaces that connect all people to nature and to each other.

Actions:

- The County will increase the visibility and community awareness of all county-owned public spaces and parks.
- The County will enhance communication about the potential for personal uses of public spaces and encourage more park use.
- The County will increase accessibility to parks by fostering connections to trails and public transportation options.
- County staff and the Parks and Recreation Commission will conduct public surveys on a more routine basis, in order to gain feedback and broader insights to inform and guide the County's actions and investments in public spaces.
- The County will update its Parks and Recreation Master Plan.
- The County will strive to maintain and invest in its facilities.
- The County will strive to protect its waters and parklands.

Resources Required:

- General Fund allocations.
- State and Federal grants.
- Private foundation and individual donations.
- Staff.
- Community partners.
- Programming offered by private sector and nonprofit entities in public spaces.
- Public support for visions and projects.
- Park users.

ECONOMIC DEVELOPMENT ACTIVITIES

Strategic Priority: In a global economy where people can work from anywhere, people are choosing to live here because of the natural characteristics of this place. We will focus on creating a healthy community and strong sense of place and will integrate our economic development efforts with our climate goals and action steps.

Goal Statement: The County will foster economic development by adopting a growth mentality and by conserving and maintaining natural resources. It will work with partners to invest in and maintain amenities that support a wide variety of industries, build the workforce, and attract well-paying jobs with the region's future in mind.

Actions:

- The County will work with the likeminded agencies in the County to address the childcare crisis, supporting residents in their careers.
- The County will develop policies and adopt practices that encourage development in townships in order to increase housing options and support access to good paying jobs.
- The County will use a variety of funding sources, including dedicated sources like tax Increment Financing, to achieve its goals.
- The County will increase staff capacity, including adding a Community Development Coordinator position, as the budget allows us to achieve its goals.
- The County will provide focused support and assistance to Industrial Parks.
- The County will support and partner to expand utilities, including natural gas, water, sewer, and broadband.

Resources Required:

- Staff.
- Elected Officials.
- Funding.
- Political will.
- Professional consultants.
- Cost sharing approach with regional partners.
- Collaboration with community partners to enhance economic development.

NEXT STEPS

The Board of Commissioners will continue to review and refine the goals and actions identified in this document. Commissioners will continue to evaluate resources required and will reflect on these goals and actions during the County's annual budgeting process.

Reflections on 9 May Afternoon Session

Karen L Cunningham <kleecunningham@gmail.com>

Wed 5/10/2023 11:03 AM

To: Bob Roelofs <BRoelofs@benzieco.net>;Katelyn Zeits <kzeits@Benzieco.net>

CAUTION: This email originated from outside the Benzie County Email System. Maintain caution when opening external links/attachments.

Dear Bob and Katy

9 May 2023

Today’s Study Session benefitted me by helping me drill down.

The strategic document was too much.

Prioritize.

Seek Excellence Not merely adequate results.

Focused on identified needs and desires.

Goals:

Three targets that can be accomplished by December 2024.

Budget long-term solution	Internet Utility	Service
Headlee/reset	County Government/Merit	Childcare
Public buy in/understanding	Not piecemeal	Hybrid

As a target is fulfilled we should have another one or two in the wings and the best suited commissioners work on those.

Identify each commissioner’s strengths. Each commissioner concentrates on facets of one target.

NEWTAT! No egos, work to attain the target.

Approach: Communication, accountability and high standards.

Benzie County will become a model for rural America.

Question: How can I best share this?

Sincerely,
KC

--

KAREN L. CUNNINGHAM
Benzie County District 3
Benzie County Commissioner
CRYSTAL CLEAR MICHIGAN

Memorandum



To: Board of Commissioners

From: Katie Zeits, County Administrator

A handwritten signature in blue ink, appearing to read "Katie Zeits", is written over the printed name.

Date: May 18, 2023

Subject: **Cyber Incident Response Policy**

Attached you will find a Cyber Incident Response Policy which adopts a more extensive Cyber Incident Response Plan for Benzie County. Typically, cyber incident response plans are confidential and therefore is not included in the packet. This policy adopts the plan.

Benzie County does not have a similar policy or plan in place now.

Recommended Motion:

The Board of Commissioners adopts the Cyber Incident Response Policy which adopts the Cyber Incident Response Plan.



Updated: 5/24/2023

CYBER INCIDENT RESPONSE POLICY

A Cyber Incident Response Plan was developed by Benzie County to respond to incidents that may occur.

This plan is put in place to:

1. Protect the confidentiality, integrity, and availability of information assets.
2. Protect the trust bestowed upon Benzie County by the public and the image projected by the government and business functions of Benzie County.
3. Provide a central organization to manage cyber-incidents.
4. Comply with requirements set forth in Benzie County policy.
5. Prevent the use of Benzie County information systems in attacks against other information systems.

By adopting this Cyber Incident Response Policy, Benzie County hereby adopts the Cyber Incident Response Plan, Version 1, dated May 23, 2023.

I, Tammy Bowers, duly appointed Clerk for the County of Benzie, Michigan, do hereby certify that the above policy was adopted by the Benzie County Board of Commissioners at a regular Board meeting held on May 23, 2023, and that related policies are hereby rescinded.


Tammy Bowers, Benzie County Clerk

Memorandum



To: Board of Commissioners

Copy: Elected Officials
Katie Zeits, County Administrator
Department Heads

From: Jackie Palfey, Human Resources Manager
Rose Roelofs, Administrative Assistant

Date: May 18, 2023

Subject: **Personnel File Policy**

A handwritten signature in blue ink, appearing to read "Jackie Palfey".

A handwritten signature in blue ink, appearing to read "Rose Roelofs".

Attached is a draft policy regarding employee Personnel Files. This policy has been reviewed by all elected officials, department heads, Commissioners, and our legal counsel before being brought forward to the Board for consideration.

This policy has been implemented to provide guidance to employees about their privileges and obligations with respect to their own personnel records and guides Benzie County personnel responsible for producing and maintaining their own personnel records. Once approved the policy will be distributed to County Personnel, added to the Everyone Drive for accessibility, and update to our new policy book.

RECOMMENDATION:

The Board of Commissioners adopts the Personnel File policy and add it to the staff manual.



Updated: 5/24/2023

Personnel File Policy

Purpose

This policy provides guidance to employees about their privileges and obligations with respect to their own personnel records. It shall also guide Benzie County personnel responsible for producing and maintaining personnel records as to the appropriate handling of those records.

Under the Bullard Plawecki Employee Right to Know Act, PA 397 of 1978, as amended, (the "Act") employees are entitled to review their personnel records, make copies of those records, and file written statements clarifying or protesting any documents contained in their file. An employer's use and disclosure of employee records are regulated by this Act as well. This policy is not intended to be construed as creating a contract between Benzie County and its employees. The policies and/or benefits outlined in this document may be added to, expanded, modified, or deleted. Any such changes shall be solely within the discretion of the Benzie County Board of Commissioners. The interpretation and operation of the benefits noted herein are within the Benzie County Board of Commissioners' sole discretion. All rights and powers vested in Benzie County or any Elected Official shall not be, in any way whatsoever, reduced by these policies.

Definition

A personnel file is composed of paper or electronic personnel records that are stored in a central location and may contain any record of employment, promotion, transfer, additional compensation, or disciplinary action. A list of documents that comprise a personnel file can be found in Section III below.

Applicability

These policies apply to all non-union employees of the County of Benzie. These policies also apply to employees in recognized bargaining units represented by certified collective bargaining units only as to non-economic matters where no conflict exists between a provision of these personnel policies and an express provision of an applicable collective bargaining unit agreement. Further, this personnel manual does not apply to any offices of Elected Officials unless the applicable Elected Official adopts, in whole or in part, these policies. Individuals who are volunteers or serve on boards will not have an employee file.

Section I- Policy

Benzie County employee files are maintained in either electronic or hardcopy format by the Administration Office/Human Resources Department for each employee and are considered confidential. Once an employee leaves Benzie County, only an electronic copy will be saved. Access to personnel files shall be limited to the following:

- County Administrator
- Human Resource Manager

- Executive Assistant to the County Administrator
- The employee's Department Head or Elected Official
- The County Attorney or designee
- An employee accessing their own file
- Employees responsible for maintaining such files
- Requests authorized by the Human Resources Manager or Freedom of Information Act Coordinator
- A department head/elected official considering the hire of a former employee, or the transfer of a current employee may be granted access to the file, or limited parts of it, in accordance with anti-discrimination laws.

Unless otherwise required by law, personnel files may not be taken outside of the Administration Office/Human Resources Department. Representatives of government or law enforcement agencies, in the course of their duties, may be allowed access to file information. This decision will be made at the discretion of the Benzie County Board of Commissioners

or the Administration Office in response to the employee's request, a valid subpoena, or a valid court order.

Under no circumstances should employee Social Security numbers be disclosed under FOIA. The same is exempt pursuant to Section 13(1) (x). Further, law enforcement personnel records should not be disclosed pursuant to Section 13 (t) (ix)

Section III-Contents

A personnel file will include, at a minimum, the following records if applicable to the employee:

- A. Employment Application
- B. Resume
- C. Offer letter and acceptance
- D. Employment Contracts
- E. Forms or documents related to an employee's hiring or changes in employment status or duties
- F. Employee acknowledgment or consent forms related to hiring, orientation, or employment
- G. Current salary and salary history
- H. Special or additional payments
- I. Copies of certification, licensing, or educational degrees
- J. Performance evaluations
- K. Disciplinary action
 - i. Written and verbal reprimand
 - b. Suspension
 - c. Discharge
- L. Letters of Agreement form employees under a collective bargaining agreement.
- M. Final investigatory reports or determinations.

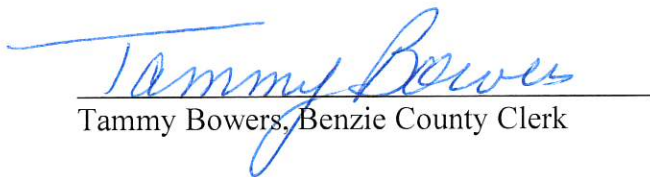
The following are examples of what must be excluded from a personnel file:

- A. Data regarding age, race, sex, religion, disability, or other protected information
- B. EEOC Complaints
- C. Background information
- D. Drug and alcohol testing results
- E. Personal accident reports
- F. Unemployment documents
- G. Child support and other wage garnishments
- H. Reference letters
- I. Staff planning materials
 - a. Management bonus plans
 - b. Promotions
 - c. Job assignments
- J. Background check reports
- K. I-9's
- L. Medical information
- M. Family Medical Leave Act and/or Workers' Compensation leave requests and supporting documentation
- N. Accommodation requests under the Americans with Disabilities Act
- O. Insurance, benefit plans, and beneficiary information

The following are examples of what may be included in a separate, confidential file that is not considered a personnel record:

- A. Same personnel information Human Resources keeps, but only if kept secured in a confidential area
- B. Documents supporting employment decisions (e.g., job change, job evaluation results, location changes, compensation changes, and disciplinary action)
- C. Leave of absence information
- D. Correspondence regarding an employee's performance
- E. Coaching and personal development plans
- F. Attendance records

I, Tammy Bowers, duly appointed Clerk for the County of Benzie, Michigan, do hereby certify that the above policy was adopted by the Benzie County Board of Commissioners at a regular Board meeting held on May 23, 2023, and that related policies are hereby rescinded.



Tammy Bowers, Benzie County Clerk

Memorandum



To: Board of Commissioners

Copy: Elected Officials
Katie Zeits, County Administrator
Department Heads

From: Jackie Palfey, Human Resources Manager
Rose Roelofs, Administrative Assistant

Date: May 18, 2023

Subject: **Bomb Swatting Threat Policy**

Jackie Palfey

Rose Roelofs

Attached is a draft policy regarding Bomb Swatting Threat Policy that has been created. This policy has been reviewed by all elected officials, department heads, Commissioners, and our legal counsel before being brought forward to the Board for consideration.

This policy has been implemented to educate Benzie County staff on how to react to ensure a safe resolution for any parties associated with the threat. Once approved the policy will be distributed to County Personnel, added to the Everyone Drive for accessibility, and update to our new policy book.

RECOMMENDATION:

The Board of Commissioners adopts the Bomb Swatting Threat policy and add it to the staff policy manual.



Updated: 5/1/2023

Bomb / Swatting Threat Policy

Purpose

Benzie County recognizes that emergency situations can occur at any time. Although it is uncommon, bomb and/or “Swatting” threats of violence Benzie County acknowledges the importance of implementing a policy. This policy has been implemented to educate Benzie County staff on how to react to ensure a safe resolution for any parties associated with the threat. Swatting calls and bomb threats are regularly recognized as the work of pranksters who wish to cause anxiety and panic toward a focused address or the community. However, as in any emergency that Benzie County encounters, Benzie County staff shall take all situations seriously.

Definitions

Swatting: The action or practice of making a prank call to emergency services, schools, or governmental facilities in an attempt to bring about the dispatch of a large number of armed police officers (SWAT team) to a particular address.

Bomb Threat: A threat to detonate an explosive or incendiary device to cause property damage, death, or injuries, whether or not the device actually exists.

Procedure

Upon receipt of a bomb threat or any threat of violence, it is impossible to know if it is real or a hoax. Therefore, precautions need to be taken for the safety of all staff, residents, and visitors of Benzie County.

Section I- Procedure for a Phone Threat

If you receive a threat of a bomb or any threat of violence over the phone, the following procedures should be followed:

- A. Procedure for the person taking the phone call
 - a. Remain calm.
 - b. Do not hang up, mute the phone, and notify a coworker (through note or gesture) to contact 911 – Central Dispatch and Administration
 - c. Fill out the Bomb Threat Report (found in the *Quick Reference Guide for Building Emergencies* – or at the end of this policy) –
 - d. **The Bomb Threat form and questions can be adaptive to any “threat” replacing the word “bomb.”** There is no need for a separate form.
 - i. Remain calm and listen carefully.
 - ii. Keep the caller on the line as long as possible. Do NOT hang up, even if you think the caller does. If the call is disconnected use a different phone to contact 911 or administration.
 - iii. Be polite and show interest.
 - iv. Try to keep the caller talking to learn more information to pass along to the proper authorities.

- v. Write down the phone number on your display, the time of call, and the date.
- vi. Write down as much detail as possible and try to get exact words.

B. Administration Procedure

- a. Once notified, if the threat is designated to the address of the Benzie County Government Center Campus (including Courts, DHS, Sheriff's Office, or Animal Control building) use the Yealink Phone paging system to announce, "THE GOVERNMENT CENTER IS IN SECURE MODE, CHECK YOUR WORKSPACE."
- C. Once Administration makes an announcement, Benzie County Elected Officials and Department Heads should do the following:
 - a. Remain calm and encourage employees to remain calm.
 - b. Lock and secure each room.
 - c. Take a headcount of all persons in your workspace.
 - d. Check for suspicious objects or persons in your work area and report any:
 - i. **Suspicious items/packages are those that appear to be out of place as noted by people familiar with that immediate work area.**
 - 1. Items/Packages-DO NOT TOUCH
 - 2. Phones/Radios- DO NOT TOUCH
 - 3. Light switches- DO NOT TOUCH
 - e. Do NOT allow cell phone use if the threat is a bomb.
 - f. Refrain staff from posting notifications via social media platforms.
 - i. **For any serious events or emergencies, all official notifications and media comments shall go through an appointed Public Information Officer, typically the Emergency Manager**
 - g. Await further instructions over the Public Address System.

Section II – Procedure for a Handwritten Note

If you receive a threat of a bomb or any threat of violence by a handwritten note, or a letter in the mail, follow the procedures below:

- A. Remain calm.
- B. Treat the threat seriously.
- C. Handle the note as minimally as possible.
- D. Note the time and description of the person handing off the note.
- E. Notify 911 Central Dispatch

Section III – Procedure for an Email

If you receive a threat of a bomb or any threat of violence by email, follow the procedures below:

- A. Do not delete or forward the email.
- B. Notify your supervisor immediately.
- C. Notify 911 – Central Dispatch

Section IV-Procedure for a Suspicious Package

Suspicious items/packages are those that appear to be out of place as noted by persons familiar with that immediate work area.

If you encounter a suspicious package, follow the procedures below:

- A. Report the suspicious package to supervision – verify with others who use the area frequently that it is out of place or unexpected.
- B. Contact 911 – Central Dispatch
- C. Do NOT touch or move a suspicious package.
- D. Do NOT use two-way radios or cellular phones.

Section V-Evacuation Protocol

If an evacuation of the building is ordered by Administration, Emergency Management, or Sheriff's Office personnel, follow the procedures below:

- A. An announcement over the Yealink phone system will announce an evacuation is needed.
 - a. Evacuate to a designated area. The Benzie County Sheriff's Office Lobby is a good direction unless advised otherwise.
 - b. When exiting, check around for suspicious items.
 - c. Account for all staff
- B. Do **NOT** use cellular phones.
- C. Evacuate in the opposite direction of the known threat or suspicious packages.

Attachment

CISA – Department of Homeland Security Bomb Threat Procedure Checklist

I, Tammy Bowers, duly appointed Clerk for the County of Benzie, Michigan, do hereby certify that the above policy was adopted by the Benzie County Board of Commissioners at a regular Board meeting held on _____ and that related policies are hereby rescinded.

Tammy Bowers, Benzie County Clerk

BOMB THREAT PROCEDURES

This quick reference checklist is designed to help employees and decision makers of commercial facilities, schools, etc. respond to a bomb threat in an orderly and controlled manner with the first responders and other stakeholders.

Most bomb threats are received by phone. Bomb threats are serious until proven otherwise. Act quickly, but remain calm and obtain information with the checklist on the reverse of this card.

If a bomb threat is received by phone:

1. Remain calm. Keep the caller on the line for as long as possible. DO NOT HANG UP, even if the caller does.
2. Listen carefully. Be polite and show interest.
3. Try to keep the caller talking to learn more information.
4. If possible, write a note to a colleague to call the authorities or, as soon as the caller hangs up, immediately notify them yourself.
5. If your phone has a display, copy the number and/or letters on the window display.
6. Complete the Bomb Threat Checklist immediately. Write down as much detail as you can remember. Try to get exact words.
7. Immediately upon termination of call, DO NOT HANG UP, but from a different phone, contact authorities immediately with information and await instructions.

If a bomb threat is received by handwritten note:

- Call _____
- Handle note as minimally as possible.

If a bomb threat is received by e-mail:

- Call _____
- Do not delete the message.

Signs of a suspicious package:

- No return address
- Excessive postage
- Stains
- Strange odor
- Strange sounds
- Unexpected delivery
- Poorly handwritten
- Misspelled words
- Incorrect titles
- Foreign postage
- Restrictive notes

*** Refer to your local bomb threat emergency response plan for evacuation criteria**

DO NOT:

- Use two-way radios or cellular phone. Radio signals have the potential to detonate a bomb.
- Touch or move a suspicious package.

WHO TO CONTACT (Select One)

- **911**
- **Follow your local guidelines**

For more information about this form contact the Office for Bombing Prevention at: OBP@cisa.dhs.gov



BOMB THREAT CHECKLIST

DATE:

TIME:

TIME CALLER
HUNG UP:

PHONE NUMBER WHERE
CALL RECEIVED:

Ask Caller:

- Where is the bomb located?
(building, floor, room, etc.)
- When will it go off?
- What does it look like?
- What kind of bomb is it?
- What will make it explode?
- Did you place the bomb? Yes No
- Why?
- What is your name?

Exact Words of Threat:

Information About Caller:

- Where is the caller located?
(background/level of noise)
- Estimated age:
- Is voice familiar? If so, who does it sound like?
- Other points:

Caller's Voice	Background Sounds	Threat Language
<input type="checkbox"/> Female	<input type="checkbox"/> Animal noises	<input type="checkbox"/> Incoherent
<input type="checkbox"/> Male	<input type="checkbox"/> House noises	<input type="checkbox"/> Message read
<input type="checkbox"/> Accent	<input type="checkbox"/> Kitchen noises	<input type="checkbox"/> Taped message
<input type="checkbox"/> Angry	<input type="checkbox"/> Street noises	<input type="checkbox"/> Irrational
<input type="checkbox"/> Calm	<input type="checkbox"/> Booth	<input type="checkbox"/> Profane
<input type="checkbox"/> Clearing throat	<input type="checkbox"/> PA system	<input type="checkbox"/> Well-spoken
<input type="checkbox"/> Coughing	<input type="checkbox"/> Conversation	
<input type="checkbox"/> Cracking Voice	<input type="checkbox"/> Music	
<input type="checkbox"/> Crying	<input type="checkbox"/> Motor	
<input type="checkbox"/> Deep	<input type="checkbox"/> Clear	
<input type="checkbox"/> Deep breathing	<input type="checkbox"/> Static	
<input type="checkbox"/> Disguised	<input type="checkbox"/> Office machinery	
<input type="checkbox"/> Distinct	<input type="checkbox"/> Factory machinery	
<input type="checkbox"/> Excited	<input type="checkbox"/> Local	
<input type="checkbox"/> Laughter	<input type="checkbox"/> Long distance	
<input type="checkbox"/> Lisp		
<input type="checkbox"/> Loud		
<input type="checkbox"/> Nasal		
<input type="checkbox"/> Normal		
<input type="checkbox"/> Ragged		
<input type="checkbox"/> Rapid		
<input type="checkbox"/> Raspy		
<input type="checkbox"/> Slow		
<input type="checkbox"/> Slurred		
<input type="checkbox"/> Soft		
<input type="checkbox"/> Stutter		

Other Information:

Memorandum



To: Board of Commissioners

Copy: Elected Officials
Katie Zeits, County Administrator
Department Heads

From: Jackie Palfey, Human Resources Manager
Rose Roelofs, Administrative Assistant

Date: May 18, 2023

Subject: **Anti-Fraud Policy**

Attached is a draft policy regarding Fraud. This policy has been reviewed by all elected officials, department heads, Commissioners, and our legal counsel before being brought forward to the Board for consideration.

This policy is intended to replace the existing Fraud Policy that is currently included in the Staff Policy Manual. This policy is to provide guidance to prevent, detect, report, and investigate fraudulent acts. Once approved the policy will be distributed to County Personnel, added to the Everyone Drive for accessibility, and update to our new policy book.

This policy is meant to replace the existing policy that is currently included in the Staff Policy Manual on page 17. I have attached the current portion of the Anti-Fraud policy page listed in our Staff Policy Manual book.

The recommendation is to replace the current policy with the updated Anti-Fraud policy.

RECOMMENDATION:

The Board of Commissioners adopts the Anti-Fraud policy to replace the old policy listed in the staff policy manual.



Updated: 5/24/2023

Anti-Fraud Policy

Purpose

Benzie County is dedicated to maintaining the highest standards of conduct and ethics in its day-to-day operations. This encompasses Benzie County employees who are responsible for protecting and ensuring the proper use of County funds, resources, and property. Therefore, any allegation of fraudulent or dishonest use of County resources, funds, or property by an employee will be investigated immediately. This policy establishes procedures to identify and report fraud as well as how complaints of the same will be investigated by Benzie County

Definitions

Fraud is any intentional act or omission designed to deceive others, resulting in the victim suffering a loss and/or the perpetrator achieving a gain. Dishonest or fraudulent activities include but are not limited to, forgery or alteration of documents; illegal activity during employment; untrue financial reporting; misappropriation of resources, funds, or property; misrepresentation of business expenses; and any other illegal activity involving County resources, funds, or property.

