

Two Rivers City Hall
1717 East Park Street
Council Chambers
Two Rivers, WI 54241
(920) 793-5532
www.two-rivers.org



**CITY OF TWO RIVERS
CITY COUNCIL AGENDA
Monday, August 17, 2020
Council Chambers – City Hall – 6:00PM
Regular Meeting**

Note: To better accommodate public input during the Governor's Emergency Mask Order, citizens may call 920-793-5534 when the Council President requests public input (meeting can be viewed on City Website, www.two-rivers.org, on Two Rivers City Hall Face book page or Spectrum Two Rivers cable channel 993)

- 1. CALL TO ORDER**
- 2. PLEDGE OF ALLEGIANCE**
- 3. ROLL CALL BY CITY CLERK**
- 4. CONSIDERATION OF ANY COUNCIL MEMBER REQUESTS TO PARTICIPATE IN THIS MEETING FROM A REMOTE LOCATION**
- 5. PUBLIC HEARING**
- 6. INPUT FROM THE PUBLIC**
- 7. COUNCIL COMMUNICATIONS**
Letters and other communications from citizens
- 8. COUNCIL REPORTS FROM BOARDS/COMMISSIONS/COMMITTEES**
- 9. CITY MANAGER'S REPORT**
 - A. Invited Guests
 1. Introduction and Swearing in Police Lieutenant--Robert Strandt
 - B. Status/Update Reports
 1. Parks and Recreation Department Temporary Curtailment of Services and Activities
 2. Cobblestone Hotel Ribbon-Cutting: Thursday, August 20 at 12:00 Noon
 3. State Department of Revenue Report on 2020 Equalized Valuations
 4. Status of City's Active Tax Incremental Districts--2020 Equalized Valuations from Department of Revenue

5. 2020 Budget: YTD Statistics for Room Tax Proceeds, Launch Ramp Fees
 6. Recent Event: Lakeshore Park Trail and Bench Dedication in Memory of Patrick Gagnon
 7. Recent Event: Catamaran Association of Wisconsin (CRAW) Two Rivers Regatta
 8. Recent Event: Simple Sundae Thursday and Cool City Car Cruise and Show
 9. Upcoming Event: Two Rivers Water & Light Recycle Event, Tuesday, August 25, 7:30 AM - 5:00 PM
 10. Upcoming Event: Celebrate Two Rivers, August 29, 4:00 to 10:00 PM
 11. Other
- C. Legislative/Intergovernmental Update
1. State Budget Update
 2. Resolution Urging Congress to Support Emergency Funding to Sustain State and Local Services
Recommended Action:
Motion to read and adopt the Resolution
 3. Other

10. CONSENT AGENDA

- A. Presentation of Minutes
1. Regular City Council Minutes-July 20, 2020 and August 3, 2020
Recommended Action:
Motion to waive reading and adopt the minutes
- B. Applications and Petitions
1. Application for Operator License-Recommended for Denial
Briana L. Williams, 1013 20th Street, Two Rivers
Recommended Action:
Motion for the City Clerk to notify applicant of the City Council's intent to deny her license, based on the recommendation of the Chief of Police, and to advise applicant of her right to a hearing before the City Council
 2. Application for Landscaping/Tree Removal License, Kupla's Trees, for the period August 18, 2020 to June 30, 2021
Recommended Action:
Motion to approve the application and authorize the City Clerk to issue the license for the period of August 18, 2020 to June 30, 2021
- C. Reports
1. Minutes of Meetings
 - a. Library Board, July 14, 2020

- b. Public Works, August 3, 2020
- c. Public Utilities, August 4, 2020
- d. Plan Commission, August 10, 2020

Recommended Action:

Motion to receive and place on file

2. Department Reports for July 2020

- a. City Clerk
- b. Community Development
- c. Electric
- d. Fire
- e. Inspections
- f. Library
- g. Parks & Recreation-June, July
- h. Public Works
- i. Safety Program
- j. Water

Recommended Action:

Motion to receive and file

3. Summary of Verified Bills for the Month of July 2020 for \$2,178,292.02

Recommended Action:

Motion to receive and place on file

RECOMMENDED ACTION FOR CONSENT AGENDA

Motion to approve the Consent Agenda with the various actions recommended

11. CITY COUNCIL - FORMAL ITEMS

- A. Project Acceptance Certification for 2018 Headworks Improvements at Wastewater Treatment Plant

Recommended Action:

Motion to approve the project acceptance certifications and authorize signature by the City Manager

- B. Resolution Adopting Updated Manitowoc County Multi-Hazard Mitigation Plan, 2020-2025

Recommended Action:

Motion to waive reading and adopt the Resolution

- C. Report on Possible Accessibility Improvements at North Pier (U.S. Army Corps of Engineers Property)

Recommended Action:

Discussion Only

- D. Letter to Property Owners on Those Sections of 24th Street, 25th Street and Madison Streets Planned for Reconstruction in 2021

Recommended Action:

Discussion Only

- E. Notice/Request for Feedback Sent to Property Owners Within 250 Feet of Existing Licensed Taverns, Seeking Feedback on Possible Changes to Beer Garden Regulations (Set for Further Discussion at September 8 Meeting)

Recommended Action:

Discussion Only

- F. Report on Existing City Tax Incremental Financing Districts; Opportunities for Funding Additional Projects

Recommended Action:

Discussion Only

- G. Permission for Fireworks to be Shot from Beach adjacent to North Pier--Kites Over Lake Michigan, Saturday, September 5

Recommended Action:

Motion to approve the request, contingent on fireworks contractor (Spielbauer Fireworks) obtaining Fire Department permit and providing certificate of liability insurance in the amount of \$5 million for public liability and property damage

RECOMMENDATION FROM THE PLAN COMMISSION MEETING AUGUST 10, 2020

- H. Schedule Public Hearing Regarding Ordinance Change to Zoning Code Text Amendments in the Waterfront Business District Related to Restaurants with Indoor or Outdoor Seating

Recommended Action:

Motion to schedule a Public Hearing on September 8, 2020

- I. Schedule Public Hearing to Designate 0.18 Acres of Land Adjacent to Lot 16, Block 2 in Sandy Bay Highland Subdivision No. 2 as Conservation Subdivision District as a Conditional Use in the R-1 Single and Double Family Residence District, Submitted by the City of Two Rivers (owner)

Recommended Action:

Motion to schedule a Public Hearing on September 8, 2020

- J. Schedule Public Hearing on Zoning Code Text Amendment to Repeal and Recreate the City's Floodplain Ordinance

Recommended Action:

Motion to table to the September 20 Council meeting, in order for staff to do additional research on the potential impacts of this ordinance change

12. FOR INFORMATION ONLY

- A. Music in the Park Series, Thursday, August 20, 2020, 6-8 PM, Tony Rocker-Elvis, Central Park
- B. Bands on the Beach-Copperbox, Saturday, August 22, 2020, 6-10 PM, Rotary Pavilion Neshotah Beach