Corruption is defined as the offering, giving, soliciting, or acceptance of an inducement or reward that may improperly influence the action of a person or entity, some examples are:

Section I- Policy

Benzie County has a zero-tolerance approach toward fraud and corruption. Benzie County will identify any suspected fraudulent or related dishonest activity against Benzie County and promptly investigate the situation. Benzie County will take the appropriate disciplinary and legal actions that include the possibility of termination of employment, restitution, and forwarding information to the appropriate authorities for prosecution.

Section II- Reporting

Employees who suspect fraudulent or corrupt acts have occurred have a responsibility to report the suspected acts to their Department Head or Elected Official immediately. This report will then be submitted to the Human Resources Manager. If the allegation is against the Department Head or Elected Official, the employee shall report the allegation directly to the Human Resources Manager. If the allegation is against the Human Resources Manager, the employee shall report the allegation directly to the County Administrator. Employees will fully cooperate with any internal investigations and/or law enforcement agencies performing an investigation. Employees may not retaliate against another employee for a good-faith report under this policy. Reports of suspected fraud or corruption will be handled with sensitivity, discretion, and confidentiality to the extent allowed by the circumstances and the law. Reports will only be shared with those who need to know to ensure an effective investigation and appropriate action is taken.

Section III- Disciplinary Action

Failure to abide by all terms and conditions of this policy may result in discipline up to and including termination, where appropriate, to legal action.

I, Tammy Bowers, duly appointed Clerk for the County of Benzie, Michigan, do hereby certify that the above policy was adopted by the Benzie County Board of Commissioners at a regular Board meeting held on May 23, 2023, and that related policies are hereby rescinded.



Tammy Bowers, Benzie County Clerk

- ii. Copying, disclosing, transferring, examining, renaming, or changing information or programs belonging to another user unless you are given express permission to do so by the person responsible for the information program;
- iii. Knowingly or inadvertently spreading computer viruses;
- iv. Distributing “junk mail” such as chain letters, advertisements or unauthorized solicitations;
- v. Transmitting confidential information without proper security and authority.

NO GAMES ARE PERMITTED TO BE LOADED UPON, OR UTILIZED ON COUNTY COMPUTERS

5.9 Fraud Policy

Benzie County hereby adopts a zero tolerance policy regarding fraud and misuse of County assets. No employee of Benzie County, contractor or sub-contractor working for the County or member of the public shall engage in fraud, embezzlement, misappropriation, theft or misuse of and County assets. An individual who violates this policy will be subject to any or all of the following: civil action, restitution, and/or criminal charges. In addition to the above listed remedies, employees who violate this policy will be subject to disciplinary action up to and including discharge.

5.10 Credit Card Use Policy

The use of credit cards will only be for the purchase of goods and services for official Benzie County business.

A. Authorized Users:

- 1. Only County Commissioners, Elected Officials, County employees and committee members of the Government Credit cards will be limited to twelve budget managers: County Prosecutor, County Clerk, Registrar, County Treasurer, County Administrator, EMS Manager, 911/Dispatch Manager, Animal Control Manager, Equalization Manager, Emergency Operations Manager, Recycle/Solid Waste manager, and Probate Court Administrator.
- 2. Only employees and Reserve Officers of the Sheriff’s Office are authorized to use credit cards issued to the Benzie County Sheriff.

B. Required Documentation:

- 1. Department Heads are responsible for all documentation which must be submitted for payment in a timely manner to avoid being charged late fees and penalties by the Credit Card Company.

Memorandum



To: Board of Commissioners

Copy: Elected Officials
Katie Zeits, County Administrator
Department Heads

From: Jackie Palfey, Human Resources Manager
Rose Roelofs, Administrative Assistant

Date: May 18, 2023

Subject: **Tobacco/Smoke-Free Workplace Policy**

Jackie Palfey

Rose Roelofs

Attached is a draft policy regarding Tobacco/Smoke-Free Workplace. This policy has been reviewed by all elected officials, department heads, Commissioners, and our legal counsel before being brought forward to the Board for consideration.

This policy is intended to replace the existing Tobacco/Smoke-Free Workplace Policy that is currently included in the Staff Manual on pages 10-11. This policy is in the interest of providing a safe and healthy environment for employees, vendors, and visitors. Once approved the policy will be distributed to County Personnel, added to the Everyone Drive for accessibility, and update to our new policy book.

This policy is meant to replace the existing policy that is currently included in the Staff Policy Manual on pages 10-11. I have attached the current portion of the Tobacco/Smoke-Free Workplace policy pages listed in our Staff Policy Manual book.

The recommendation is to replace the current policy with the updated Tobacco/Smoke-Free Workplace policy.

RECOMMENDATION:

The Board of Commissioners adopts the Tobacco/Smoke-Free Workplace policy to replace the old policy listed in the staff policy manual.



Updated: 5/1/2023

Tobacco/Smoke-Free Workplace Policy

Purpose

Benzie County is committed to providing a safe and healthy workplace by promoting the health, safety, and well-being of its employees. Benzie County recognizes the hazards caused by exposure to environmental tobacco smoke, as well as the life-threatening diseases linked to the use of all forms of tobacco. In accordance with the Michigan Clean Indoor Air Act, Public Act 198 of 1986, as amended; the Dr. Ron Davis Smoke-Free Air Law, Public Act 188 of 2009, as amended; and other public health policies, Benzie County strives to provide a health-conscious environment for its employees, vendors, and visitors.

Section I- Scope

This policy covers the use of all tobacco and smokeless tobacco products, including, but not limited to, cigarettes, pipes, cigars, snuff, and chew as well as the use of e-cigarettes or other electronic nicotine delivery systems in a County Facility. A County Facility includes any County-owned/leased building or County-owned/leased vehicle.

Section II- Policy

The use of tobacco and smokeless products as well as e-cigarettes or other electronic nicotine delivery systems is prohibited within all County Facilities at any time. Use of these products shall be strictly prohibited within all work areas, including, but not limited to, conference rooms, reception areas, restrooms, stairwells, hallways, or other enclosed areas within County Facilities.

Smoking and the use of e-cigarettes or other electronic nicotine delivery systems are only permitted in designated areas outside County Facilities. Said designated areas shall be clearly identified as a smoking area for use by employees, vendors, and visitors. All materials used for smoking, including, but not limited to, cigarette butts, snuff, chew, and matches, shall be extinguished and disposed of in appropriate containers provided by Benzie County.

Section III-Enforcement

All employees share the responsibility for adhering to and enforcing this policy. If an employee observes a violation of this policy, they should bring it to the attention of their immediate supervisor, or, if necessary, the Benzie County Board of Commissioners. The Benzie County Board of Commissioners, or their designee(s), shall oversee the enforcement of this policy. Complaints shall be investigated as soon as possible following receipt.

Failure to abide by all terms and conditions of this policy may result in discipline up to and including termination. This policy shall not be construed to create any duty or obligation on the part of Benzie County to take any actions beyond those required of an employer by existing law.

Retaliation against individuals reporting violations of this policy or for exercising their rights under the law will not be tolerated. If an employee believes they are being retaliated against, the employee shall immediately report it to their immediate supervisor.

I, Tammy Bowers, duly appointed Clerk for the County of Benzie, Michigan, do hereby certify that the above policy was adopted by the Benzie County Board of Commissioners at a regular Board meeting held on May 23, 2023, and that related policies are hereby rescinded.



Tammy Bowers, Benzie County Clerk

- D. Mailing County documents containing more than four sequential digits of a Social Security number except in such cases where state or federal law, rule, regulation, or court order or rule authorizes permits or requires that a Social Security number appear in the document. Documents containing more than four sequential digits of a Social Security number that are sent through the mail shall not reveal the number through the envelope window or otherwise be visible from outside the envelope or package.
- E. Releasing any document under the Freedom of Information Act which contains more than four sequential digits of a Social Security number. The Social Security number shall be redacted or otherwise rendered unreadable before the document or copy of a document is disclosed.

All documents containing Social Security numbers shall be stored in a physically secure manner. Social Security numbers shall not be stored on computers or other electronic devices that are not secured against unauthorized access. Only staff who have legitimate business reasons to know, will have access to records containing Social Security numbers.

Documents containing Social Security numbers will be retained in accordance with the requirements of state and federal laws. At such time as documents containing Social Security numbers may be disposed of, such disposal shall be accomplished in a manner that protects the confidentiality of the Social Security numbers, such as shredding or burning. Records awaiting disposal will be kept in a secured area, such as a locked file cabinet. Records containing Social Security numbers or confidential information should not be retained beyond their destruction date (unless a Freedom of Information Act (FOIA) request has been received for a particular record or the County's legal counsel directs otherwise.)

The County shall take reasonable measures to enforce this Privacy Policy and to correct and prevent the reoccurrence of any known violations. Any employee, who knowingly obtains, uses or discloses Social Security numbers for unlawful purposes or contrary to the requirements of this Privacy Policy shall be subject to discipline up to and including discharge. Additionally, certain violations of the Act carry criminal and/or civil sanctions. The County will cooperate with appropriate law enforcement or administrative agencies in the apprehension and prosecution of any person who knowingly obtains uses or discloses Social Security numbers through the County for unlawful purposes.

Section 5: Other Policies

5.1 Tobacco/Smoke Free Workplace

Because we recognize the hazards caused by exposure to environmental tobacco smoke, as well as the life-threatening diseases linked to the use of all forms of tobacco, and in the interest of providing a safe and healthy environment for employees, vendors and visitors, and in accordance with the Michigan Clean Indoor Air Act, as amended, as well as other

Memorandum



To: Board of Commissioners

Copy: Elected Officials
Katie Zeits, County Administrator
Department Heads

From: Jackie Palfey, Human Resources Manager
Rose Roelofs, Administrative Assistant

Date: May 18, 2023

Subject: **Adoption and Administration Policy**

Attached is a draft policy regarding Adoption and Administration. This policy has been reviewed by all elected officials, department heads, Commissioners, and our legal counsel before being brought forward to the Board for consideration.

This policy is intended to replace the existing Adoption and Administration Policy that is currently included in the Staff Manual on page six. This policy is an updated procedure on how to adopt and implement policies for Benzie County. Once approved the policy will be distributed to County Personnel, added to the Everyone Drive for accessibility, and update in our new policy book.

This policy is meant to replace the existing policy that is currently included in Section 1 of the Staff Policy Manual on page six. I have attached the current portion of the Adoption and Administration policy page listed in our Staff Policy Manual book.

The recommendation is to replace the current policy with the updated Adoption and Administration policy.

RECOMMENDATION:

The Board of Commissioners adopts the Adoption and Administration policy to replace the old policy listed in the staff policy manual.



Updated: 5/1/2023

Adoption and Administration of Policies

Purpose

The objective of this policy is to outline the procedure to adopt and implement policies for Benzie County.

Section I- Policy

All policies brought forth to Elected Officials, Department Heads, and employees shall not be interpreted as creating a contract between Benzie County and themselves. Such policies shall be subject to review and revision by the Benzie County Board of Commissioners in consultation with the Human Resources Manager and County Administrator.

Section II – Procedure

Policies that Elected Officials and Department Heads are interested in changing, reviewing, or removing should be brought to the attention of the County Administrator and Human Resources Manager. The County Administrator and Human Resources Manager will then decide what, if any, further action is necessary to update the policies. This may include seeking a legal opinion from Corporation Counsel before presenting any proposed revisions to the Benzie County Board of Commissioners. The Benzie County Board of Commissioners is responsible for adopting all staff and operational policies. This includes any changes, modifications, and/or rescission of a policy.

Department Heads shall be familiar with and implement staff policies, making copies available to their respective staff. Elected Officials, however, reserve the right to 1) adopt and implement their own personnel-related policies for their respective offices or 2) choose not to enforce Benzie County Board of Commissioner-adopted policies, except for when economic-related issues are the subject of such policies. If an Elected Official does not elect to use a Benzie County Board of Commissioner-approved policy, the Elected Official may provide a copy of their policy manual to the Human Resources Manager for the record.

Every employee shall be provided with a copy of all Benzie County policies upon hiring. A signed receipt attesting to the employee's receipt and review of the policies will be kept in each respective employee's personnel file. Policy updates will be issued and replaced on the County's internal drive, a hard copy will be placed in the policy binder held by the Benzie County Clerk, and a digital copy of the policy manual will be made available on the Benzie County website.

I, Tammy Bowers, duly appointed Clerk for the County of Benzie, Michigan, do hereby certify that the above policy was adopted by the Benzie County Board of Commissioners at a regular Board meeting held on May 23, 2023, and that related policies are hereby rescinded.



Tammy Bowers, Benzie County Clerk

Policies referring to hours of work, sick, personal time, and funeral leave do not apply to salaried employees. Salaried personnel may take leave according to their position's requirements and their personal needs. The County shall decide who is salaried.

This Manual shall not be construed as creating a contract between the County and any employees. The interpretation and operation of the benefits noted herein are within the sole discretion of the County Board of Commissioners. Benefits outlined in this document may be added to, expanded, reduced, deleted or otherwise modified by the County Board of Commissioners. Any modifications in the manual shall be solely within the discretion of the County Board. The Employer reserves and retains, solely and exclusively, all rights to manage and operate its affairs and neither the constitutional nor the statutory rights, duties and obligations of the Employer shall in any way whatsoever be abridged by the terms of this manual.

The fact that these policies may have been applied differently in the past does not affect their current or future applications. The policies included in this Staff Manual supersede, replace and control any prior staff manuals, policies, representations, contracts, or practices.

Section 1: Adoption and Administration

- 1.1** The Board of Commissioners shall adopt Staff Policies and any amendments.
- 1.2** The H.R. Committee shall administer the Staff Policies.
- 1.3** Department heads shall be familiar with the Staff Policies, implement them, and make copies available to their staff.
- 1.4** The Board of Commissioners reserves the right to add to, modify and/or rescind policies at any time.
- 1.5** Every employee shall be provided a copy of this Manual and shall sign a receipt which will be kept in the official personnel record.
- 1.6** The policies contained herein supersede previous policies contained in the 8/16/11 version of the Personnel Policy. Updates will be issued as replacement pages and will be updated on the website.

Section 2: Equal Employment Opportunity

2.1 Equal Employment Opportunity

Memorandum



To: Board of Commissioners

Copy: Elected Officials
Jackie Palfey, Human Resources Manager
Department Heads

From: Katie Zeits, County Administrator *Katie Zeits*

Date: May 18, 2023

Subject: **Disciplinary Action Policy**

Attached is the draft Disciplinary Action Policy for the Board's review. The purpose of this policy is to set and maintain standards of conduct within the County for personnel. In doing so, Benzie County can ensure that all employees are treated fairly and consistently. The policy is designed to help and encourage all employees to achieve and maintain satisfactory standards of behavior and productivity.

This policy is meant to assist supervisors in their management of staff. It's also meant to mirror processes set in place within Collective Bargaining Agreements to ensure equal treatment of personnel. While a policy hasn't been in place, it's been practice for supervisors to follow a similar process as this.

The recommendation is to adopt the attached policy.

RECOMMENDATION:

The Board of Commissioners adopts the Disciplinary Action Policy and rescinds all related policies.



Updated: 5/24/2023

Disciplinary Action Policy

Purpose

The purpose of this policy and procedure is to set and maintain standards of conduct within the County. In doing so, Benzie County can ensure that all employees are treated fairly and consistently, applying a concept called progressive discipline. Progressive discipline may include but is not limited to, verbal warnings, written reprimands, final written warnings, and/or termination of employment. However, the County retains and reserves the discretion to apply any level of disciplinary action and nothing in this policy acts to change or limit the at-will employment relationship.

Section I- Policy

This policy applies to all employees that the County, in its sole discretion, determines must be addressed by discipline. Discipline shall mean any form of reprimand, whether written or verbal, that could lead to loss of pay or termination. No disciplinary action policy can be expected to address every single workplace situation that may require corrective action. Therefore, the County may take a case-by-case approach regarding discipline but will attempt to consider all relevant factors before making its determination.

Benzie County expects employees to follow all rules and regulations that the County and its departments set forth. All rules and regulations are necessary for the County's orderly and efficient operations. Failure to follow the rules and regulations may lead to disciplinary action. Whether to impose any discipline or any degree of discipline is a discretionary decision that a Department Head or Elected Official will make for their employee based on the nature of the offense, the employee's history, and other facts and circumstances deemed relevant. Whenever a notice of disciplinary action is taken, it may be placed in the employee's personnel file. In such case, an employee may respond in writing and have the response included in their personnel file consistent with the Bullard-Plawecki Employee Right to Know Act (MCL 423.501 *et seq.*).

Typically, an employee's conduct that warrants discipline is due to unacceptable behavior; poor performance; or violation of the County's policies, practices, or procedures. The Department Head or Elected Official reserves the right to repeat or skip steps in the progressive discipline procedure if the situation warrants change. Moreover, as this policy necessarily involves conduct between County employees, which has an adverse impact on the workplace and the work environment, conduct between employees that occur outside of the workplace may also be considered when enforcing this policy.

Section II – Procedure

Progressive discipline is a step-by-step process designed to modify unacceptable employees. Progressive discipline will involve the process of correcting a single or repeat episode of an employee failing to comply with rules and/or specific workplace expectations and conduct. A

step-by-step process designed to modify unacceptable employee behaviors, it allows for discipline to start at a higher level based on the severity and circumstances of the situation. The Department Head or Elected Official should assess the employee's understanding of the rules and expectations; their willingness to follow them; any system failures and workplace obstacles interfering with compliance; and whether the action was the result of an excusable mistake, an inexcusable error, or deliberate action.

The following is a general outline of the disciplinary process:

A. Verbal Warning

1. The purpose of the verbal warning is to counsel the employee on the expectations of the position and clarify policies.
2. The Department Head or Elected Official should document the conversation for their records and provide a copy to the employee if requested.

B. Written Warning

1. If the conduct of the verbal warning is repeated or an additional problem occurs within 12 months of a verbal warning, the Department Head or Elected Official should follow up with a written warning in the form of a letter.
2. The Department Head or Elected official is encouraged to consult with Human Resources prior to taking disciplinary action.
3. If a single incident is more serious than what is appropriate for a verbal warning, the Department Head or Elected Official may skip the verbal warning and issue a written warning in the form of a letter.
4. The letter should include the unacceptable conduct, reiterate the expectations, and state that further disciplinary action will occur if the behavior is repeated within 12 months of this written warning.

C. Final Written Warning

1. If the conduct addressed by the written warning is repeated or an additional problem occurs within a 12-month period, discipline may progress to a final written warning. This may include a suspension without pay.
2. The Department Head or Elected Official is encouraged to consult with Human Resources prior to taking disciplinary action.
3. Sick leave, personal leave, comp leave, or vacation time shall not be used during an employee's suspension. All suspensions will be without pay.

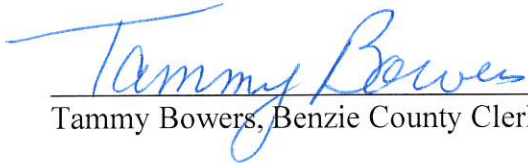
D. Termination of Employment

1. Employment may be terminated based on progressive discipline within a

12-month period or based on the severity of a single incident.

2. The Department Head or Elected Official is encouraged to consult with Human Resources prior to taking disciplinary action.

I, Tammy Bowers, duly appointed Clerk for the County of Benzie, Michigan, do hereby certify that the above policy was adopted by the Benzie County Board of Commissioners at a regular Board meeting held on May 23, 2023, and that related policies are hereby rescinded.



Tammy Bowers, Benzie County Clerk


Note: This policy may differ for those employees who are members of recognized unions, organizations, or associations. Any questions related to the content of this policy, or its interpretation, should be directed to Human Resources.

Memorandum



To: Board of Commissioners

Copy: Elected Officials
Jackie Palfey, Human Resources Manager
Department Heads

From: Katie Zeits, County Administrator 

Date: May 18, 2023

Subject: **Nepotism Policy**

Attached is the draft Nepotism policy for consideration by the Board. As most may understand, this policy would prevent direct supervision of a close family member within a given office. It does not limit family members from being hired by the County.

This policy is meant to replace the existing policy that is currently included in the Staff Policy Manual on page 14. I have attached the current portion of the nepotism policy page listed in our Staff Policy Manual book.

The recommendation is to replace the current policy with the updated Nepotism policy.

RECOMMENDATION:

The Board of Commissioners adopts the Nepotism Policy and rescinds all related nepotism policies.



Updated: 5/24/2023

Nepotism Policy

Purpose

The purpose of this policy is to avoid favoritism or the appearance of favoritism, conflicts of interest, and loyalty often associated with nepotism in the workplace. Nepotism is inconsistent with Benzie County's longstanding policy of making employment and other business decisions based solely on needs and an individual's qualifications, skills, ability, and work performance. Employment with and advancement within Benzie County is based on qualifications and merit. Benzie County will not discriminate in favor or opposition of the employment of an employee's family member (defined below).

Definitions

Family Members/or close personal relationship is defined as spouse, partner, parents, stepparents, siblings, stepsiblings, aunts, uncles, nieces, nephews, grandparents, grandchildren, cousins, and in-laws.

Nepotism is the practice among those with the power or influence of favoring relatives, friends, or associates, especially by giving them jobs.

Section I- Policy

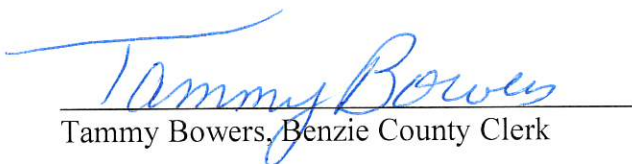
It is Benzie County's policy to hire, appoint, promote, demote, or transfer employees on the basis of individual merit and to avoid any suggestion of favoritism or discrimination in making such decisions. Employing family members in positions where one might have influence over the other's status or job security is considered a potential violation of this policy. Even if favoritism or discrimination is not shown, the existence of the situation may raise questions or cause discomfort for the individuals involved. Therefore, Benzie County prohibits the hiring of an employee's family member in situations where a relative would be under the direct or general supervision of an elected official, department head, supervisor or team leader, or to employ an employee's family member where the status of employment of that person might be influenced by an elected official, department head, supervisor, or team leader. While there may be existing relationships among employees which are contrary to this policy, Benzie County seeks to avoid creating any new situations where family members are employed in supervisor/subordinate relationships.

- A. No person shall be hired, appointed, promoted, demoted, or transferred into a position that would create a policy conflict. If employees become family members and the employees have a reporting responsibility to each other less than three supervisory levels apart, the supervisory employee must notify Human Resources. The employees will have sixty days from creating the conflict to resolve the situation on their own or in conjunction with Human Resources. This may include transfer or, if necessary, termination of one of the employees.
- B. If there is a situation where an action of Benzie County results in an involuntary circumstance where two family members have a reporting responsibility to each other less

than three supervisory levels apart, one of the employees will be reassigned within sixty days.

- C. Any exceptions to this policy will be made on a case-by-case basis, not to be considered precedence for establishing the practice. Exceptions must be approved in writing by the employees' respective Department Heads or Elected Officials as well as the Human Resources Manager. Written justification for the exception must be submitted to Human Resources prior to any employment decisions. Where an exception is made, the affected supervisor in the reporting relationship must recuse themselves from performance and discipline issues related to the other employee and be replaced by one of their peers.
- D. Specific to the supervisory relationship, family members will not be permitted to evaluate each other's job performance or to make recommendations for salary adjustments, promotions, or other decisions. Any preexisting family relationships that predate this policy shall be exempt under this policy; however, if the existing relationship changes so that the conflict no longer exists, this policy will apply for future employment decisions.
- E. Benzie County reserves the right to take prompt action if an actual or potential conflict of interest arises concerning individuals who occupy positions at any level (higher or lower) in the same line of authority that may affect employment decisions. Department Heads and Elected officials are prohibited from dating subordinates or any type of fraternization and may be disciplined for such action up to and including termination.
- F. Failure to immediately disclose the existence and/or establishment of a familial relationship which involves a supervisory-subordinate relationship constitutes a breach of trust and policy violation. Violations of this policy will subject the employee(s) to disciplinary action up to and including discharge.
- G. Employees who feel aggrieved by this policy have the right to appeal to the Benzie County Board of Commissioners. The Benzie County Board of Commissioner's decision will be finalized.

I, Tammy Bowers, duly appointed Clerk for the County of Benzie, Michigan, do hereby certify that the above policy was adopted by the Benzie County Board of Commissioners at a regular Board meeting held on May 23, 2023, and that related policies are hereby rescinded.


Tammy Bowers, Benzie County Clerk

Note: This policy may differ for those employees who are members of recognized unions, organizations, or associations. Any questions related to the content of this policy, or its interpretation, should be directed to Human Resources.

Employees of federally aided programs are, however, prohibited from participation in partisan political activity under the Federal Hatch Political Activities Act.

No employee shall engage in any partisan political activity or campaigning for an elective office during scheduled working hours or while on duty or while off duty wearing a uniform or other identifying insignia of County office or employment. Solicitation of signatures or contributions or nominating petitions is prohibited during working hours. No employee shall be required to engage in a campaign for election of any candidate.

5.5 Nepotism

Members of the immediate family or those in a close personal relationship shall not be hired nor remain employed if:

- a. The individual would have the primary authority to supervise, hire, remove or discipline the other;
- b. The individual would have the responsibility of auditing the work of the other; or,
- c. The individual would have access to confidential material of the other.

A close personal relationship may be, but is not limited to, natural, adoptive, step, foster, or by marriage including spouse, child, parent, brother, sister, grandparent, grandchild, first cousin, aunt, uncle, niece, nephew, or other member of household.

If two employees are in such positions, one of the employees will be, where possible, transferred to another department. If such transfer cannot be accomplished due to the unavailability of an open position or a lack of qualifications, one of the employees must resign. The decision on which employee will transfer or resign will initially be left to the employees. However, if after thirty (30) days, no such decision is made, the employee with the least seniority will be transferred or will resign.

5.6 Dating in the Workplace

Supervisors may not retain their position while dating a subordinate employee.

In that event, the County will try to transfer one of the employees to another department. If that is not possible, the employees involved may choose which one will resign their employment. If they do not choose or do not agree, both employees shall be terminated. The employee in the higher-level position must disclose the relationship to the department head and to the Human Resources Committee.

5.7 Reporting Illegal and Unethical Activity

Any employee who, during the course of employment, believes that he or she has been **requested** or required to engage in an illegal or unethical act, or to engage in otherwise

Memorandum



To: Board of Commission

From: Katie Zeits, County Administrator *Katie Zeits*

Date: May 18, 2023

Subject: **Proposals for Fieldwork for Equalization Studies**

Attached you will find a memo from Brianne Lindsay regarding proposals for fieldwork for equalization studies. Ms. Lindsey is recommending that we move forward with the low bidder, Complete Appraisal Service.

In past years, Equalization was able to handle these services themselves. However, at this current time the office can't complete these services and therefore proposals have been sought out. In Michigan, one must possess a certain level of license and have training to perform this fieldwork and while there are staff with this level of licensing, staffing shortages and the inability to find additional level two applicants, we believe this is the best path forward.

Recommended Motion:

That the Board of Commissioners approves a one-year contract with Dr. Mark Holley, Complete Appraisal Service, in the total amount annual amount of \$23,300, such contract subject to approval as to its form by legal counsel and authorizes the Chair to sign.



Benzie County Equalization Department
Polly Watson Cairns, Director of Record
Brianne Lindsay, Equalization Department Head
448 Court Place, Beulah, MI 49617
Phone: (231)882-0013 Fax: (231)882-0033

To: Benzie County Board of Commissioners

May 23, 2023

From: Brianne Lindsay, Equalization Department Head
cc: Polly Watson Cairns, Equalization Director of Record

Re: **Proposals for Fieldwork for Equalization Studies**

Attached you will find three proposals from contractors to conduct fieldwork and data entry this summer for our 2024 Equalization Studies. Each proposal has been reviewed and each covers a similar scope of duties and only varied in cost. Contracting this service will ensure our fieldwork and data entry will be completed on or before September 30th, 2023. These contracts cover appraisal parcel counts only. Residential inspections will be needed for ECF and Land Value analysis and will require further discussion with the contractor.

1. Complete Appraisal Service - \$23,300
2. CSZ Services - \$29,125
3. Michigan Assessing Professional Services - \$33,825

Recommendation:

That the Board of Commissioners approve a contract with Dr. Mark Holley of Complete Appraisal Service totaling \$23,300 and authorize the chair to sign.

Signature

Brianne Lindsay, MAAO
Equalization Department Head

Benzie County Equalization Department
E: blindsay@benzieco.net

Signature

Polly Watson Cairns, MMAO
Equalization Director of Record

Benzie County Equalization Department
E: pcairns@benzieco.net

①

CONTRACT FOR PROFESSIONAL SERVICES
BENZIE COUNTY, MICHIGAN

THIS AGREEMENT is by and between Benzie County, Michigan, a Michigan Governmental Jurisdiction, herein called the "County", located at 448 Court Place, Beulah, MI 489617, and Dr. Mark Holley, Complete Appraisal Service, 111 E. Front Street, Ovid, Michigan 48866, the "Contractor", by their undersigned authorized officers.

The parties agree as follows:

The County engages the Contractor to provide appraisal/assessing services including field work for the 2023 Equalization Studies for 2024 Equalization.

The Contractor represents that it is familiar with the skills and techniques pertaining to appraisal/assessing and is capable of performing those tasks.

The County and the Contractor, in consideration of the following, agree as follows:

1. A. The CONTRACTOR agrees to complete the following tasks on or before September 30, 2023

- i. Inspect approximately 139 Commercial, 23 Industrial and 71 Agricultural properties. The sample properties will be selected by the County Equalization Department.
- ii. Measure buildings and site improvements
- iii. Observe class, condition, percent good etc. for appraisal
- iv. Photograph building improvements with digital photography equipment and download digital photos to database.
- v. Interview property owners
- vi. Analyze parcels for Size
- vii. Enter observed characteristics for sample properties into BS&A software. Enter land and building sketches as needed to complete the property record card for each parcel.

Upon completion of the above items to the satisfaction of the County's Equalization Director, payment of \$23,300 shall be made to the Contractor within seven (7) days of receipt of an invoice for payment.

2. The County agrees to reasonably cooperate with the Contractor in providing direction and data needed to complete the tasks.
3. Each of the parties shall be responsible for their respective acts and omissions resulting in liability claims for loss due to personal injury, death and property damage of any nature to either of them or to other, and related fees and costs, arising out of their respective performances under this Agreement, and each agrees to hold the other harmless and to indemnify the other for damages and expenses arising from such claims.

4. The Contractor further represents that it is an independent contractor, that its employees, officers agents, and sub-contractors are not employees of the County or local jurisdictions within the County. The Contractor will comply with all provisions of applicable Worker's Compensation and Unemployment Compensation Laws, and applicable rules and regulations. The Contractor agrees to comply with all applicable local, State and Federal tax reporting and compliance regulations and shall make all Worker's Compensation and Unemployment Compensation taxation payments required or incidental to this contract and the work to be performed hereunder.
5. The Contractor, as an independent contractor, hereby further agrees to save and hold harmless the County from any and all claims, payments, demands, obligations and damages arising from any cause whatsoever from its failure to comply with any and all applicable local, State and Federal taxation, Worker's Compensation or other such requirements.
6. Prior to the commencement of work hereunder, the Contractor shall furnish the County certificates of its current professional, and personal injury and property damage liability and Worker's Compensation insurance for all of its activities under this Agreement, in limits acceptable to the County. The certificates shall provide that the County shall receive thirty days written notice in advance from the insurers of cancellation of any such coverage. Clinton County shall be named as an additional insured on any liability insurance policy.
7. The Contractor covenants for itself and its officers, agents and employees that it will not to discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight, marital status or other classification protected by Federal or State law.
8. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, legal representatives, successors and assigns, where permitted by this Agreement and is not assignable without the written consent of all parties, which may be granted or withheld in each party's sole discretion.
9. In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision hereof and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.
10. The validity, performance and construction of this Agreement shall be governed and interpreted in accordance with the laws of the State of Michigan applicable to contracts made and to be performed therein. Any action or lawsuit with respect to breach of this Agreement shall be brought solely in the courts for the Count yof Clinton and the parties waive any other right to jurisdiction or venue in a different State or Federal court or forum.

11. All written communications with and reports and invoices to the County shall be addressed to:

Mrs. Brianne Lindsay
Equalization Director
448 Court Place,
Beulah, MI 489617

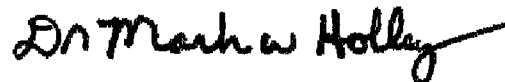
12. All written communications to the Contractor shall be addressed to:

Dr. Mark Holley, Complete Appraisal Service
111 E. Front Street
Ovid, MI 48866
Ph: (989) 834-5611
Fax: (989) 834-5505

13. This Agreement contains the entire understanding and agreement between the parties regarding the subject of this Agreement and supersedes all previous communications, negotiations and agreements, whether oral or written, between the parties with respect to such subject matter. No addition to or modification of this Agreement or waiver of any provision of this Agreement shall be binding on either party unless made in writing and executed by the County and the Contractor.

IN WITNESS WHEREOF, the County and the Contractor have caused this Agreement to be executed in duplicate original on the date set forth below.

COMPLETE APPRAISAL SERVICE



Dated: 05/ /2023

Dr. Mark Holley

CLINTON COUNTY

Dated: _____

Brianne Lindsay, Equalization Director

Dated: _____

, Board of Commissioners

Dated: _____

, Administrator

PROPOSAL FOR PROFESSIONAL VALUATION SERVICES

SECTION I: BASIC SERVICES OF THE CONTRACTOR

The **Contractor** shall physically inspect, measure, document, photograph all parcels selected by the County for field appraisal studies for the 2024 assessment year. The improvements shall be sketched and valued on a software system compatible with current County software. The contractor shall also sketch the legal description of said parcels.

The **Contractor** shall work with the County to eliminate any adversarial situations.

The **Contractor** shall provide all necessary transportation and field equipment to perform the services.

The **Contractor** hereby acknowledges that all personnel and employees used in the completion of the services shall, for all purposes, be considered employees of the Contractor and not that of the County.

The **Contractor** will be available for appointments should the taxpayer or taxpayer representative request a meeting or to be present during inspections.

The **Contractor** will complete 20 inspections, sketches and valuations for the County to review before continuing on with the complete project.

The Contract shall commence on May 1, 2023 and the work completed no later than September 30, 2023. An import of all work performed will be given to the County on or before September 30, 2023, for use in County Equalization studies.

Compensation for Basic Services shall be in the amount of:

\$29,125 based on 139 Commercial appraisals, 23 Industrial appraisals & 71 Agricultural/Residential appraisals.

Compensation for service shall be paid within 30 days of billing for parcels completed.

Terms of contract shall be for 2023, with an option to extend for the years 2024 & 2025 if mutually agreed upon.

SECTION II: COUNTY RESPONSIBILITIES

The County shall provide access to the Contractor property description files as they currently exist in the County database or in County possession. This may include, but not limited to, legal descriptions, property number, owner and address information as well as other information the County may possess concerning such properties.

The County shall provide, at the discretion of the Equalization Director and Contractor, mailings and/or other information to the General Public as to the intentions of the Contractor and the work being provided on behalf of the County.

The County shall provide all mapping or GIS information needed to complete and aide in completion of the project.

The parties acknowledge that it is the responsibility of the County to determine the nature and extent of implementation of the Contractor's work provided. To that end, the County assumes responsibility for the defense of any claim, cause of action or other proceeding that may or might be instituted by the State Tax Commission or any other entity arising from contracted work.

SECTION III: MISCELLANIOUS PROVISIONS

Relationship between the County and Contractor shall be at all times be deemed in a relationship of Independent Contractor to the County.

The Contractor will maintain at least \$1,000,000 of general liability and property damage, unemployment, workers disability, automobile liability and any other insurance required by law for the Contractor and his agents or officers as will protect him and the County from claims. The Contractor shall save the County harmless and indemnify the County from any claims for bodily injury, death, or property damage that may arise due to his acts or negligence or that of his employees that arise from his error or omission to properly perform his duties as Contractor (description under Section I).

The parties to this Agreement acknowledge that, inasmuch as the Agreement is in the nature of a Personal Services Contract, and as the County's decision to contract with the Contractor is based in part on the perceived expertise and ability of the Contractor, it is agreed that the Contractor

duties and obligations hereunder may not be assigned, transferred, nor conveyed without advance written approval from the County.

The Contractor shall be responsible to the highest levels of competency presently maintained by other practicing professional assessors and appraisers, for the professional and technical soundness and accuracy of the property valuations, drawings, property inspection data and all other work and materials furnished under this agreement.

Ownership of all documents, data, drawings, specifications, photographs, property cards, summaries, with the exception of the field work card, will be the property of the County. Calculated cost methodology will be used and applied for all parcels.

In the event of a material breach of the Agreement by either party, it is agreed that the non-defaulting party shall be permitted to recover, in addition to any other remedies as may be available to it, at law or equity, all reasonable attorney's fees and costs incurred as a direct result or consequence of such breach.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals the day and year first above written.

Benzie County

Charles S Zemla

CSZ Services

Appraisal Service-Benzie County, MI

The following is a proposal to offer the Benzie County Equalization Department appraisal services in the 2023 Calendar Year for 2024 Studies. Responsibilities would include:

- Organize and map the parcels, as selected by the Director, to establish and efficiently plan for conducting field inspections.
- Physically visit, measure, field draw, notate features, interview property owners (if available), and photograph the existing real property on all selected parcels.
- Input the field drawing into an appraisal database utilizing Apex v5.0 and attach photos to each parcel.
- Enter collected data into approved BS&A database using current State of Michigan approved Cost Manual for valuation.
- Electronically transmit data to the Director upon completion of project.
- Confer with the Director, as necessary, regarding progress made and adequately address any and all questions or concerns raised by the Director.
- Expenses for equipment, such as tape measures, laser measures, computers, and computer software licenses will be at no additional rate. Mileage, vehicle repair, and other employees hired to assist are included in the contracted rate.
- To be provided by the County or reimbursed:
 - Vehicle magnets identifying the vehicle used as a Benzie County or Equalization Department representative. These will be returned upon project completion.
 - Generic Equalization Department Business Cards to be used in place of the State recommended "door hangers". These will be used sparingly.
 - Direct mailing to each property owner of the pending inspection.
- Field Inspections would begin as agreed upon with the Director and Contractor.

Compensation:	Agricultural	\$175/Parcel
	Commercial	\$125/Parcel
	Industrial	\$175/Parcel
	Residential	\$125/Parcel

Compensation is due after the completion of the project and the Director has reviewed the work. Once the Director has approved the quality of the work submitted, payment is due in full within 30 days. Any work deemed unsatisfactory will be reinspected/reviewed at no additional charge.

Thank you,



Michael Houserman, MAAO
Michigan Assessing Professional Services, LLC (MAPS, LLC)
(989) 302-0848

Memorandum



To: Board of Commission

From: Katie Zeits, County Administrator

A handwritten signature in blue ink that reads "Katie Zeits".

Date: May 18, 2023

Subject: **Netlink Copy Machine Lease**

Benzie County works with Netlink to provide copy machines for general operating use. There are three machines held in the Sheriff's Office whose maintenance agreement terms are expiring. Administrative Assistant Suzi Mills has worked with Netlink to renew the terms of these machines to provide server and toner replacements.

Recommended Motion:

That the Board of Commissioners approves three agreements with Netlink Business Solutions for a period of 36 months for copy machines in Sheriff's Office in the estimate total annual amount of \$1800.



6500 E. Traverse Highway.
Traverse City, MI 49684

COLOR COPIER MAINTENANCE AGREEMENT

Company Name: Benzie County Sheriff -- Administration

Location of copier address: 505 S. Michigan Ave, Beulah, MI 49617

Billing address: Same

Contact: Kyle Rosa / Suzi Mills

Phone: 231-882-4494

Fax:

Email: smills@benzieco.net

Starting Date: 05/05/2023

Ending Date: 05/04/2026

Ending Copier Count (first year)- Black:

Model # MX 2651

Finisher # NONE

S.N. #13004981

NBS # 3620

Cost per Black Copy .011
Color Copy .057

Estimated Yearly Cost Black - \$330.00

Estimated Yearly Volume 30,000 Black & White

Black Overages billed every 3 months at 0.011 per copy.
Color Images Billed at 0.057 per copy every 3 months

Non-taxable

Comments: Computer / network support is not included in copier hardware maintenance agreements. Toner Included

Signature:

Bob Roelofs, Board of Commissioners Chair

Date

May 23, 2023

I have received and read a copy of the Terms and Conditions of NETLINK, and I accept the Terms and Conditions, for the COPIER MAINTENANCE AGREEMENT from NETLINK. I also acknowledge that I have authority to sign this agreement for the business listed above

NETWORK SUPPORT. Netlink will assist or install networked equipment print and scanning software with cooperation of any in-house or contracted network support personnel at agreed open cost. If Customer requires additional print or scan software due to changes in client network, client software, new computers or other changes beyond Netlink control, this support may be billable. Netlink Business Solutions does maintain a staff of network engineers if required. Netlink shall under no circumstances be liable for any special software requirements. Netlink will provide actual software disks and / or link to all latest software down loads.

Signature:

Date

5/24/2023

The above pricing will remain unchanged for
Technical support requests may be made by calling NETLINK at (231) 946-8808.

1. **EQUIPMENT MAINTENANCE AND SUPPLIES AGREEMENT.** NETLINK agrees to perform maintenance, cleaning, and make inspections, adjustments and repairs, and replace defective parts without additional charge to customer provided such calls are made during normal business hours. NETLINK will furnish the following supplies, to be delivered at such intervals in such quantities as recommended, by the manufacturer. Additional items included are: Toner, Developer, Drums or Photoconductor, Fusing Rollers. This agreement does not include paper, labels, staples or operating supplies of any kind. Title to all supplies furnished, including consumable parts such as drums, remains in NETLINK until said supplies are consumed to the extent that they may not be further utilized in the copy making process. In the event of customer's default or cancellation of this agreement, all such supplies and consumable parts shall be returned to NETLINK on demand.

2. **FAX MAINTENANCE AGREEMENT.** In the event that the Equipment under this agreement is a facsimile, NETLINK shall provide such maintenance service as is necessary to keep the Equipment in good operating condition, including the replacement of parts that have been broken or worn out through normal use. With the exception of paper, toner, drum, and developer all parts, and labor are included in this agreement. NETLINK WILL NOT BE RESPONSIBLE FOR REPLACING OR PAYING FOR REPLACEMENT OF ANY DATA, MEMORY, OR INFORMATION WHICH IS LOST, ALTERED, OR DAMAGED WHILE STORED IN THE EQUIPMENT. THIS AGREEMENT DOES NOT COVER SERVICE NECESSITATED BY MALFUNCTIONS OF PARTS, ATTACHMENTS AND/OR SOFTWARE PACKAGES NOT SUPPLIED BY OR THROUGH NETLINK, OR BY USE OF OPERATING SUPPLIES WHICH ARE NOT COMPATIBLE WITH THE EQUIPMENT.

3. **EXCESS COPIES.** Under this Agreement, the term is based on anticipated Customer usage as stated in "Base Allowance" on the face of this Agreement. Base Allowance copies are accumulated from the initial meter reading. Should the Base Allowance be exceeded prior to expiration of any applicable billing cycle, Customer agrees, to pay the current excess copy charge for each copy in excess of the Base Allowance. Invoices for excess copies will be tendered monthly and/or at the end of the initial term and shall be due and payable immediately. For agreements billed annually, upon exceeding the Base Allowance, Customer may request that a new agreement be executed, with the initial date of the term to coincide with the date that Base Allowance was exceeded. Customer's option in this regard shall be void if all previously tendered invoices have not been paid. Pages scanned by machine for network scanning will be invoiced at half of the cost per copy rate on the preceding page.

4. **BUSINESS HOURS FOR SERVICE.** Maintenance services shall be provided hereunder only during NETLINK'S normal business hours, which shall consist of 8:00am to 5:00pm, Monday through Friday, exclusive of NETLINK holidays and subject to change by NETLINK. At Customer's request, NETLINK may render maintenance service outside of normal business hours, subject to availability of personnel, at established NETLINK rates then in effect.

5. **RECONDITIONING.** When shop reconditioning is necessary, or the manufacturer's life expectancy of the equipment has been exceeded, and normal repairs and parts replacement cannot keep a unit in satisfactory operating condition, NETLINK will submit a cost estimate of needed repairs which will be in addition to ordinary maintenance/service charges. If Customer does not authorize such work, NETLINK may refuse to renew this agreement for such unit, and/or refuse to continue providing service to such unit under this Agreement, furnishing service only on a "Per Call" basis.

6. **CANCELLATION OF SERVICE.** Cancellation at the conclusion of the initial term or any renewal term may be accomplished by either party by providing written notice of such cancellation no later than thirty (30) days prior to the expiration of the term then in effect. In addition, NETLINK may cancel this agreement, in whole or in part, at any time upon seven (7) days written notice, or without notice in the thirty (30) day period prior to renewal date, if Customer at any time is within breach of any term or condition contained herein. NETLINK may apply any refund due to the satisfaction or any past due invoices for any other product or service. Should this agreement be cancelled by Customer, NETLINK will not issue any refund for the unused portion.

7. **INTEREST; SUSPENSION OF SERVICE.** Customer agrees to pay all invoices rendered for services performed and/or parts installed on Equipment when services are performed in advance of payment by Customer. Customer agrees that if any part of any payment due to NETLINK hereunder is more than 30 days past due, the past due portions shall bear interest at the rate of 1.5% monthly (18% per annum). Without waiver of any other rights hereunder, NETLINK shall have the right to discontinue service in the event Customer becomes delinquent in payment.

8. **LIQUIDATED DAMAGES.** In the event of Customer default or voluntary termination, Customer promises to pay to NETLINK the following amounts as liquidated damages (and not as a penalty): (a) During the first six months of the initial term, six times the Average Monthly Charge; (b) At any time thereafter, the lesser of the remaining amount owed or three times the monthly charge. In the event Customer is in default of any obligation under this agreement and remains in default for (7) days after notice thereof, NETLINK may cancel and collect damages according to the foregoing formula.

9. **RENEWAL** This agreement will be automatically renewed after 1 year. The cost per copy for yearly volume and overages may increase at the time of renewal.

10. **INSTALLATION.** Certain Equipment must be installed according to specific requirements in terms of space, electrical, and environmental conditions. Installation requirements are defined in the Equipment Operators Manual. Customer shall ensure that the Equipment is placed in an area that conforms to these requirements.

11. **DISCLAIMER.** NETLINK expressly disclaims any duty as insurer of the Equipment and Customer shall pay for all costs of repair and parts or replacement of the Equipment made necessary by, but not limited to, loss or damage through accident, abuse, misuse, theft, fire, water, casualty, natural force or any other negligent act of Customer or Customer's agents and/or service performed by non NETLINK personnel. NETLINK will not assume any liability for any conditions arising from electrical circuitry external to the Equipment and equipment line cords, nor is any external electrical work covered under this agreement.

12. **SERVICE WARRANTY; LIMITATIONS OF REMEDY.** NETLINK warrants to the Customer that the service provided hereunder will be performed in accordance with industry practices and workmanship. If any failure to meet the forgoing warranty appears and written notice is thereof being provided within the terms of this agreement, NETLINK will correct or replace the defective material or parts involved. This service warranty constitutes customer's sole and exclusive remedy. NETLINK shall not be liable for any incidental, special or consequential damages or economic loss, including but not limited to, loss of profits, revenue or cost of equipment use.

13. **CUSTOMER CHANGES.** Any customer changes, alterations, or attachments may require a change in the charges set forth herein. NETLINK also reserves the right to terminate this agreement in the event that it shall determine that such changes, alterations, or attachments make it impractical for NETLINK to continue to service the Equipment.

14. **ATTORNEYS' FEES; COSTS.** In the event Customer defaults under this Agreement, or if any other dispute arises hereunder requiring NETLINK to refer said matter to an attorney and/or to initiate, or defend, any court action in any way related to this Equipment Order, Customer agrees to pay NETLINK'S reasonable attorneys' fees and all costs resulting from such action.

15. **WAIVER OF JURY TRIAL.** CUSTOMER HEREBY EXPRESSLY WAIVES TRIAL BY JURY AS TO ANY AND ALL ISSUES ARISING OUT OF, OR IN ANY WAY RELATED TO THIS AGREEMENT.

16. **NO WAIVER.** Customer acknowledges and agrees that any delay or failure to enforce its rights hereunder by NETLINK, does not constitute a waiver of such rights by NETLINK, or in any way prevent NETLINK from enforcing such rights, or any other rights hereunder, at a later time.

17. **ENTIRE AGREEMENT.** This Agreement constitutes the entire agreement between Customer and NETLINK related to the service and maintenance of the Equipment, and any and all prior negotiations agreements (oral or written), or understandings are hereby superseded.

18. **NO MODIFICATION OF TERMS.** CUSTOMER EXPRESSLY ACKNOWLEDGES AND AGREES THAT THESE TERMS AND CONDITIONS MAY NOT BE VARIED, MODIFIED, OR CHANGED EXCEPT BY WRITTEN AGREEMENT EXECUTED BY A CORPORATE OFFICER OF NETLINK. NO SALES OR SERVICE PERSONNEL, INCLUDING BUT NOT LIMITED TO, MANAGERS OR SUPERVISORS, HAS ANY AUTHORITY TO OVERRIDE THIS PROVISION.

19. **NOTICE.** Any notice or other communication given or required in connection with this Agreement shall be in writing, and shall be given by certified or registered mail, postage prepaid, return receipt requested. If sent to NETLINK, said notice shall be sent to 10126 E. Cherry Bend Rd., Traverse City, Michigan, 49684 or such other address as NETLINK may hereafter designate in writing. If to Customer, the notice shall be sent to Customer at the address specified on the reverse side hereof, or such other address which may be specified, by Customer, in writing to NETLINK.



6500 E. Traverse Highway.
Traverse City, MI 49684

COLOR COPIER MAINTENANCE AGREEMENT

Company Name: Benzie County Sheriff -- Detective

Location of copier address: 505 S. Michigan Ave, Beulah, MI 49617

Billing address: Same

Contact: Kyle Rosa / Suzi Mills

Phone: 231-882-4494

Fax:

Email: smills@benzieco.net

Starting Date: 05/05/2023

Ending Date: 05/04/2026

Ending Copier Count (first year)- Black:

Model # MX-M3551

Finisher # NONE

S.N. #13030341

NBS # 3621

Cost per Black Copy .011

Estimated Yearly Cost Black \$550.00

Estimated Yearly Volume 50,000 Black & White

Black Overages billed every 3 months at 0.011 per copy.

Non-taxable

Comments: Computer / network support is not included in copier hardware maintenance agreements. Toner Included

Signature:


Bob Roelofs, Board of Commissioners Chair

Date

May 23, 2023

I have received and read a copy of the Terms and Conditions of NETLINK, and I accept the Terms and Conditions, for the COPIER MAINTENANCE AGREEMENT from NETLINK. I also acknowledge that I have authority to sign this agreement for the business listed above

NETWORK SUPPORT. Netlink will assist or install networked equipment print and scanning software with cooperation of any in-house or contracted network support personnel at agreed open cost. If Customer requires additional print or scan software due to changes in client network, client software, new computers or other changes beyond Netlink control, this support may be billable. Netlink Business Solutions does maintain a staff of network engineers if required. Netlink shall under no circumstances be liable for any special software requirements. Netlink will provide actual software disks and / or link to all latest software down loads.

Signature:



Date

5/24/2023

The above pricing will remain unchanged for
Technical support requests may be made by calling NETLINK at (231) 946-8808.

1. **EQUIPMENT MAINTENANCE AND SUPPLIES AGREEMENT.** NETLINK agrees to perform maintenance, cleaning, and make inspections, adjustments and repairs, and replace defective parts without additional charge to customer provided such calls are made during normal business hours. NETLINK will furnish the following supplies, to be delivered at such intervals in such quantities as recommended, by the manufacturer. Additional items included are: Toner, Developer, Drums or Photoconductor, Fusing Rollers. This agreement does not include paper, labels, staples or operating supplies of any kind. Title to all supplies furnished, including consumable parts such as drums, remains in NETLINK until said supplies are consumed to the extent that they may not be further utilized in the copy making process. In the event of customer's default or cancellation of this agreement, all such supplies and consumable parts shall be returned to NETLINK on demand.

2. **FAX MAINTENANCE AGREEMENT.** In the event that the Equipment under this agreement is a facsimile, NETLINK shall provide such maintenance service as is necessary to keep the Equipment in good operating condition, including the replacement of parts that have been broken or worn out through normal use. With the exception of paper, toner, drum, and developer all parts, and labor are included in this agreement. NETLINK WILL NOT BE RESPONSIBLE FOR REPLACING OR PAYING FOR REPLACEMENT OF ANY DATA, MEMORY, OR INFORMATION WHICH IS LOST, ALTERED, OR DAMAGED WHILE STORED IN THE EQUIPMENT. THIS AGREEMENT DOES NOT COVER SERVICE NECESSITATED BY MALFUNCTIONS OF PARTS, ATTACHMENTS AND/OR SOFTWARE PACKAGES NOT SUPPLIED BY OR THROUGH NETLINK, OR BY USE OF OPERATING SUPPLIES WHICH ARE NOT COMPATIBLE WITH THE EQUIPMENT.

3. **EXCESS COPIES.** Under this Agreement, the term is based on anticipated Customer usage as stated in "Base Allowance" on the face of this Agreement. Base Allowance copies are accumulated from the initial meter reading. Should the Base Allowance be exceeded prior to expiration of any applicable billing cycle, Customer agrees, to pay the current excess copy charge for each copy in excess of the Base Allowance. Invoices for excess copies will be tendered monthly and/or at the end of the initial term and shall be due and payable immediately. For agreements billed annually, upon exceeding the Base Allowance, Customer may request that a new agreement be executed, with the initial date of the term to coincide with the date that Base Allowance was exceeded. Customer's option in this regard shall be void if all previously tendered invoices have not been paid. Pages scanned by machine for network scanning will be invoiced at half of the cost per copy rate on the preceding page.

4. **BUSINESS HOURS FOR SERVICE.** Maintenance services shall be provided hereunder only during NETLINK'S normal business hours, which shall consist of 8:00am to 5:00pm, Monday through Friday, exclusive of NETLINK holidays and subject to change by NETLINK. At Customer's request, NETLINK may render maintenance service outside of normal business hours, subject to availability of personnel, at established NETLINK rates then in effect.

5. **RECONDITIONING.** When shop reconditioning is necessary, or the manufacturer's life expectancy of the equipment has been exceeded, and normal repairs and parts replacement cannot keep a unit in satisfactory operating condition, NETLINK will submit a cost estimate of needed repairs which will be in addition to ordinary maintenance/service charges. If Customer does not authorize such work, NETLINK may refuse to renew this agreement for such unit, and/or refuse to continue providing service to such unit under this Agreement, furnishing service only on a "Per Call" basis.

6. **CANCELLATION OF SERVICE.** Cancellation at the conclusion of the initial term or any renewal term may be accomplished by either party by providing written notice of such cancellation no later than thirty (30) days prior to the expiration of the term then in effect. In addition, NETLINK may cancel this agreement, in whole or in part, at any time upon seven (7) days written notice, or without notice in the thirty (30) day period prior to renewal date, if Customer at any time is within breach of any term or condition contained herein. NETLINK may apply any refund due to the satisfaction or any past due invoices for any other product or service. Should this agreement be cancelled by Customer, NETLINK will not issue any refund for the unused portion.

7. **INTEREST; SUSPENSION OF SERVICE.** Customer agrees to pay all invoices rendered for services performed and/or parts installed on Equipment when services are performed in advance of payment by Customer. Customer agrees that if any part of any payment due to NETLINK hereunder is more than 30 days past due, the past due portions shall bear interest at the rate of 1.5% monthly (18% per annum). Without waiver of any other rights hereunder, NETLINK shall have the right to discontinue service in the event Customer becomes delinquent in payment.

8. **LIQUIDATED DAMAGES.** In the event of Customer default or voluntary termination, Customer promises to pay to NETLINK the following amounts as liquidated damages (and not as a penalty): (a) During the first six months of the initial term, six times the Average Monthly Charge; (b) At any time thereafter, the lesser of the remaining amount owed or three times the monthly charge. In the event Customer is in default of any obligation under this agreement and remains in default for (7) days after notice thereof, NETLINK may cancel and collect damages according to the foregoing formula.

9. **RENEWAL** This agreement will be automatically renewed after 1 year. The cost per copy for yearly volume and overages may increase at the time of renewal.

10. **INSTALLATION.** Certain Equipment must be installed according to specific requirements in terms of space, electrical, and environmental conditions. Installation requirements are defined in the Equipment Operators Manual. Customer shall ensure that the Equipment is placed in an area that conforms to these requirements.

11. **DISCLAIMER.** NETLINK expressly disclaims any duty as insurer of the Equipment and Customer shall pay for all costs of repair and parts or replacement of the Equipment made necessary by, but not limited to, loss or damage through accident, abuse, misuse, theft, fire, water, casualty, natural force or any other negligent act of Customer or Customer's agents and/or service performed by non NETLINK personnel. NETLINK will not assume any liability for any conditions arising from electrical circuitry external to the Equipment and equipment line cords, nor is any external electrical work covered under this agreement.

12. **SERVICE WARRANTY; LIMITATIONS OF REMEDY.** NETLINK warrants to the Customer that the service provided hereunder will be performed in accordance with industry practices and workmanship. If any failure to meet the forgoing warranty appears and written notice is thereof being provided within the terms of this agreement, NETLINK will correct or replace the defective material or parts involved. This service warranty constitutes customer's sole and exclusive remedy. NETLINK shall not be liable for any incidental, special or consequential damages or economic loss, including but not limited to, loss of profits, revenue or cost of equipment use.

13. **CUSTOMER CHANGES.** Any customer changes, alterations, or attachments may require a change in the charges set forth herein. NETLINK also reserves the right to terminate this agreement in the event that it shall determine that such changes, alterations, or attachments make it impractical for NETLINK to continue to service the Equipment.

14. **ATTORNEYS' FEES; COSTS.** In the event Customer defaults under this Agreement, or if any other dispute arises hereunder requiring NETLINK to refer said matter to an attorney and/or to initiate, or defend, any court action in any way related to this Equipment Order, Customer agrees to pay NETLINK'S reasonable attorneys' fees and all costs resulting from such action.

15. **WAIVER OF JURY TRIAL.** CUSTOMER HEREBY EXPRESSLY WAIVES TRIAL BY JURY AS TO ANY AND ALL ISSUES ARISING OUT OF, OR IN ANY WAY RELATED TO THIS AGREEMENT.

16. **NO WAIVER.** Customer acknowledges and agrees that any delay or failure to enforce its rights hereunder by NETLINK, does not constitute a waiver of such rights by NETLINK, or in any way prevent NETLINK from enforcing such rights, or any other rights hereunder, at a later time.

17. **ENTIRE AGREEMENT.** This Agreement constitutes the entire agreement between Customer and NETLINK related to the service and maintenance of the Equipment, and any and all prior negotiations agreements (oral or written), or understandings are hereby superseded.

18. **NO MODIFICATION OF TERMS.** CUSTOMER EXPRESSLY ACKNOWLEDGES AND AGREES THAT THESE TERMS AND CONDITIONS MAY NOT BE VARIED, MODIFIED, OR CHANGED EXCEPT BY WRITTEN AGREEMENT EXECUTED BY A CORPORATE OFFICER OF NETLINK. NO SALES OR SERVICE PERSONNEL, INCLUDING BUT NOT LIMITED TO, MANAGERS OR SUPERVISORS, HAS ANY AUTHORITY TO OVERRIDE THIS PROVISION.

19. **NOTICE.** Any notice or other communication given or required in connection with this Agreement shall be in writing, and shall be given by certified or registered mail, postage prepaid, return receipt requested. If sent to NETLINK, said notice shall be sent to 10126 E. Cherry Bend Rd., Traverse City, Michigan, 49684 or such other address as NETLINK may hereafter designate in writing. If to Customer, the notice shall be sent to Customer at the address specified on the reverse side hereof, or such other address which may be specified, by Customer, in writing to NETLINK.



6500 E. Traverse Highway.
Traverse City, MI 49684

COLOR COPIER MAINTENANCE AGREEMENT

Company Name: Benzie County Sheriff -- Dispatch

Location of copier address: 505 S. Michigan Ave, Beulah, MI 49617

Billing address: Same

Contact: Kyle Rosa /Suzi Mills

Phone: 231-882-4494

Fax:

Email: smills@benzieco.net

Starting Date: 05/05/2023

Ending Date: 05/04/2026

Ending Copier Count (first year)- Black:

Model # MX-M3551

Finisher # NONE

S.N. #13030881

NBS # 3622

Cost per Black Copy .011

Estimated Yearly Cost Black \$880.00

Estimated Yearly Volume 80,000 Black & White

Black Overages billed every 3 months at 0.011 per copy.

Non-taxable

Comments: Computer / network support is not included in copier hardware maintenance agreements. Toner Included

Signature:


Bob Roelofs, Board of Commissioners Chair

Date

May 23, 2023

I have received and read a copy of the Terms and Conditions of NETLINK, and I accept the Terms and Conditions, for the COPIER MAINTENANCE AGREEMENT from NETLINK. I also acknowledge that I have authority to sign this agreement for the business listed above

NETWORK SUPPORT. Netlink will assist or install networked equipment print and scanning software with cooperation of any in-house or contracted network support personnel at agreed open cost. If Customer requires additional print or scan software due to changes in client network, client software, new computers or other changes beyond Netlink control, this support may be billable. Netlink Business Solutions does maintain a staff of network engineers if required. Netlink shall under no circumstances be liable for any special software requirements. Netlink will provide actual software disks and / or link to all latest software down loads.

Signature:



Date

5/24/2023

The above pricing will remain unchanged for
Technical support requests may be made by calling NETLINK at (231) 946-8808.

1. EQUIPMENT MAINTENANCE AND SUPPLIES AGREEMENT. NETLINK agrees to perform maintenance, cleaning, and make inspections, adjustments and repairs, and replace defective parts without additional charge to customer provided such calls are made during normal business hours. NETLINK will furnish the following supplies, to be delivered at such intervals in such quantities as recommend, by the manufacturer. Additional items included are: Toner, Developer, Drums or Photoconductor, Fusing Rollers. This agreement does not include paper, labels, staples or operating supplies of any kind. Title to all supplies furnished, including consumable parts such as drums, remains in NETLINK until said supplies are consumed to the extent that they may not be further utilized in the copy making process. In the event of customer's default or cancellation of this agreement, all such supplies and consumable parts shall be returned to NETLINK on demand.

2. FAX MAINTENANCE AGREEMENT. In the event that the Equipment under this agreement is a facsimile, NETLINK shall provide such maintenance service as is necessary to keep the Equipment in good operating condition, including the replacement of parts that have been broken or worn out through normal use. With the exception of paper, toner, drum, and developer all parts, and labor are included in this agreement. NETLINK WILL NOT BE RESPONSIBLE FOR REPLACING OR PAYING FOR REPLACEMENT OF ANY DATA, MEMORY, OR INFORMATION WHICH IS LOST, ALTERED, OR DAMAGED WHILE STORED IN THE EQUIPMENT. THIS AGREEMENT DOES NOT COVER SERVICE NECESSITATED BY MALFUNCTIONS OF PARTS, ATTACHMENTS AND/OR SOFTWARE PACKAGES NOT SUPPLIED BY OR THROUGH NETLINK, OR BY USE OF OPERATING SUPPLIES WHICH ARE NOT COMPATIBLE WITH THE EQUIPMENT.

3. EXCESS COPIES. Under this Agreement, the term is based on anticipated Customer usage as stated in "Base Allowance" on the face of this Agreement. Base Allowance copies are accumulated from the initial meter reading. Should the Base Allowance be exceeded prior to expiration of any applicable billing cycle, Customer agrees, to pay the current excess copy charge for each copy in excess of the Base Allowance. Invoices for excess copies will be tendered monthly and/or at the end of the initial term and shall be due and payable immediately. For agreements billed annually, upon exceeding the Base Allowance, Customer may request that a new agreement be executed, with the initial date of the term to coincide with the date that Base Allowance was exceeded. Customer's option in this regard shall be void if all previously tendered invoices have not been paid. Pages scanned by machine for network scanning will be invoiced at half of the cost per copy rate on the preceding page.

4. BUSINESS HOURS FOR SERVICE. Maintenance services shall be provided hereunder only during NETLINK'S normal business hours, which shall consist of 8:00am to 5:00pm, Monday through Friday, exclusive of NETLINK holidays and subject to change by NETLINK. At Customer's request, NETLINK may render maintenance service outside of normal business hours, subject to availability of personnel, at established NETLINK rates then in effect.

5. RECONDITIONING. When shop reconditioning is necessary, or the manufacturer's life expectancy of the equipment has been exceeded, and normal repairs and parts replacement cannot keep a unit in satisfactory operating condition, NETLINK will submit a cost estimate of needed repairs which will be in addition to ordinary maintenance/service charges. If Customer does not authorize such work, NETLINK may refuse to renew this agreement for such unit, and/or refuse to continue providing service to such unit under this Agreement, furnishing service only on a "Per Call" basis.

6. CANCELLATION OF SERVICE. Cancellation at the conclusion of the initial term or any renewal term may be accomplished by either party by providing written notice of such cancellation no later than thirty (30) days prior to the expiration of the term then in effect. In addition, NETLINK may cancel this agreement, in whole or in part, at any time upon seven (7) days written notice, or without notice in the thirty (30) day period prior to renewal date, if Customer at any time is within breach of any term or condition contained herein. NETLINK may apply any refund due to the satisfaction or any past due invoices for any other product or service. Should this agreement be cancelled by Customer, NETLINK will not issue any refund for the unused portion.

7. INTEREST; SUSPENSION OF SERVICE. Customer agrees to pay all invoices rendered for services performed and/or parts installed on Equipment when services are performed in advance of payment by Customer. Customer agrees that if any part of any payment due to NETLINK hereunder is more than 30 days past due, the past due portions shall bear interest at the rate of 1.5% monthly (18% per annum). Without waiver of any other rights hereunder, NETLINK shall have the right to discontinue service in the event Customer becomes delinquent in payment.

8. LIQUIDATED DAMAGES. In the event of Customer default or voluntary termination, Customer promises to pay to NETLINK the following amounts as liquidated damages (and not as a penalty): (a) During the first six months of the initial term, six times the Average Monthly Charge; (b) At any time thereafter, the lesser of the remaining amount owed or three times the monthly charge. In the event Customer is in default of any obligation under this agreement and remains in default for (7) days after notice thereof, NETLINK may cancel and collect damages according to the foregoing formula.

9. RENEWAL This agreement will be automatically renewed after 1 year. The cost per copy for yearly volume and overages may increase at the time of renewal.

10. INSTALLATION. Certain Equipment must be installed according to specific requirements in terms of space, electrical, and environmental conditions. Installation requirements are defined in the Equipment Operators Manual. Customer shall ensure that the Equipment is placed in an area that conforms to these requirements.

11. DISCLAIMER. NETLINK expressly disclaims any duty as insurer of the Equipment and Customer shall pay for all costs of repair and parts or replacement of the Equipment made necessary by, but not limited to, loss or damage through accident, abuse, misuse, theft, fire, water, casualty, natural force or any other negligent act of Customer or Customer's agents and/or service performed by non NETLINK personnel. NETLINK will not assume any liability for any conditions arising from electrical circuitry external to the Equipment and equipment line cords, nor is any external electrical work covered under this agreement.

12. SERVICE WARRANTY; LIMITATIONS OF REMEDY. NETLINK warrants to the Customer that the service provided hereunder will be performed in accordance with industry practices and workmanship. If any failure to meet the forgoing warranty appears and written notice is thereof being provided within the terms of this agreement, NETLINK will correct or replace the defective material or parts involved. This service warranty constitutes customer's sole and exclusive remedy. NETLINK shall not be liable for any incidental, special or consequential damages or economic loss, including but not limited to, loss of profits, revenue or cost of equipment use.

13. CUSTOMER CHANGES. Any customer changes, alterations, or attachments may require a change in the charges set forth herein. NETLINK also reserves the right to terminate this agreement in the event that it shall determine that such changes, alterations, or attachments make it impractical for NETLINK to continue to service the Equipment.

14. ATTORNEYS' FEES; COSTS. In the event Customer defaults under this Agreement, or if any other dispute arises hereunder requiring NETLINK to refer said matter to an attorney and/or to initiate, or defend, any court action in any way related to this Equipment Order, Customer agrees to pay NETLINK'S reasonable attorneys' fees and all costs resulting from such action.

15. WAIVER OF JURY TRIAL. CUSTOMER HEREBY EXPRESSLY WAIVES TRIAL BY JURY AS TO ANY AND ALL ISSUES ARISING OUT OF, OR IN ANY WAY RELATED TO THIS AGREEMENT.

16. NO WAIVER. Customer acknowledges and agrees that any delay or failure to enforce its rights hereunder by NETLINK, does not constitute a waiver of such rights by NETLINK, or in any way prevent NETLINK from enforcing such rights, or any other rights hereunder, at a later time.

17. ENTIRE AGREEMENT. This Agreement constitutes the entire agreement between Customer and NETLINK related to the service and maintenance of the Equipment, and any and all prior negotiations agreements (oral or written), or understandings are hereby superseded.

18. NO MODIFICATION OF TERMS. CUSTOMER EXPRESSLY ACKNOWLEDGES AND AGREES THAT THESE TERMS AND CONDITIONS MAY NOT BE VARIED, MODIFIED, OR CHANGED EXCEPT BY WRITTEN AGREEMENT EXECUTED BY A CORPORATE OFFICER OF NETLINK. NO SALES OR SERVICE PERSONNEL, INCLUDING BUT NOT LIMITED TO, MANAGERS OR SUPERVISORS, HAS ANY AUTHORITY TO OVERRIDE THIS PROVISION.

19. NOTICE. Any notice or other communication given or required in connection with this Agreement shall be in writing, and shall be given by certified or registered mail, postage prepaid, return receipt requested. If sent to NETLINK, said notice shall be sent to 10126 E. Cherry Bend Rd., Traverse City, Michigan, 49684 or such other address as NETLINK may hereafter designate in writing. If to Customer, the notice shall be sent to Customer at the address specified on the reverse side hereof, or such other address which may be specified, by Customer, in writing to NETLINK.

Memorandum



To: Board of Commissioners

From: Katie Zeits, County Administrator *Katie Zeits*

Date: May 17, 2023

Subject: **Grant Application for Tribal Council Allocation of 2% Funds – Total Body Scanner**

Attached you will find a grant application to the Grand Traverse Band Council for 2% tribal allocation to support the purchase of the total body scanner in the jail. The deadline for this grant cycle is May 31 with an anticipated early summer award notification. The Board of Commissioners has talked at length about the total body scanner and its importance in the jail for operational use. The Board also identified multiple possible funding sources to support the purchase and installation of the machine.

The attached grant application requests \$48,000 toward the purchase of the total body scanner, 38% of the total cost.

Recommendation:

That the Board of Commissioners approves the grant application for Tribal Council Allocation of 2% funding for a total body scanner and authorizes the Chair to sign.

**Tribal Council Allocation of 2% Funds
Application Form**

PLEASE NOTE:

Under the terms of the consent decree, which settled *Tribes v. Engler* (Case No. 1:90-CV-611, U.S. Dist. Ct., West. Dist. Mich.), the Grand Traverse Band of Ottawa and Chippewa Indians, as defined in the stipulation, has agreed to pay 2% of its video gaming revenue to local units of government (i.e., local township, village, city, county board of commissioners, public school system).

***ONLY APPLICATIONS FROM LOCAL UNITS OF GOVERNMENT LOCATED WITHIN
GTB'S 6-COUNTY SERVICE AREA WILL BE CONSIDERED FOR 2% FUNDING**

1. Allocation Cycle: ☒ JUNE – New submission date, Postmarked by **MAY 31st**
☐ DECEMBER – New submission date, Postmarked by **NOVEMBER 30th**
2. Name of Applicant: Benzie County Sheriff's Office
Address: 505 S. Michigan Avenue
Beulah Michigan 49617
Phone #: 231-882-4494 Fax #: 231-882-5814
Printed Name: Sheriff Kyle Rosa
 - **Authorized Signature:** _____
(Signature of local unit of government official; e.g., county/city official, township supervisor, village president, college president, school superintendent)
Title: Benzie County Chairman of the Board of Commissioners
E-mail address: broelofs@benzieco.net Bob Roelofs
Printed Name of contact person: Undersheriff Greg T Hubers
Telephone #: 231-882-4494 Fax #: 231-882-5814
E-mail address: ghubers@benzieco.net
3. Type of Applicant: _____ Local Government _____ Local Court
_____ Township ☒ County Commissioner _____ Road Commission
_____ Public School District _____ College _____ Charter School
_____ Public Library ☒ Sheriff/Police Department _____ Fire Department
_____ 501c3 applying through local unit of government (name): _____

4. Fiscal Data: Amount Requested: \$ 48,000 Percent: 38 %
 Local Leveraging: \$ 77,000 Percent: 62 %
 (Match)
 Total Budget: \$ 125,000 Percent: 100 %

5. Target Population numbers: _____ Children _____ Adults _____ Elders
1439 Total GTB member Community _____ Others
 (Indicate the number of GTB members)

6. Counties Impacted: X _____ Antrim X _____ Benzie X _____ Charlevoix
x _____ Grand Traverse x _____ Leelanau x _____ Manistee

7. Brief Description (purpose of funding); include statement of need:
The SOTER RS body scanner is an x-ray type technology that allows
every individual booked into the Benzie County jail to be scanned
for any foreign objects either consumed or hidden within the body
cavities. This technology will be offered to all law enforcement agencies
in surrounding counties including all 6 Counties represented in the
Grand Traverse Band region. The total body scanner will be used to
prevent accidental and intentional overdoses in the Benzie County jail
and surrounding areas. The initial start up costs include training every
Benzie County Corrections Officer in the safe and proper use of the
device. The scanner will be physically located in the Benzie County
jail. Benzie County Sheriff's Office will be responsible for the costs of
software and hardware upgrades. In the past three years, the Benzie
County jail has experienced at least 10 incidents where inmates have
smuggled narcotics into the facility by inserting them into body cavities or swallowing
narcotics prior to or during arrest. This device could have prevented
10/12 of these events where Narcan was administered and hospitalization
was required at tax payers expense.

8. This question only pertains to Indian Education Programs of Public School Systems. If you are not an Indian Education Program of a Public School system, skip to question 9.

(a) **Program formula: (1) \$5,000, up to \$10,000 per school district + (\$1,000, up to \$1,500 x # of GTB member students) = allocation. The increase to the formula will be determined by the previous timely 2% report received, and the data provided within the report on the success of the school's Indian Education Program as a result of the 2% allocation.**

Please note: 1) In completing this section, only provide the student numbers of currently enrolled GTB members; do not include the general Native American data of your school system; and 2) there will be a cap of \$100,000, up to \$125,000 per school, based on the school's GTB membership count and data provided within the 2% report received from the previous year.

(b) Recommendation from Parent Committee: ☐ YES ☐ NO

Please have the Parent Committee sign the attached Certification Form.

(c) Describe parent involvement in project: _____

(d) Does the school receive Title VII Indian Education Funds? ☐ YES ☐ NO
If yes, how much: _____

9. What are the start and completion dates of the proposed project?

Start 08/01/2023 Completion 09/01/2023

10. Has applicant received prior awards through the Tribe's 2% funding allocation?

☒ YES ☐ NO. If yes, please list the start and end dates and amount:

04/02/2021 - 04/02/2021 and amounts: \$16,350

_____ - _____ and amounts: _____

_____ - _____ and amounts: _____

11. Is the proposed project new NEW or a continuation project _____?

If this is a continuation project, please explain why there is a need to continue funding:

12. If the previous project has been completed, did you submit your 2% report? ☒ YES ☐ NO.
The 2% report must be submitted one year from the date you received your 2% award. If your report has not been submitted, your current application will not be considered! 2% Reports are mandatory for future grant considerations. Mail your 2% report to: Attn: 2% Reports; GTB, 2605 N.W. Bay Shore Drive, Peshawbestown, MI 49682.
13. Impact of Gaming on local program: (e.g., increase in student population, resulting from increase in Tribal employment or increase in emergency services to Casino patrons).
This project will increase emergency services to all non-tribal and tribal members in the six county region through prevention and reduced hospitalization.
14. How will the success of the project be assessed (evaluation plan)? Corrections Officers will track every individual scanned and number of foreign or hidden objects located. This data will be compiled into a yearly report by the Undersheriff.
15. If new staff is required, will preference be given to Native American applicants?
☒ YES ☐ NO
16. Budget: Please attach a one-page itemization of the planned budget. Include explanation for each category of the budget.

IMPORTANT!! BEFORE YOU MAIL YOUR 2% APPLICATION, PLEASE REMEMBER TO:

- 1) Execute authorized signature on first page, question #2.
- 2) Attach 1-page budget
- 3) Attach Parent Committee Certification Form if application is from an Indian Education/Title VII Program.
- 3) Submit by appropriate deadline:
 - **If for June cycle, postmarked by May 31st.**
 - **If for December cycle, postmarked by November 30th.**

Mail completed 2% applications to:

**Attention: 2% Program
Grand Traverse Band of Ottawa and Chippewa Indians
2605 N.W. Bay Shore Drive
Peshawbestown, MI 49682**

If you have any questions, please call 231-534-7601.

Grand Traverse Band of Ottawa and Chippewa Indians 2% Indian Education Parent Committee Certification Form

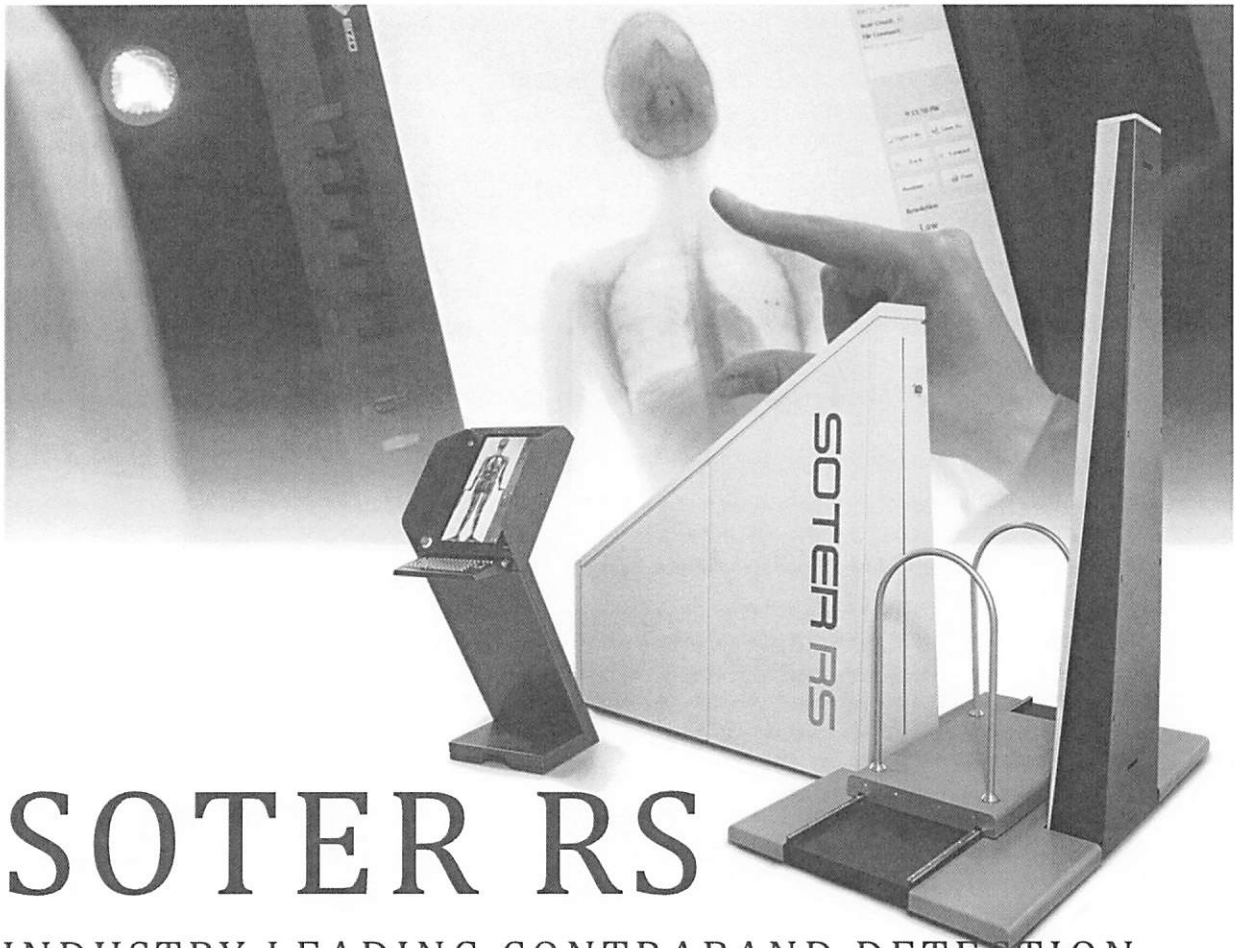
Instructions: By filling out this form, you are certifying that only one 2% application is being submitted for your school district's Indian Education/Title VII program.

We affirm that we have participated in providing information regarding the content of this 2% application for the Grand Traverse Band of Ottawa and Chippewa Indians (GTB).

We affirm that previous 2% reports have been submitted to GTB for 2% funding that this school district has received from GTB.

As current members of this school district's Parent Committee for the Indian Education Program/Title VII, we approve of and certify that this 2% application is being submitted on behalf of the _____ School District.
(Name of school district)

_____ Print Name	_____ Sign Name	_____ Date
_____ Print Name	_____ Sign Name	_____ Date
_____ Print Name	_____ Sign Name	_____ Date
_____ Print Name	_____ Sign Name	_____ Date
_____ Print Name	_____ Sign Name	_____ Date
_____ Print Name	_____ Sign Name	_____ Date



SOTER RS

INDUSTRY LEADING CONTRABAND DETECTION

Benzie County Sheriff's Office, Michigan

Commercial Proposal

PREPARED BY



John Shannon
OD Security North America
416 Island Park Drive,
Daniel Island, SC 29492

PROPOSAL DATE

October 27th 2022

Proposal -

Delivered, installed, and calibrated (F.O.B Destination) – Benzie County Sheriff's Office, 505 Michigan Avenue, Beulah, MI 49617

1 x SOTER RS Full Body Security Scanning System

Unit Cost - \$125,000

Total Cost - \$125,000

Includes - Shipping, Installation, Calibration and Testing, Operator, Administrator, and Radiation Safety Officer Training, **5-years Full Manufacturer's Warranty** (parts and labor, to include time and travel associated with servicing and maintenance)

Delivery and installation – 21 days after receipt of Order

Payment Terms – in full on installation

Proposal includes (for the operational life of the System) –

- Provision of 24/7 Toll Free Support Line and 24/7 On-Line Help Desk
- Same day Technical/Engineering Support (**Michigan based Technicians**)
- **Web Services interface to JMS**
- Initial and Annual State Radiation Safety Compliance
- Bi-annual Preventative Maintenance Inspection
- Annual Full System Re-calibration
- **1-Day Annual Refresher Training (years 2-5)**
- **All standard software updates through-out term of contract**
- Provision of Random Scanning Software Upgrade
- Provision of Fingerprint/Bar-code Scanner/RFID Scanner/Digital Camera Hardware/Software Upgrade

- Provision of PREA Compliant Software Upgrade
- **Provision of 1 x SOTER Handheld Tablet**
- **Access to new THEIA AI Automatic Threat Recognition Software (to be released January 1st 2023) on annual software license basis**

Additional Features (at discretion of Benzie County)

1. Provision of Extended Warranty (Maintenance/Service) Contract (parts and labor and including time and travel) year 6 onwards

Unit Cost - \$8,750 annually, payable in advance

2. Provision of additional SOTER Handheld Tablets (mobile device)

Unit Cost -

Hardware - 1 x GD3030-400 Intel i5-5350U - **\$2,950 (one-off)**

Software - SOTER RS Operator Interphase (OI) Software (Annual Software License) - **\$2,100 annually, payable in advance**

**Total Cost – Year 1 \$5,050
Year 2 onwards \$2,100**

3. Upgrade to SOTER RS Dual View (at any stage during contract)

Our System is upgradable from Single View to Dual View capability with unrivalled detection capacity – 46AWG Full Body Image and 46AWG Torso Image

Upgrade unit cost - \$18,750

4. Upgrade to an ADA Compliant Platform Configuration (at any stage during contract)

Unit Cost - \$7,500

5. Provision of Additional Training outside Scope of Project

Per Diem Cost - \$1,000

Commissioner Reports

Art Jeannot
Commissioner Report
May 23, 2023

- **5/10 – Northwest MI Community Action Agency (Housing Committee)**
 - The committee is recommending to the full board approval of funding for a housing project in Frankfort. The developer and owner is Homestretch in partnership with the City. The amount recommended is \$40k.
- **5/11 – Platte Township**
 - Business as usual.
- **5/15 – Northern MI Association of Counties**
 - Discussed the need for MSU Extension to provide a training seminar for BOC Chairmen/Chairwomen. Anyone could participate. I would like your feedback.
 - Chet Janik gave an overview of MI Leadership Institute and the services they provide. Services include executive job recruitment. Some of you may remember that Chet was the County Administrator in Leelanau County and he retired in December 2022.
 - We had several legislative updates. Most of these updates are already shared with you via emails from MAC.
 - The June 19th meeting has been cancelled.
- **5/18 – Northwest MI Community Action Agency**
 - Approved \$40k to help fund the Homestretch housing project (12 units) in Frankfort. Another \$50k was approved for a project in Traverse City.
 - The Summer Conference for State Action Agencies will be held at Crystal Mountain July 18-20.
- **5/19 – EDC/BRA**
 - I attended the meeting along with Rhonda. I will rely on Rhonda to give you an update.
- **Other**
 - I met with Paula Eberhart to get updated on the operations of her department. Technology, customer service and staffing are areas we spent the most time on.

Commissioner Report 05/23/23
Rhonda Nye
District IV

May 9th – Village of Beulah

- Sewer ACO (Administrative Consent Order) not received but expected.
- Sewer upgrade funding option consultation held with Baker Tilly Finance; they will attend the June 13th meeting to share information.
- Price for 10 garbage bags raised to \$33.00 effective June 1st.

May 10th – Benzonia Township

- Approved contract with Consumer Energy. Power poles will be relocated along Grace Road for accessibility. Several red pines will be removed, \$1,500.00 accepted for new tree purchase.
- Fire call volume rising, staffing issues may need to be addressed soon.
- Approved grant writer for township. No contract, service will be charges on hourly basis.

May 11th – Centra Wellness Board

- New Executive Committee members selected:
 - Chair – Don Tanner
 - Vice Chair – Terry Piachek
 - Secretary – Rhonda Nye
- End of Covid means return to pre-pandemic Medicaid rules, no clients came off of Medicaid during the pandemic.
- Northern Lakes status discussed.

May 15th – Union negotiations – Deputies and General Unions.

May 17th – Agenda Review

May 19th – EDC

- Update will be given at 05/23 BOC meeting.

May 22nd – MAC Health & Human Services

- Update will be given at 05/23 BOC meeting.

RECEIVED

MAY 18 2023

TAMMY BOWERS
BENZIE COUNTY CLERK
BEULAH, MI 49617



May 23

Commissioner Cunningham, District 3

kcunningham@benzieco.net

231.822.4067

Attended/Presented

- 12 May MAC Environment Regulatory Committee, Lansing: planning future topics and speakers then sharing with counties. Received legislature update, future topics: water from natural to tap, biochar- economic/entrepreneur /education.
- 16 May Frankfort City Council/ CLTwp
- 17 May Benzie Chamber/Frankfort Accelerator/Point Betsie

Community

FEAS groundbreaking.

Point Betsie: Open House 6 May, 10am- 4pm.

Kinship Coalition: planning a Benzie meeting in June, purpose to establish a monthly support meeting.

Writing a description for a "liaison".

Veterans Inspiring Veterans Art Show board site visit. Frankfort Public Hearing/Golf cart ordinance. Toured Land Grant housing on "Jay's Place". Planning on Frankfort Business Accelerator Task Force.

Assorted meetings and emails with constituents, as it relates to county information, concerns and strategies.

MI Infrastructure survey. "Seeking resilient input." link:

<https://forms.office.com/pages/responsepage.aspx?id=h3D71Xc3rUKWaoku9HII0URLghCLLTVGs6msvMgvZkRUOVFMMjA5Rkl0SVgzU0Y1R0ZIMUJYOVI2OC4u>

Tim Markey
Commissioner Report
May 23, 2023

May 10th – Homestead Twp Board

- Progress is being made on the new Platte River Park. Hope to have the Kayak launch, fishing piers, and bathroom done before July.
- Looking to add security cameras outside the bathrooms by the ball fields. There has been some damage to the facilities.

May 11th – Centra Wellness Network

- Elected new board officers:
 - Chair – Don Tanner
 - Vice-Chair – Terry Pechacek
 - Secretary – Rhonda Nye
- Northern Lakes Community Mental Health Authority (Leelanau, Grand Traverse, Wexford, Missaukee, Roscommon, & Crawford) will continue. All counties signed a new agreement. They are in the process of hiring a CEO.
- The NMRE (Northern Michigan Regional Entity) has re-structured the SUD (Substance Use Disorder Oversight advisory Committee). With an opinion from their attorney, participation in the SUD can be done remotely as it is only an advisory committee.
- Working with MAC to add rural exception to MAC's platform
- Holding a staff BBQ on June 29th.

May 11th – Dispatch Advisory

- Discussed the fall-out of the lightning strike on Dispatch & the Sheriff's office
- Approved some policies

May 15th – LPT

- Approved the Public Safety Annex of the new EOP (Emergency Operations Plan)
- Discussed the possibility of have a Safety Fair this summer or Fall. Asked that the agencies provide any Public Safety events that their communities are having so that we can coordinate.

May 15th – LEPC

- Approved the Smeltzer Orchards off-site response plan

May 17th – Benzie Senior Resources

- Canceled due to lack of quorum

May 22nd – MAC – Judiciary

- Will provide updates as I see necessary

County Administrator Report

STUDY

SESSION

THE BENZIE COUNTY BOARD OF COMMISSIONERS
STUDY SESSION
May 9, 2023

The Benzie County Board of Commissioners met as a Study Session on Tuesday, May 9, 2023, in the Frank Walterhouse Board Room, 448 Court Place, Government Center, Beulah, Michigan.

The meeting was called to order by Vice Chair Rhonda Nye at 1:30 p.m.

Present were: Commissioners Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke

The Pledge of Allegiance was recited.

Agenda:

Motion by Roelofs, seconded by Cunningham, to approve the agenda as presented. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Minutes:

Motion by Sauer, seconded by Warsecke, to approve the Study Session minutes of April 11, 2023, as presented. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

1:32 p.m. Public Comment

Karen Mallon, Victim Advocate for the Prosecutor's office, stated that she has worked for the county for almost 11 years. She asks that the Board be mindful of implementing a benefit program that at its inception and introduction systematically rules out almost 95% of the county employees. A benefit program should be all inclusive. I'm sure the Sheriff's Office employees, Police Officers, Corrections Officers, and Dispatch employees would like to participate in the Infant in the Workplace program.

Sonya Potts, states that she works in Benzie County, but does not live here. I would like you to think about the Infant in the Workplace Program. New mothers are kind of hairy at the beginning. I do not know how they can do a quality work product if they are consistently dealing with a crying baby. It would also affect the outline offices, as we can hear what is going on outside the walls of the office. I do not see how it can benefit everyone. Any change to benefit employees should benefit all employees not just a few.

1:35 p.m. Public Comment closed.

Human Resources:

Jackie Palfey – presented the written HR Update report and was available to answer any questions.

Topics for Continued Discussion:

- a. Goal Setting/Strategic Plan: Katie Zeits stated that she had taken all the emails and information that has been provided over the last few meetings and put them into this Strategic Priorities Goals and Action document. Would like to know how you feel about this document, any changes you would like to see, anything missed, or do you like it as is. Discussion was held and it was decided that this document would move forward to the May 23, 2023, Board of Commissioners meeting for adoption, with the changes that were discussed.

- b. Discussion on bundling millage requests: Commissioners provided their input on which millage make sense to bundle. It was also discussed Headlee re-set versus Headlee override, and the Tax Advisory Committee versus a Tax Allocation Board. It was the consensus that the goal is Headlee re-set. Based on what is being heard today, Katie will put together hypothetical numbers, regarding the county and the township, on how this will affect the taxpayers. This discussion will be continued.
- c. Discussion regarding Infant in the Workplace program. Katie Zeits presented the Infant in The Workplace Policy. Discussion was held and it was decided that a survey will be developed and distributed to the county employees to see how they feel about this policy. This matter will come back once the survey is completed.

3:04 p.m. Public Comment

Mary Robling, Frankfort, is in favor of Headlee re-set and feel it will benefit us going forward. There used to be regular articles in the local newspaper updating the public on what is going on at the Commissioners meetings. Need to find someone with writing skills to start this again. Thank you for your service.

3:08 p.m. Karen Mallon, Homestead Township, stated that she represents 8 employees that have concerns about this, but were too afraid to come because of repercussions for not looking to agree with this. What I don't like is a benefit offered that 95% of employees are excluded from. I lost good benefits when forced to join the union. Need to look at how it affects the county employees. Hope you look at all those people up the hill that services this county 24 hours a day, that will never be able to participate in this.

3:10 p.m. Public Comment closed.

Motion by Roelofs, seconded by Markey, to adjourn at 3:11 p.m. Ayes: Cunningham, Jeannot, Markey, Nye, Roelofs, Sauer and Warsecke Nays: None Motion carried.

Committee Appointments

Memorandum



To: Board of Commissioners

From: Katie Zeits, County Administrator *Katie Zeits*

Date: May 17, 2023

Subject: **Closed Session: Collective Bargaining Negotiations**

I recommend that the Board of Commissioners enter into closed session to discuss collective bargaining.

Recommended Motion:

That the Board of Commissioners enter into closed session to discuss the negotiation of a collective bargaining agreement as permitted by MCL 15.268(c).



**Networks
Northwest**
Talent / Business / Community



TALENT



BUSINESS



COMMUNITY

2022 ANNUAL REPORT

To Our Partners, Stakeholders, and Communities of **Northwest Lower Michigan,**

We are pleased to once again present the Networks Northwest Annual Report. In this 2022 version, you will find information and highlights regarding our accomplishments throughout the last year. You will learn more about the services we provided to our customers, updates on our programs, and the financial details about our agency.



Of particular interest, as our region, state, and nation continue to struggle against a talent crisis, Networks Northwest and Northwest Michigan Works! set our sights on having a positive impact on overcoming the workforce shortages affecting our region. Recognizing that our youth and young adults are key to the continued economic prosperity of Northwest Lower Michigan, we worked diligently to serve this population and prepare them to succeed in education, employment, and life.

We are proud of our ability to meet these customers where they were while also playing an instrumental role in preparing them for future success.

With pride and enthusiasm, Networks Northwest will continue to lead, convene, and support the workforce, businesses, and communities of Northwest Lower Michigan in 2023 and beyond.

Sincerely,



Sue Peters, Board Chair
Vice President of Human Resources,
Munson Healthcare



Chris Christensen, Chief Elected Official
Charlevoix County Commissioner



Terry Vandercook,
Chief Executive Officer



TALENT DEVELOPMENT

The dedicated, experienced staff at Networks Northwest are passionate about connecting job seekers and workers to the employers who need talent. Northwest Michigan Works! is the signature program in an array of services that help people be job-ready, with a focus on developing skill sets that employers need most. Our staff provide a wide variety of services to help clients reach their employment goals, but the hard work is ultimately all theirs. In the following pages, you will be inspired by people from all over Northwest Lower Michigan who have worked hard to take the next big step in their careers.



- ➔ *Job Seekers*
- ➔ *Veterans*
- ➔ *Young Professionals*
- ➔ *Jobs for Michigan's Graduates*



- ➔ *MiCareerQuest Northwest*
- ➔ *Adult Education*
- ➔ *Offender Success*

Talent Development Meet Lisa Peterson

Lisa was working in a 25-30 hours per week seasonal labor position with an excavating company when she first met with staff from Northwest Michigan Works! Each winter, she was laid off and had to rely on unemployment to make ends meet. Northwest Michigan Works! assisted Lisa with her unemployment process.

While helping Lisa, the staff learned that Lisa had some new employment goals. Lisa wanted to find year-round, full-time employment with higher earning potential. She was referred to a Northwest Michigan Works! Career Advisor, and together they worked out a plan for Lisa to reach her goals, which included obtaining a CDL A.

When the time came for her annual winter layoff, Lisa was enrolled in both Workforce Innovation and Opportunity Act and the Michigan Learning and Education Advancement Program grant programs by her Career Advisor at Northwest Michigan Works! Through these grants, tuition funding was obtained to help Lisa with the cost of pursuing CDL A certification through Pinnacle Truck Driving School. Lisa was also assisted with gas cards to travel to and from training for the four week course. Lisa successfully completed CDL A training and passed her exams, making her a CDL A licensed driver.

Less than a month later, Lisa had a job offer from Central Transport in Traverse City. Her hourly pay went from part-time, seasonal work at \$16/hour to full-time, year-round at \$24.50/hour. Lisa had met her goals. Her earning potential significantly increased, and she no longer had to rely on unemployment to meet her needs.

"I got a referral to call the Career Advisor at Northwest Michigan Works!," said Lisa. "She helped me through the process of being able to financially afford my schooling for a CDL A. The whole process was great! My Career Advisor was wonderful, helping me find resources for my future career. I would highly recommend this to anyone. If there are funds available, they will make sure you receive them."



Talent Development

Northwest Michigan Works! staff provide a full suite of employment services to workers and job seekers who visit the Northwest Michigan Works! American Job Centers in-person or receive services virtually. Team members provide services like résumé and cover letter development, interviewing skills and practice, job search strategies, networking, assistance with unemployment, and career pathways assessments and exploration.

American Job Center Customer Visits

18,462

Total Center Visitors in 2022



Virtual Workshops

➤ *Résumé Development, Interviewing Skills, & Job Search Strategies Workshops*

➤ *Career Connection*
➤ *Veterans Services Orientations*

Talent Development Veteran Services



Service Type	Services Provided
Appointment	136
Career Connection	4
Job Search	86
Learning Lab	146
Résumé Assistance	42
Unemployment	223
USDOL Apprentices	10
Veterans Workshop	5
Total	652

Talent Development



"I couldn't believe a person would care enough to come see ME—a guy in jail for a meth crime. By talking to my Life Coach I learned that I, and I alone, am responsible for what happens to me. I will never forget what she told me—'Creating happiness for yourself takes as much time as making yourself miserable. Choose wisely.' As soon as I was discharged from rehab, I came to Michigan Works! to start working with my Life Coach and get my life on track. We researched all the construction companies in the area and worked on my résumé. I got a job, but my truck needed insurance and plates. Michigan Works! helped me with both, and gas cards so I didn't have to stress about gas so much, especially at the beginning and before my first paycheck. Without Michigan Works! I wouldn't be where I am now, and without my Life Coach, I wouldn't have even started."

—Matthew Stockman, Northwest Michigan Works! Customer

"When I started this journey three years ago I had no idea the direction I wanted to move in; all I knew is that I wanted to help! With great patience and understanding I have shifted my focus from behavioral health to mental health. Thanks to Michigan Works!, I am currently enrolled in a certification course to become a Community Healthcare Worker. These certifications will assist me in my future endeavors to land a career in the mental health field."

—Janaia Arnold, Northwest Michigan Works! Customer



Talent Development

Partnership. Accountability. Training. Hope. (PATH) & Workforce Innovation and Opportunity Act (WIOA)—Community Impact

60%

Percentage of Wagner Peyser participants employed six months after completion of services

92%

of PATH participants obtained employment

91%

of WIOA participants were employed six months after completion of services

75%

of WIOA Adults and Dislocated Workers received a credential

89%

of WIOA participants were employed a year after completion of services

\$17.23/hr

Average reported hourly wage earned six months after completion of services by WIOA Adult and Dislocated Worker participants

\$16.57/hr

Average reported hourly wage earned six months after completion of services by WIOA Youth and Wagner Peyser participants

Talent Development

Job Seeker Success Stories



With help from WIOA-Adult funding and his Career Advisor, Aaron Olund was able to obtain his CDL Class A and full-time employment with Alliance Beverage in Traverse City. He says, "It is a great place to work and I am glad they gave me a shot!"

—Aaron Olund II



"I was struggling with filling out my unemployment, so I stopped in to the Michigan Works! office and spoke with a wonderful Career Services Specialist. She was very helpful and she told me of a job close to my home. I was absolutely thrilled with this job.

They hired me right away!"

—Carolyn Dine



"The weekly meetings and availability of the PATH Advisor helped me the most. I looked forward to being able to have one-on-one help, so that I could be honest and to relieve some of the stress I was holding inside. The meetings helped my confidence and helped me to be organized."

—Elizabeth Milliron



"The staff at Michigan Works! helped me with applying for unemployment benefits, updating and condensing my résumé, and, using my work history, they helped me find a job I love!"

—Jennifer Bodary



"My time spent at Michigan Works! in the PATH program gave me the confidence to get back out into the real world and find a job. Thank you Michigan Works! for all of your support!"

—Pamela Granfors



"I came to Michigan Works! in hopes of fulfilling my dream to become a truck driver. I wanted to obtain my CDL so I could find a career to last me until retirement. I've always wanted to drive on the open road since I was a child!"

—Zach Brown

Talent Development





Young Professionals Program

Over the course of eight weeks, Northwest Michigan Works! successfully administered the 2022 Young Professionals program. The goal of this program is to expose young adults to in-demand occupations and industries, while also providing them with the technical skills they need to pursue welding and construction occupations after completing the program.

In partnership with Char-Em Intermediate School District, Northwest Education Services, and Wexford-Missaukee Intermediate School District, participants received training and assistance with transportation, tools, and safety equipment to use during and after the pre-apprenticeship program.

Students earned an hourly wage of **\$17/hour** while participating in the training.

91% of students completed their respective program

Cohort 1	Program Focus Construction Trades	Number of Participants 9	Number who Completed 7 <i>(2 left for employment opportunities)</i>
	Primary Partners NORTHWEST MICHIGAN WORKS!  		
Cohort 2	Program Focus Welding	Number of Participants 12	Number who Completed 12
	Primary Partners NORTHWEST MICHIGAN WORKS!  Career Tech Northwest Education Services		
Cohort 3	Program Focus Welding	Number of Participants 10	Number who Completed 9 Number who Earned a Credential 5
	Primary Partners NORTHWEST MICHIGAN WORKS!  Wexford-Missaukee ISD		

"I am the only girl in the program, and at first this made me nervous, but I didn't let that intimidate me. This program really opened my eyes to how much I love welding and how much I want to be a welder. I've always been curious about welding, but now I know this is the path I want to take for my future career."
—Anna Londak



Talent Development

Jobs for Michigan's Graduates (JMG)

The success of our region's young adults remains a top priority of Northwest Michigan Works! and our JMG team. With the significant skill gap and a talent pipeline shortage, Michigan's workforce needs educated and work-ready young adults. In 2022, Northwest Lower Michigan's JMG program equipped 346 young people with the skills needed to overcome barriers and succeed in education, employment, and life.

Engaging youth in different opportunities that allow for exploration in career and education pathways is a key part of the successful outcomes of the JMG program. Specialists work closely with their school partners to facilitate employer and post-secondary engagement opportunities, and experiential based learning, all within a trauma-informed care environment.



Youth attended Leadership Day at Camp Daggett in Petoskey.

Northwest Michigan Works! is proud to have partnered with the following schools to achieve a record JMG enrollment of 346 students in 2022:

- Northwest Education Services (formerly TBAISD)
- Cadillac Innovation High School
- Wexford-Missaukee ISD
- CASMAN Academy
- Mackinaw Trail Middle School (Cadillac)
- Char-Em ISD
- Cadillac High School
- Northwestern Michigan College (NMC)



346
Students
Enrolled

Record Enrollment!

69 students participated in leadership development events at the regional and state levels, including Leadership Day, Legislative Day, and the Career Development Conference.

Highlights of the year:

- 18 JMG students participated in paid work experience opportunities with 11 area employers.
- The Regional JMG Leadership Day held at Camp Daggett in Petoskey drew 20 area students who participated in leadership activities and networked with other northern Michigan youth.
- The statewide Career Development Conference was held in Lansing. 25 Northwest Lower Michigan youth competed in various events. One of the youth earned second place and another third place in the Career Preparation event.

For the seventh consecutive year, our program received the National Jobs for America's Graduates "5 of 5 Award" for meeting or exceeding national standards in five categories measuring youth success.

All JMG youth receive:

- Work-based learning opportunities
- Employer and post-secondary engagement
- Mentorship from a trauma-informed caring adult
- Youth-led leadership development and experiences
- Service learning opportunities
- Competency-based instruction
- 12 months of follow-up services

Madeline is a capable student who enrolled in the JMG program as a senior in high school and graduated in June 2022. She is driven by a desire to do good for her community and has spent many hours volunteering for various community projects. At the age of 14, Maddy started her own baking business, Maddy Cakes, and continued to run the business while attending high school full-time. Maddy is currently attending Johnson and Wales University to study baking and pastry arts with financial assistance from the JMG scholarship program.



Daydreana Davis (CASMAN Academy), Abby Kovasevich and Madeline Stange (Cadillac High School), and Sawyer Keene (Mackinaw Trail Middle School) were awarded \$1000 to pursue post-secondary education in the second annual JMG Scholarship Competition.

**Graduation
Rate**

99%

82%

**JMG students pursuing
employment, military, or
college after high school**

81%

Full-Time Employment Rate

56%

Further Education Rate

67%

**Employment Rate
(part and full-time)**

"JMG is a valuable educational support and partner for the students at Crooked Tree High School."

—Don Heinz, Teacher, Crooked Tree High School in Harbor Springs

"The JMG program helped to give me valuable job skills that have become useful in my workplace."

—Tyler Kuchta, JMG Student, Cadillac Innovation High School

"The quality of the students coming to us from the JMG program has been truly remarkable. They are well prepared, eager, and open to be mentored as they continue to grow and advance their skill sets."

—Tom Gordon, General Manager, Fox Grand Traverse

Talent Development

MiCareerQuest Northwest

Northwest Michigan Works! worked hard alongside our employer and community partners to put on the first in-person MiCareerQuest Northwest event since 2019. This event was a career and college readiness event for 9th grade students to talk with experts from the region's in-demand industries, experience tools and technology of the trades, and learn in-depth and practical knowledge of today's workplaces.

The event was host to:

- ➔ 32 community sponsors, including our event sponsor the Northwestern Lower MiSTEM Network
- ➔ 2,000 9th grade students
- ➔ 30 school districts
- ➔ 60 career exploration exhibits
- ➔ 7 high-wage, in-demand industries represented
- ➔ 100+ career pathways to explore
- ➔ 70 community volunteers



According to the feedback surveys:

100%

of exhibitor respondents would participate in MiCQ again

75%

of student respondents learned about employment and education opportunities they didn't know about before the event

88%

of educator respondents said their awareness of career and post-secondary opportunities in Northwest Lower Michigan was expanded



Talent Development

Adult Education

Northwest Education Services Adult Education is provided through the Northwest Michigan Works! Learning Labs. The **Education for Employment** focus helps provide participants with a transition focus after graduation to employment or training. Labs operate year round with an open registration schedule. Participants aged 18 and older can learn for free at their own pace through an individualized educational plan.

217 participants | **14,200+ attendance hours**

64 2022 Graduates (22 HSD, 42 HSE/GED)	Age Group			
	16-18	6%	45-54	9%
	19-24	34%	55-59	3%
	25-44	43%	60+	5%

Programs of Enrollment	
Adult Basic Ed.	21%
Adult Secondary Ed.	36%
English as a Second Language	5%
High School Diploma	3%
High School Equivalency (GED)	35%

69%

of all attendance hours came from Distance Learning

HYFLEX LEARNING: Educational delivery options change based on the participants' needs, and remote or distance learning continues to be a valuable option. A contributing factor is that many adult education participants typically work a significant number of hours and have limited time to spend on-site—so the learning lab delivery system has been redesigned into a "HYFLEX" system:

- ➔ Combination of both onsite and remote with flexibility to choose and encourages need for and active participation in both modes
- ➔ Participants are prepared during registration to interact with the video conferencing in order to be an effective distance learner

LITERACY SERVICES UPDATE: Often, adults who struggle with reading or writing skills do not seek help. This year it was encouraging to see that literary services enrollment numbers tripled! A major benefit of the full range of literary services provided in the learning labs has been an increase in educational gains for those enrolled students. Lab tutors are now trained by the local learning lab teacher, and foster an encouraging environment allowing applicants to feel comfortable in seeking help with reading and writing skills.

LEARNING LAB SPECIALISTS: Two Lab Specialists provide career planning and barrier removal services to learning lab participants to better prepare them for meaningful employment. These transition services focus on such employment for self-sufficiency, or enrollment in postsecondary education or training. The Specialists work in tandem with the learning lab teachers and aides to provide a comprehensive plan with each student.

Added two Learning Lab Specialists in 2022

ACT (ADULT CAREER TRAINING) @ WMISD CTC: The ACT (Adult Career Training) program had another successful year in partnership with the **Wexford-Missaukee Intermediate School District Career Technical Center**. All of the individuals that completed the program were gainfully employed thanks to the partnership with Adult Education and Northwest Michigan Works!.



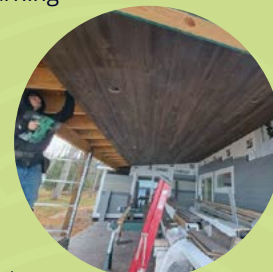
Healthcare ➔ First aid/CPR, HIPAA and bloodborne pathogen certified, earning Certified Nursing Assistance (CNA) certification.

Heavy Equipment ➔ Learned federal rules and regulations, including prevention maintenance of machinery and tractor trailers, and ultimately transitioned to CDL (Commercial Driver's License) training with Pinnacle Truck Driver Training.

Manufacturing ➔ Completed training in overhead crane and forklift operation, technical math, blueprint reading, residential wiring, soldering, mill and lathe operations and four types of welding instruction. Individuals earn certifications from the CTC listing their mastery of the different types of instruction.

Elizabeth (Liz) S. entered the Traverse City Learning Lab when she enrolled in the SUN (Skills Up North) welding program in August 2019. Due to work issues, Liz was forced to drop out.

She returned a year later and **was able to finish her GED in just two months!** Liz was a hard worker and a motivated student. Her career exploration plan determined an interest in woodworking. **Liz has now been working as a Tradesman apprentice with Ultimate Accents Construction for over six months** and very excited about the work she is doing. "There is no way that I could keep going and do what I am doing without the people supporting me, and that includes you."



Talent Development

Offender Success Program

Over 90% of individuals who are incarcerated in Michigan will return to their communities after serving their sentence. The Offender Success program is designed to support these individuals in overcoming their challenges in order to become successful, self-sufficient community members—and when people are able to successfully reintegrate into their communities public safety increases, the rate of crime decreases, and tax dollars that would otherwise be spent on keeping individuals incarcerated can be redirected to other programs. Offender Success staff work closely with Michigan Department of Corrections parole agents to assess and meet the needs of each participant.

Residential Stability | Job Placement
Social Support | Health & Behavioral Health

Offender Success staff work one-on-one with participants referred for job placement to help them through the job search process and beyond, maintaining contact until they have reached 12 months of full-time employment (or until their parole term has been completed). Participants can also be referred for housing support services, which assists those who would otherwise be homeless to obtain temporary shelter and make a plan for finding long-term independent housing. Offender Success staff coordinate with parole to provide additional supports as needed, such as bus passes, fuel cards, clothing vouchers, or funding for mental health services. With the ultimate goal of reducing recidivism, the Offender Success program has demonstrated its efficacy by reducing the state’s recidivism rate to 23.6% in 2022, the fourth lowest rate in the nation.

Over 85% *Job placement rate—second highest in state, exceeding state average of 56%*

OS participant Christopher Cook paroled to Wexford County in October of 2021. With no other housing options, he was placed in transitional housing funded by the OS program and began receiving housing support, job placement, and social support services. He was provided with clothing vouchers upon his release, which he used to purchase work boots and pants, as well as items for everyday wear. Mr. Cook was able to get a job almost immediately, and with the support of his OS Resource Specialist he was able to maintain full-time employment while searching for a position more in line with his interests



Percentage of enrolled participants who have successfully remained in the community for at least 3 years after they began receiving services.

Over 77%

Over 52%
Percentage of participants who maintained employment for 12 months and/or until parole term completion

Numbers of Participants Served by County	
Antrim — 25	Benzie — 14
Charlevoix — 9	Emmet — 9
Grand Traverse — 60	Kalkaska — 9
Leelanau — 7	Manistee — 12
Missaukee — 5	Wexford — 48

\$14.91 *Average hourly wage for participants—third highest in state*

Residential Stability

- 85 individuals who would have otherwise been homeless received assistance with finding and securing a place to stay.
- 26% of program budget was expended on providing residential stability services.
- 26 individuals were screened by OS staff for a Housing Choice Voucher (HCV). One of the individuals was pulled from the waitlist, and with the help of OS staff he was able to use his HCV to secure independent, affordable housing.

Job Placement

- Job placement and retention services were provided to 53 unique offenders.
- OS Staff provided job placement and retention services for participants who worked with 69 employers, 42 of which were first time partners with the OS program.
- Exceeded key performance measure for job placement and met the benchmark for job retention.

and goals. OS was able to purchase tools that were required for him to begin his second job and bus passes to help him get to work and other required appointments throughout his parole term. In October of 2022 he achieved one year of full-time employment. During those twelve months, he earned a promotion and a raise at work, and was able to begin the process of purchasing a home with his partner. According to Mr. Cook, “This program has been an asset to the success after my release. Lindsey has gone above and beyond to ensure I had the tools to be successful and endure the hard road after leaving prison.”

BUSINESS DEVELOPMENT

Networks Northwest is a leader in helping the business community thrive in today's economy. Our professional business teams can help with anything from hiring and training, to connecting with vital resources to make businesses in our area more attractive and competitive. Through our efforts, employers have been able to expand their business, become more profitable, streamline their systems, invest more in their workforce, and change northern Michigan lives for the better. Take a look at just some of the stories we are a part of in the following pages and know that we will continue this work in serving our region's employers and communities.



➔ *Business Resource Network*

➔ *Apprenticeships*

➔ *Business Services*

➔ *Going PRO Talent Fund*

➔ *Global Trade Alliance*

➔ *Northwest Michigan Procurement Technical Assistance Center*

Business Development

Business Resource Network Employee Retention Program

Since its inception in 2018, the Business Resource Network (BRN) has enjoyed great success, including keeping the original 8 members until 2022. Our Success Coach has partnered with our employer members to create work cultures to include flexibility, compassion, and supportiveness to produce above average employee retention rates. Not all employees will receive BRN services; we are working with those with the most barriers to continued employment, and are therefore the hardest to serve. The Success Coach constantly updates her resources in order to best serve both the employers and their employees. In 2022, 94 new individuals received services and 60 individuals received ongoing case management. In total, 154 received services and 116 were retained for a 75% retention rate for the year. In 2022, 643 referrals for services were provided. Ninety percent were in the following categories:

<i>Financial Management & Budgeting: 166</i>	<i>Utilities: 56</i>	<i>Mental Health Counseling: 48</i>	<i>Legal: 21</i>	<i>Health Insurance: 16</i>	<i>Home Repair: 13</i>	<i>Affordable Family Nutrition: 9</i>
<i>Housing: 103</i>	<i>Transportation Assistance: 49</i>	<i>Car Repair: 45</i>	<i>Child Care Assistance: 17</i>	<i>Child, Food & Medical Assistance: 13</i>	<i>Driver's License: 11</i>	<i>Employment Assistance: 9</i>

"The BRN has been a fantastic program for our employees, but it also gives us a leg up when we're recruiting. Most candidates are interested in benefits we offer so we make a point of touting the BRN in interviews and with new hires. It's such a unique benefit and available from day one—we've even had new employees contact her their first week. Our Success Coach's network of resources goes so far beyond our own, it's a relief to know we can refer employees to her when we need to and be assured they're in good hands."

—Jill Harrell, Human Resources Coordinator for Wojan Window & Door



Business Development

Apprenticeships—Skills for In-Demand Jobs

Northwest Michigan Works! sponsors over 50 diverse US Department of Labor (DOL) apprenticeship training programs including youth apprenticeships, healthcare, administrative and construction, with over 300 registered apprentices throughout the 10-county region. A variety of occupations and industries both big and small are benefiting from this proven workforce strategy. The Apprenticeship team helps both job seekers and businesses meet their needs. The Apprenticeship team conducts ongoing check-ins with apprentices to ensure they complete training competencies on time and without additional barriers. The team also works to ensure the employer is supported through regular program reviews and financial resources to help cover costs associated with a registered apprenticeship program.

This year, some of the jobs Northwest Michigan Works! helped with an apprenticeship pathway included:

- ➔ Childcare Educator
- ➔ Childcare Development Specialist
- ➔ Optician
- ➔ Ophthalmic Ultrasound Diagnostic Technician
- ➔ Paramedic & more!

300+

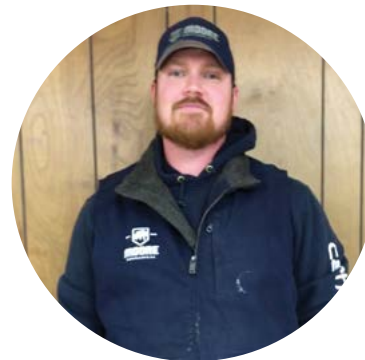
*Registered Apprentices
Across the Region*

Apprenticeship Success

Moore Mechanical

In 2022, the entire Apprenticeship team became GI Bill Certified through the State of Michigan Veterans Administration (VA) to provide a higher level of service for veteran apprentices. Eligible candidates access special support while they are participating in a USDOL registered apprenticeship including housing allowances and monthly wage stipends. The first veteran to receive benefits was Spenser L. an HVAC apprentice with Moore Mechanical. Spenser started his program in December of 2021 and during the apprenticeship orientation he identified himself as a US Army Veteran. He was aware of his GI Bill Education Benefits and inquired about accessing the support for housing and wages. Through a lengthy process, the Apprenticeship team captured the employer information and started his registration process with the VA. Upon approval, the apprentice information was then submitted and within less than 30 days, Spenser was approved for three years of full-time benefits, while establishing himself in his new HVAC career! The first benefit allocation included several months of back pay and was the financial support Spenser needed to help him cover closing costs and updates on his home.

This specialized service provided by Northwest Michigan Works! will help ensure Spenser's success throughout his three-year apprenticeship program and allow the team to assist others just like him with their GI Bill Benefits process.



"Working with Michigan Works! has been wonderful! We worked through the process with the VA together and learned how to ensure other veterans are able to take advantage of their education benefits during their apprenticeship. Thank you so much! I know it's been a learning experience but thank you for working with me to get it figured out!"

—Spenser L., Veteran HVAC

Apprenticeship Success

Habitat for Humanity—Grand Traverse Region

Like other employers in the construction sector, Habitat for Humanity for the Greater Grand Traverse Region was struggling to fill essential positions. They reached out to Northwest Michigan Works! to inquire about the carpenter apprenticeship program, and see if it could help enhance their current training program to engage new talent. The competition for carpenters was tough and their Director of Operations knew they needed a fresh way to recruit a skilled workforce. She, along with an enthusiastic team, worked to develop a unique apprenticeship program that covered the technical and soft skills required for a position with this highly respected non-profit organization. The program took nearly a year to develop and was approved during a USDOL signing ceremony in May of 2022.

Matt Powell served as a volunteer for Habitat for Humanity and has some previous experience in carpentry. Through a series of conversations, Matt learned about the carpenter apprenticeship and that they were hiring for the position. Habitat for Humanity leadership recognized Matt's skills and dedication, offering him the full-time apprenticeship opportunity in July 2022. He now works with a committed mentor at a variety of job sites around northern Michigan, continuing to increase his carpentry skills as he helps to build sustainable homes for partner families.

The carpenter apprenticeship provides 2000 hours of on-the-job learning as well as 148 hours of related technical coursework through Northwestern Michigan College Extended Education, Ed2Go and Habitat for Humanity. The curriculum includes human-centered soft skills, safety instruction and builder's licensing training. The Northwest Michigan Works! Apprenticeship Specialist working with Matt learned he was struggling with completing the online courses due to only having a cell phone for accessing the materials. The Apprenticeship program was able to help Matt overcome this barrier by providing him with a laptop, as well as fuel assistance to help ensure his sustainability and employment. Such wrap-around services set both the employee and employer up for success.

"Habitat for Humanity is thrilled with the opportunity to partner with Northwest Michigan Works! on this entry level carpentry apprenticeship. Skilled construction workers are in high demand in our region and through this program, apprentices will be provided on-the-job training with related education, preparing them to advance their career in the construction trades."

—Angela Clem-Skeans, Director of Operations



Business Development

Business Services at a Glance



Northwest Michigan Works! collaborated with the Michigan Economic Development Corporation and regional Economic Development Organizations to conduct

91 & 26 *virtual employer visits*
onsite

During these visits, employers had the opportunity to learn more about the Going Pro Talent Fund, Industry 4.0 Technology (i4.0) grant, apprenticeships, On-the-Job Training (OJT), industry and partner referrals, and more.

55 *Employer of the Day hiring events held, with* **120+** *job seekers attending*

Over \$17,000

in On-the-Job training contracts

\$75,000

in i4.0 Technology Implementation grants awarded

Awardees' expected revenue increase over the next 2 years

\$2,210,000

4995

jobs posted by the Northwest Michigan Works! Business Services Team

150+

total employers engaged by Northwest Michigan Works! Business Services Team



Business Development

Business Services by County

Michigan Works! Business Services: Unique Companies Served by County, By Industry												
Industry	Antrim	Benzie	Charlevoix	Emmet	Grand Traverse	Kalkaska	Leelanau	Manistee	Missaukee	Wexford	Out of Region	Total
Agriculture, Forestry, Fishing	6	3	2	2	1	1	5	1	3	5		29
Mining, Oil and Gas Extraction					2	1			1			4
Utilities	1		1		4				1	2		9
Construction	7	1	7	19	24	6	4	5		3	4	80
Manufacturing	16	1	20	14	52	7	5	9	3	22		149
Wholesale Trade	1			1	13	1	1		1	4	1	23
Retail Trade	8	3	8	16	29	6	2	9	2	63	1	147
Transportation and Warehousing	1		2	3	14					9	5	34
Information					2		1	1		4		8
Finance and Insurance	1	1	1	4	8			3	1	10		29
Real Estate and Rental and Leasing	1		2	2	4					3		12
Professional, Tech Services		2	3	5	16		1			23	2	52
Management of Companies					3							3
Admin, Support, Waste Management		1		2	5	1	2	1		2		14
Educational Services	1		1	10	10	1		1		6	1	31
Health Care and Social Assistance	3		10	15	35	2	1	6	2	29	4	107
Arts, Entertainment, and Recreation	2	1	5	6	4			1		2		21
Accommodation and Food Services	6	2	8	15	10		3	5		19	3	71
Other Services	3	4	7	17	19		3	8		6	10	77
Public Administration	7	1	1	1	7	1	1	2	2	8	3	34
Total	64	20	78	132	262	27	29	52	16	220	34	934

Petoskey Farms Vineyard & Winery

Networks Northwest hosted a registered apprenticeship graduation ceremony in partnership with Petoskey Farms Vineyard and Winery. Graduating apprentices who were awarded their US Department of Labor Registered Apprenticeship Journeyworker credential included Derrick Vogel, Winemaker Journeyworker at Petoskey Farms Vineyard and Winery. Derrick completed his winemaker course and continues his work with Petoskey Farms Vineyard and Winery while preparing for his future by starting work on his own business and vineyard.

Other Journeyworker credentials were awarded for Painters, Medical Assistants, Soil Conservation Technician, Carpenter, Roofer, and Accounting Technician. Also attending the graduation were legislative representatives, educational providers, State of Michigan Department of Labor and Economic Opportunity Workforce Development Team, and employers. Employer partners received the Employer of Excellence award for their progressive participation in a US Department of Labor Registered Apprenticeship program.



Business Development Employer Testimonials



"Our representatives from Northwest Michigan Works! are always an incredible help! They are available to assist whenever we need [them], and are very timely with answering our questions. Our representatives truly care about us, our growing business, and the opportunities that come with it. We are so thankful for everything they do!"

—**Rachel Elder, Tasting Room Manager**



"For well over 14 years, Northwest Michigan Works! has provided our company with impeccable service regarding training dollars and workforce information/trends in our area. Our Business Service Representative is very responsive and is a wealth of knowledge when it comes to programs offered by Northwest Michigan Works!"

—**Kari Wineland, Human Resource Manager**

"Our Business Services Representative was on-site to visit with me as soon as I started my new position as Executive Director of the Bergmann Center. We were able to establish a customer service apprenticeship for special needs clients which we serve through our resale shop in Charlevoix. The Apprenticeships and Business Services Team were there assisting us with paperwork, marketing, and guiding us to grant funds. **Northwest Michigan Works! truly provides services which enable ALL citizens to benefit and become beneficial, independent members of society.**"

—**Chuck Hayes, Executive Director**



"Cadillac Fabrication has been able to take advantage of the Going Pro Talent Fund award in the past and hopefully in the future. **We have seen through some tough times that our core employees have stayed loyal to our company and we believe this helps with that.**

While we know that training is a critical component for development and growth, it is also one area that [requires] immediate discretionary spending. With the support of the Going Pro Grant, we have been able to develop our workforce and simultaneously meet the ever present demands of maintaining our budgetary spending. The team at Northwest Michigan Works! continues to help our business and we are grateful for this."

—**Kris Saller, Human Resources**





*"Implementing the On-the-Job training program was seamless as representatives from Northwest Michigan Works! worked with us each step of the way from introducing us to the program, walking us through the application process, and signing up new hires. In addition, the representatives went above and beyond by meeting onsite with our new hires applying to the program as they all lacked transportation in getting to the Michigan Works! office. **They truly care about helping people find work!**"*

—Brenda Byers, Human Resources Manager



*"The entire team at Northwest Michigan Works! and Networks Northwest have been SO helpful answering questions and providing direction to PDM Industries! They have been there every step of the way. We were able to recoup some of our onboarding costs with the Going Pro Talent Fund award we received. Training our new hires took production time away from our veteran employees and this grant helped defray that cost. We have been able to hire several new employees after working with the Business Services team. **I cannot thank your organization enough. I am thankful beyond words!"***

—Rodney Werly, Plant Manager



*"Northwest Michigan Works! has programs that Promethient has been able to take advantage of over the years. They have been able to help with getting the word out for new positions, guiding us through Going Pro Talent Fund award applications and more recently providing the connection and expertise to secure an i4.0 technology grant. We expect job growth and job retention as a result of this grant. **It is especially important for an early-stage manufacturing business to have agile partners who care about our success and who are willing to take action.** Northwest Michigan Works! is this type of partner."*

—Bill Myers, CEO

Talent Development

Going PRO Talent Fund

The Going PRO Talent Fund provides competitive awards to employers to assist in training, developing, and retaining current and new employees. Training supported by the Going PRO Talent Fund must be completed within one year from the date of the award and lead to an industry-recognized credential. As a result, employees' skills expand and improve, opening up opportunities for growth within the company, ultimately setting businesses and employees up for economic advancement.

In 2022, 28 businesses in Northwest Lower Michigan received a total of \$774,650 in awards which was used to train a total of 525 employees.

Northwest Clients by County					
County of Business	# of Awards	Amount Awarded	# of Employees Receiving Training	# of New Hires	# of Apprentices
Antrim	1	\$6,000	6	2	0
Benzie	4	\$132,844	69	15	30
Charlevoix	5	\$228,324	160	69	18
Emmet	3	\$55,590	36	19	2
Grand Traverse	13	\$320,753	227	43	5
Manistee	1	\$28,339	21	17	0
Wexford	1	\$2,800	6	1	0
REGION 2 TOTALS	28	\$774,650	525	166	55

Iron Fish Distillery

In 2022, Iron Fish Distillery in Benzie County embarked on a major expansion, planning a \$900,000 investment in new equipment and facility improvements, with a goal to triple production of its estate whiskey and enhance the customer experience for its 125,000 annual visitors. Already impacted by a limited labor force and given its lofty goals, Iron Fish reached out to Northwest Michigan Works! for guidance.

The Northwest Michigan Works! Business Team was instrumental in helping Iron Fish Distillery secure Going PRO Talent Funds to support current team members' training and provide On-the-Job training for new hires brought on board. Here is what Human Resources Manager Shelley Geyer has to say about the experience: "Through the Going PRO grant, we sent three core production team members to industry specific training. The entire team and distillation operation benefited with renewed energy and productivity. We are appreciative and thankful for Networks Northwest's support, training and funding."

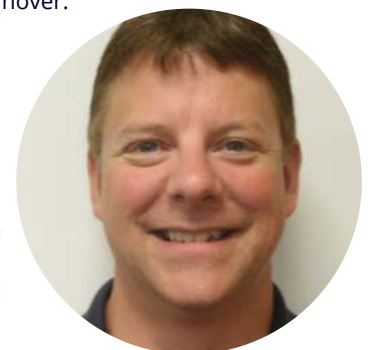


Circuit Controls Corporation

Circuit Controls Corporation is a manufacturer of automotive electrical terminals. It was established in the Petoskey area in 1959 and is part of the Yazaki Group. Its high-speed precision stamping presses and state of the art Gold plating equipment make it one of the world's leaders in automotive electrical components.

Here's what Human Resources Manager Bob Brazier has to say: "I have worked with Michigan Works & Networks Northwest for several years now. Staff have always been professional and extremely helpful whenever we needed assistance. Our Going Pro Talent Fund award was especially helpful. Changing technology requires a great company to invest in its employees in order to stay that way. This improves engagement and boosts morale, which then affects production efficiencies and turnover.

I really appreciate all the work that your teams put into the grant process. Thank you!"



Talent Development

Global Trade Alliance



Networks Northwest completed their fifth year of a five-year contract as the Regional Export Network (REN) host for all of Northern Lower Michigan and the Upper Peninsula. In 2022, the Global Trade Alliance was busy connecting local employers to export resources through social media, newsletters, and our organization websites. The Business Services Team conducted outreach and education across the region in order to connect companies with the right program and resources. These engagements were designed to help companies that are new to exporting altogether and some focused on preparing businesses for international trade shows.

Working with both local and state level partners the Global Trade Alliance was able to market trade show opportunities, trade missions, exporting focused webinars, and export related training. Employers were connected to training such as International Traffic In Arms or Export Administration Regulations and also were able to take advantage of international travel and in-country trade shows. Opportunities to participate in the International Trade and Development

Intern Program, and the Michigan Economic Development Corporation's Michigan State Trade Expansion Program (MiSTEP) were also highlighted.

The Global Trade Alliance continued its collaborations with the Michigan Economic Development Corporation (MEDC), Grand Traverse Area Manufacturing Council, Northwest Lower Michigan Industry 4.0 Consortium, Northern Initiatives, Northern Michigan Chamber Alliance, Networks Northwest Procurement and Technical Assistance Center, the Small Business Development Center, and the Northwest Michigan Works! Business Services Team.

Our partnership with MEDC and our local International Trade Manager will allow us to continue to serve and connect businesses with export resources to facilitate expansion of their international reach.

Global Trade Alliance Clients



**MICHIGAN ECONOMIC
DEVELOPMENT CORPORATION**

Businesses served
50

*State Trade Export Program
grants totaling*
\$265,200

Export sales
\$27,754,316

Business Development

Northwest Michigan PTAC

The PTAC provides no-cost assistance to area businesses who want to sell their products and/or services to the government.

The mission of the Procurement Technical Assistance Centers (PTAC) is to enhance national defense and the economic development of the State of Michigan by helping area business secure local, state, and federal government contracts.

The Northwest Michigan PTAC serves the entire Upper Peninsula and the 10 counties throughout Northwest Lower Michigan.



**2 Offices Serving
25 Counties**

Businesses Served

164

Counseling Hours Provided

1,618

Government Contracts Awarded to Clients

\$69M

this does not include large businesses as defined by the SBA

Jobs Created or Retained

345



Connecting Business and Government through Training and Events

- Selling to the State of Michigan
- Doing Business and Matchmakers with the U.S. Forest Service and the National Park Service
- Overview of Small Business Innovative Research (SBIR) and Small Business Technology Transfer (STTR) Grants
- Michigan Aerospace Manufacturing Association (MAMA) - North American Space Summit

\$69m

*in Client Contract
Awards*



"PTAC gives the everyday person, the small entrepreneur, the ability to do work with the government, our government. This is critical because America is built and sustained by the creativity and hard-work of each and every person who has a dream to make this country, this world, a better place. The gears of government are intimidating but PTAC counselors help us knock on the doors to opportunity."

**—Karen Wright, Owner
Pause Breathe Proceed**

The Northwest Michigan Procurement Technical Assistance Center is funded in part through a cooperative agreement with the Defense Logistics Agency and in part by the Michigan Economic Development Corporation (MEDC).

Business Development

Success Stories

KMI

Kall Morris Inc. (KMI) of Marquette, Michigan is a space solutions company that removes and repurposes uncooperative objects in Earth orbit to protect critical space assets and continue building the future.

In October of 2020, KMI was new to government contracting so they contacted the Northwest Michigan PTAC for assistance with SAM.gov registration and pursuit of an SBIR/STTR for the development of space debris retrieval technology.

With PTAC assistance, KMI positioned itself for government contracting and submitted multiple STTR proposals, eventually winning three research contracts through the Air Force Research Laboratory (AFRL) worth \$750,000 in total (as of September 2022).

These awards have already enabled KMI to hire 10 additional staff members and they intend to hire more staff. KMI is also expanding into a larger and more permanent facility in the Marquette area.

Additionally, KMI staff have attended numerous classes and events hosted by the PTAC, including an in-depth proposal writing course. KMI continues to interact regularly with PTAC whenever staff members have questions about acquisition regulations/processes or wish to receive training on specific government contracting topics.

"Utilizing PTAC is the easiest and strongest recommendation I can make to other companies interested in contracting with the government themselves," said Troy Morris, Co-Founder & Director of Operations for KMI. "Working with our local PTAC, and guided by our representative Leo, KMI has been able to access, engage, and achieve with the US government nearly \$1 million in contracts, with opportunity and confidence for so much more."

"PTAC clients range from one person shops to very large businesses, selling everything from cherries to manufactured weapon parts," said Cathy Fairbanks, Northwest Michigan PTAC Regional Director.

"Every client is different and it is very rewarding to help a small business like KMI who is doing such big things! To think we may have played a very, very small part in providing technology that cleans up space debris is incredible!"



Graceland Fruit, Inc.

Graceland Fruit, Inc. (GFI) in Frankfort, Michigan is a leading producer and global distributor of premium quality dried fruit ingredients for the food industry. GFI sells dried fruit (cherries, blueberries, cranberries) to the US Department of Agriculture for use in the National School Lunch Program, Emergency Food Assistance Program, and other government food and nutrition programs.

GFI has been a PTAC client for nearly 20 years, but more recently has been increasing its use of PTAC's no cost services. In the last four years, PTAC has provided GFI with over 150 hours of market research and one-on-one counseling, as well as five virtual training sessions. In the same time period, GFI has won over \$14M in USDA contracts for dried cherries and blueberries making a significant difference in the economy of Benzie County. While GFI is responsible for their own success, the PTAC has been a valuable resource providing them with pertinent information and technical assistance along the way.

"PTAC is essential to my USDA processing and bidding. The PTAC team is so very knowledgeable and goes above and beyond to assist me with, at times, urgent issues."

—Kerry Babion, Customer Sales and Service Manager, Graceland Fruit, Inc.



COMMUNITY DEVELOPMENT

Comprised of professional planning staff, the Community Development department of Networks Northwest garners collaboration for generating ideas aimed at achieving consensus on a range of subjects. The Community Development department offers services to communities and community-based organizations for the development of plans, strategic processes, grant writing, policy, and land use ordinance language. Community Development staff work directly with state and federal agencies to disseminate information concerning programs related to a wide range of land use topics including economic development, transportation, recreation, housing, food systems and agriculture, resource protection and hazard planning. The Community Development department is well qualified and continues to successfully convene and strategize for the needs of our region's residents, units of government, non-profits and business community.



➔ *Planning Policy and Housing: City of Charlevoix Master Plan*

➔ *EDA Trail Construction Grant in Northwest Michigan*

➔ *Hazard Mitigation Planning in Northwest Michigan*

➔ *Preparation for Establishment of the Metropolitan Planning Organization (MPO)*

Planning Policy and Housing: City of Charlevoix Master Plan

The City of Charlevoix has recognized the need for new and more housing units to support permanent residents who currently live in the community, or who wish to relocate to the city for work or family. Housing is such an important issue that Charlevoix has taken steps to address housing challenges within Master Plan Policy by creating a deed restriction program, allowing accessory dwelling unit (ADU) use in the central neighborhood district, and restricting the number of short-term rentals (STR) in certain residential districts. Similar to the region, housing needs in Charlevoix are brought upon by a number of causes including shortage in supply, changes in desired housing type, and housing that is available within the affordability range of local residents.

Necessary public input from the Charlevoix community was gathered for the Master Plan update. Community Development staff conducted surveys and responses were solicited through utility bills, the city's website and social media pages. A total of 637 responses were collected with a mail in response rate of 15 percent. The community survey asked 40 multiple choice or open-ended questions to gauge the community's satisfaction

with topics such as housing and neighborhoods, business and economy, transportation and infrastructure, energy, winter amenities, and general demographics and city government affairs. The items expressed in the Master Plan update are directly influenced by the results of the community survey.

The following "strongly influences" why people reside in Charlevoix:

87%
northern Michigan
location

81%
environment/natural
features

81%
safety &
security

Open-ended responses identified a want and need for affordable housing:

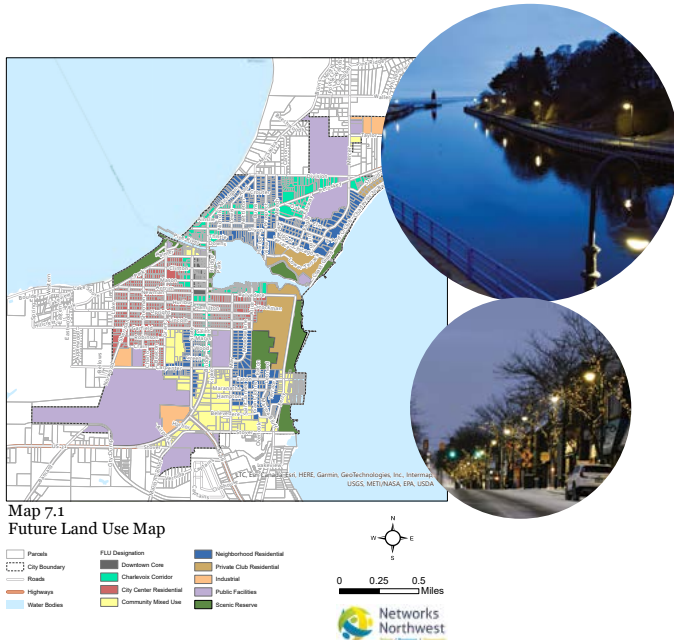
43%
use non-motorized
transportation EVERY DAY

80%
want power from
sustainable energy sources

73% said
yes
local government
deals with issues

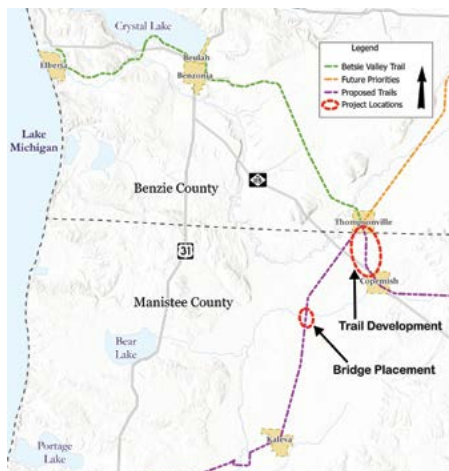
The Charlevoix Planning Commission also held monthly meetings throughout the process. Community input and discussions with local leaders set the goals and objectives for the plan, as well as a vision for the Future Land Use Plan (shown in inset). The Commission consolidated and reduced the number of districts to simplify policy and administration. The City Council adopted the 2022 City of Charlevoix Master Plan on November 21, 2022.

Community Development



Collaboration Leads to Successful EDA Trail Construction Grant In Northwest Lower Michigan

Networks Northwest partnered with the State of Michigan Department of Natural Resources on an application to the Economic Development Administration (EDA) for trail construction between Benzie and Manistee Counties, specifically linking the Villages of Thompsonville and Copemish with a constructed trail and placing a bridge over Bear Creek along a separate route between the Villages of Thompsonville and Kaleva. Historically, the Village of Thompsonville was known as the location of the “Diamond Crossing” where the Toledo, Ann Arbor and Northern Railroad line intersected the Chicago and West Michigan Railroad



lines. These railroad lines brought early pioneers and visitors to the region. The now vacated railroad beds, which are largely under state ownership, had been converted to a multi-use trail from Elberta to Thompsonville. This successful grant award of almost \$1.4

million from EDA continues the desired trail expansion along the established Betsie Valley Trail from Thompsonville to Copemish Village, and establishes the ability for snowmobile use and future year-round trail development between Thompsonville and Kaleva Villages.

\$1,391,280
EDA grant

\$347,820
Manistee County
Community
Foundation
matching grant

\$1,739,280
TOTAL project
funding

The nearly \$1.75 million dollar recreation investment was made possible with an almost \$400,000 matching grant from the Manistee County Community Foundation. Partnerships between state and local units of government along with non-profits and community groups, facilitated by Networks Northwest Community Development staff led to ease of support for the project. Successful grant writing to both the Economic Development Administration and the Manistee County Community Foundation by Community Development staff led to the successful upcoming implementation of the project. Community surveys consistently show that trails are very desirable to the residents of and visitors to Northwest Lower Michigan. Many benefits accompany trail development, including equitable access for all and bolstering of economic activity through year-round use of trails within our communities.

It is estimated that the development of this multi-use trail section and placement of a bridge over Bear Creek will provide **\$592,550.40 in direct spending per year in the adjacent communities.**

Promoting preservation of open space and access to those spaces increases user’s knowledge and connection to the environment, continuing a legacy of conservation: an ideal shared widely throughout Northwest Lower Michigan.

Hazard Mitigation Planning in Northwest Lower Michigan

Community Development staff have been working diligently with ten county and two tribal governments in our region to create new or updated 5-Year Hazard Mitigation Plans for each of their communities.

Nearly \$363,000 in pre-disaster mitigation grants have been awarded to Networks Northwest from the Federal Emergency Management Agency (FEMA) to help create updated hazard mitigation plans for Antrim, Benzie, Charlevoix, Emmet,

Community Development

Kalkaska, Leelanau, Manistee, Missaukee, and Wexford Counties and the Grand Traverse Band of Ottawa and Chippewa Indians Tribe; as well as the creation of a new plan for the Little River Band of Ottawa Indians Tribe.

The purpose of hazard mitigation planning is to reduce or eliminate long-term risk to human life and property from a hazard event. Most disasters or emergencies are caused by naturally-occurring events such as coastal erosion, severe storms or wildfires. Key components of creating and updating hazard mitigation plans include:

- Identifying hazards within the community (via online survey, public input & stakeholder meetings)
- Analyzing the risks posed by those hazards (via documented hazard events, environmental and infrastructure data, locations of vulnerable populations, and public input)
- Choosing specific actions that will mitigate those risks and prioritizing them

Under the Disaster Mitigation Act, state and local governments are required to adopt a state or local hazard mitigation plan approved by FEMA in order to qualify for federal hazard mitigation assistance grants. Hazard mitigation plans are valid for five years from the date of FEMA approval. Examples of FEMA-grant funded mitigation projects that local and county governments may pursue include: infrastructure improvements that mitigate flooding issues, generators for shelters, safe room construction, property acquisition, structure demolition or relocation, mitigation reconstruction, retrofitting of buildings and facilities, and wildfire mitigation.

For more information, please visit: www.nwm.org/hazardplan

Preparation for Establishment of the Metropolitan Planning Organization (MPO)

Networks Northwest Community Development staff members serve as administrative support for the Traverse Transportation Coordinating Initiative (TTCI) that serves as the coordinating body for representatives within the Traverse City census designated urbanized area, to discuss current and future transportation projects.



Originally formed in 1988 as the Grand Traverse Area Transportation Task Force, its goal was to investigate the long-standing issue of a bypass/beltline around Traverse City. In 1990, it was rebranded the Traverse City Transportation and Land Use Study (TC-TALUS) to better serve the region. In 2016, when it was believed that urbanized area designation was near, it was renamed as the Traverse Transportation Coordinating Initiative (TTCI).

In anticipation of meeting the MPO population threshold of 50,000, TTCI followed a similar format as a Metropolitan Planning Organization (MPO).

An MPO is a federally mandated and federally funded transportation policy-making organization that is comprised of representatives from local governments and governmental transportation authorities. On December 29, 2022 the United States Census Bureau announced that the Traverse City-Garfield urban area reached a population of 56,890 in the 2020 Census, meeting the eligible population threshold to become an MPO.

The MPO is designated by agreement between the governor and local governments that represent at least 75% of the affected population. An MPO designation allows such urbanized areas as Traverse City to carry out a metropolitan transportation planning process, resulting in additional federal dollars available for roads and transit in the Traverse City area. Due to the scarce transportation funding resources, the MPO provides a continuing, coordinated, and comprehensive transportation planning process so as to appropriately use funds following the region's shared vision. MPOs develop and maintain transportation plans. TTCI was designed to help guide the transition in becoming an MPO, in partnership with the Michigan Department of Transportation and Networks Northwest. TTCI has been able to provide consensus and support for this process, and eager to begin official MPO designation work in 2023.

"Staff with Networks Northwest have worked to maintain the community collaborative through TTCI for preparation of the eventual establishment of a Metropolitan Planning Organization (MPO) in our region. Through trusted communication, the planning area units of government are positioned and eager to move through the welcomed establishment process for the MPO."



—Beth Friend, Supervisor, East Bay Township

Financial Summary

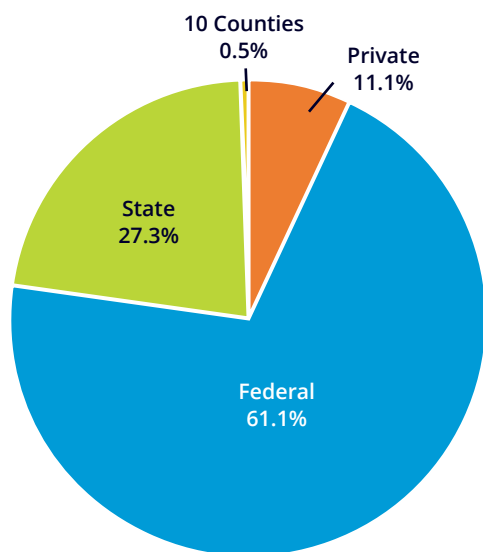
2022



Both of our legal entities, Networks Northwest and Northwest Michigan Works! Inc., received FY22 audits that contained no significant deficiencies of any kind.

Revenue by Source

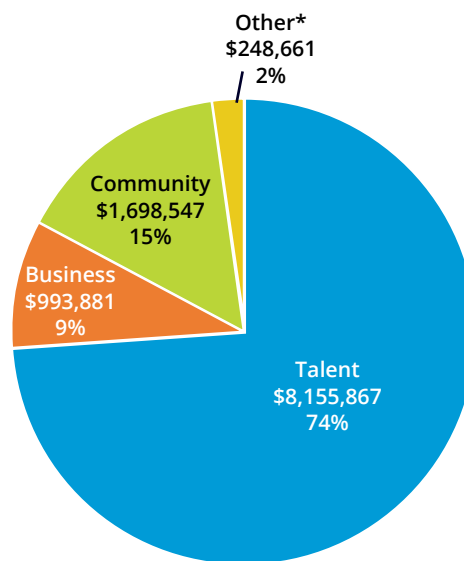
Fiscal Year 2022, Ending 9/30/2022



Expenditures by Service Category

Fiscal Year 2022, Ending 9/30/2022

Total: \$11,096,956

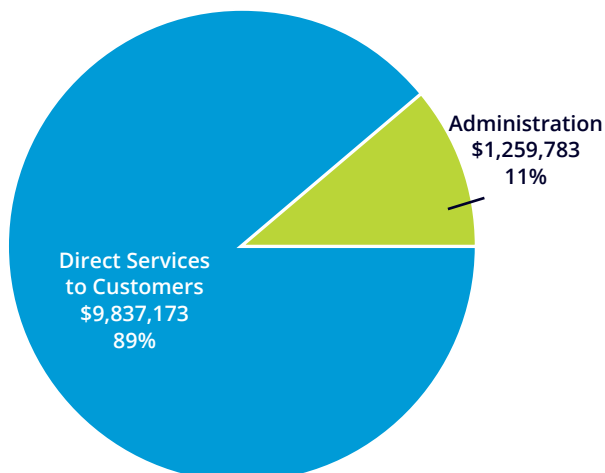


**Reserve Fund; Leave Fund: Pass-through funds*

Expenditures by Function

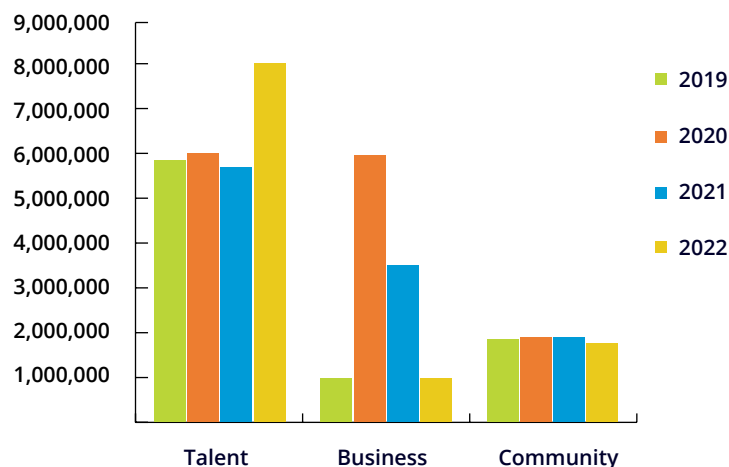
Fiscal Year 2022, Ending 9/30/2022

Total: \$11,096,956



Budget

2019 – 2022





TALENT



BUSINESS



COMMUNITY



**Networks
Northwest**

Talent / Business / Community

networksnorthwest.org

231.929.5000

Correspondence

**BENZIE-LEELANAU DISTRICT HEALTH DEPARTMENT
BOARD OF HEALTH MEETING AGENDA**

Wednesday, May 24, 2023 – 2:00 p.m.

**Benzie Community Resource Center - Ingemar Johansson Conference Room
6051 Frankfort Highway
Benzonia, MI 49616**

or

Electronically, via conference call

To participate, dial: (213)-282-9788 and enter Conference ID: 807 213 701#

This is a Regular Meeting of the Benzie-Leelanau District Health Department Board of Health. Public Comment is encouraged at the beginning and end of the meeting. An individual's comment time may be limited based on the discretion of the Chair.

Call to Order/Roll Call

Pledge of Allegiance

Approval of Minutes from the Regular Board of Health Meeting of May 1, 2023.

Approval of the Agenda

Public Comment Period

1. Health Officer Update – Dan Thorell
2. Personnel and Finance Committee Report-Personnel and Finance Committee
 - A. Accounts Payable - Action
 - B. April 2023 - Financial Statements – Action
 - C. Local Appropriations - Action
 - D. MIPCON 2023 Annual Conference – Action
 - E. Renewal of Lease Agreement with the Leelanau Montessori Public Academy - Action
3. Staff Reports
 - A. Medical Director – Dr. Joshua Meyerson
 - B. Personal Health – Michelle Klein
 - C. Environmental Health Director – Eric Johnston
 - D. Administrative- Dodie Putney

Public Comment Period

Board Comments

Adjourn

Personnel and Finance Comm. Meeting- May 24, 2023 12:00 pm
Benzie Community Resource Center, Roger Griner Conference Room or
Electronically via conference call:
(213) 282-9788 and enter Conference ID: 807 213 701#

Osceola County
Resolution #2023-0009

**RESOLUTION TO INSTRUCT OUR REPRESENTATIVES
TO OPPOSE ALL FIREARMS CONTROL LEGISLATION**

WHEREAS, the Constitution of the United States, ratified on the 21st day of June, 1788, declares in Article VI section 2, "This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.";

WHEREAS, the people of the United States are guaranteed the right to keep and bear arms without any legislative infringement, under the Constitutional authority of Amendment 11, "A well-regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.";

WHEREAS, the people of the State of Michigan recognize that the blessings of freedom come from our Almighty God according to the Preamble of the Constitution of the State of Michigan, "We, the people of the State of Michigan, grateful to Almighty God for the blessings of freedom, and earnestly desiring to secure these blessings undiminished to ourselves and our posterity, do ordain and establish this constitution.";

WHEREAS, the people of the State of Michigan have the inherent, inalienable right to hold all political power in the State of Michigan according to the Constitution of the State of Michigan, Article I, Section 1. "All political power is inherent in the people. Government is instituted for their equal benefit, security, and protection.";

WHEREAS, the people of Michigan are guaranteed the right to keep and bear arms without any legislative infringement, under Michigan State Constitutional authority in Article I section 6, "Every person has a right to keep and bear arms for the defense of himself and the state.";

WHEREAS, the people of the State of Michigan recognize that we have the right to retain rights that are not specifically written in the Constitution of the United States or the Constitution of the State of Michigan according to: Amendment IX of the Constitution of the United States, "The enumeration in the Constitution of certain rights, shall not be construed to deny or disparage others retained by the people." and Amendment I, Section 23 of the Constitution of the State of Michigan, "The enumeration in this constitution of certain rights shall not be construed to deny or disparage others retained by the people."; and **WHEREAS**, the people of the State of Michigan recognize that we have the right to instruct our representatives according to the Constitution of the State of Michigan, Article I, Section 3, "The people have the right peaceably to assemble, to consult for the common good, to instruct their representatives and to petition the government for redress of grievances." **NOW, THEREFORE, BE IT:**

RESOLVED, that the Osceola County Board of Commissioners, as people of the State of Michigan, instruct our representatives of the 100th Michigan State Legislature to vote in opposition of all proposed legislation that would unconstitutionally infringe on the right of the people to keep and bear arms;

BE IT FURTHER RESOLVED, that the Osceola County Board of Commissioners, as people of the State

of Michigan, instruct our representatives of the 100th Michigan State Legislature to vote in opposition of all proposed legislation that infringes on the right of the people to own, bear, purchase, and sell items that are directly relevant to operation, maintenance, and modification of any firearms, including but not limited to: ammunition, magazines, stocks, triggers, braces, barrels, etc.;

BE IT FURTHER RESOLVED, that the Osceola County Board of Commissioners, as people of the State of Michigan, instruct our representatives of the 100th Michigan State Legislature to vote in opposition of all proposed gun legislation, such as Red Flag Gun Laws, that would deny a person of their right to not be deprived of life, liberty or property without due process of the law, or their right to equal benefit, security and protection;

BE IT FURTHER RESOLVED, that the Osceola County Board of Commissioners, as people of the State of Michigan, instruct our representatives to recognize that the power which they hold is because of the consent of the people, and that they have no power to make legislation that is contrary to the supreme Law of the Land, nor have they been given consent to draft, introduce, sponsor, or amend legislation that infringes on the right of the people to keep and bear arms in any way; and

BE IT FURTHER RESOLVED, that the Clerk of the Osceola County Board of Commissioners, shall transmit copies of this resolution to all members of the 100th Michigan State Legislature and the Senate District 34, and shall urge all counties in Michigan to adopt similar resolutions.

PASSED AND ADOPTED as a resolution of the Osceola County Board of Commissioners meeting held on May 2, 2023.

Motion by Commissioner Momany to adopt this Resolution #2023-0009, Supported by Commissioner Michell.

Roll call vote:

Yeas: Commissioners Gregory, Stieg, Turner, Momany, Custer, Gydesen and Michell

Nays: None.

Abstain: None.

Absent: None.

This Resolution is declared adopted this 2nd day of May, 2023.

County of Osceola
State of Michigan

I, Tracey Cochran, the undersigned duly qualified and acting Clerk of the Board of Commissioners of the County of Osceola, State of Michigan, do hereby certify that the foregoing is a true and complete copy of proceedings taken at a Regular Meeting of the Board of Commissioners of said County held on the 2nd day of May, 2023.

IN WITNESS WHEREOF, I have hereunto affixed my official signature this 2nd day of May, 2023.

Tracey Cochran, Clerk
County of Osceola, Michigan

LENAWEE COUNTY BOARD OF COMMISSIONERS

301 N. Main St. Courthouse ~ Adrian, MI 49221

(517) 264-4508

www.lenawee.mi.us

CHAIR

James Van Doren

VICE-CHAIR

Dustin Krasny



Dawn Bales

Karol "KZ" Bolton

Terry Collins

Nancy Jenkins-Arno

Kevon Martis

David Stimpson

Ralph Tillotson

RES#2023-08

MICHIGAN HOUSE BILLS 4526-4528

Opposition to Legislation Preempting Local Control

WHEREAS, legislation preempting local control over sand and gravel mining was introduced this week in the House with House Bills 4526, 4527, and 4528; and

WHEREAS, these bills aim to eliminate local control of aggregate mining operations and place the regulating authority in the hands of the Department of Environment, Great Lakes, and Energy (EGLE), usurping all local authority including all local zoning, administration, and ordinance over the industry; and

WHEREAS, local governments support access to aggregate materials necessary to fix our roads and are uniquely positioned to know what is best for their communities; and

WHEREAS, the current process allows for local governments to balance these needs along those with their entire community, protecting the interests and safety of their residents, students, business, and property owners.

THEREFORE, BE IT RESOLVED that the Lenawee County Board of Commissioners strongly urges its State House of Representatives to oppose House Bills 4526, 4527, and 4528 which would silence local voices on aggregate operations in our community.

BE IT FURTHER RESOLVED that the Lenawee County Board of Commissioners supports the Michigan Townships Association (MTA), Michigan Municipal League (MML), and Michigan Association of Counties (MAC) in their joint statement in this preemption of local control.

BE IT FURTHER RESOLVED that copies of this resolution be provided to Governor Gretchen Whitmer, Senator Jeff Irwin (15th District), Senator Joseph Bellino, Jr. (16th District), Representative William Buck (30th District), Representative Reggie Miller (31st District), Representative Dale Zorn (34th District), Representative Andrew Fink (35th District), Michigan Department of Environment Great Lakes and Energy, the Michigan Townships Association, the Michigan Municipal League, the Michigan Association of Counties, and all Michigan counties.

PASSED BY ROLL CALL VOTE of the Lenawee County Board of Commissioners at a regular meeting held Wednesday, May 10, 2023, in Adrian, Michigan.

A handwritten signature in black ink, appearing to read "James E. Van Doren", is written over a horizontal line.

James E. Van Doren, Chair

A handwritten signature in black ink, appearing to read "Roxann Holloway", is written over a horizontal line.

Roxann Holloway, County Clerk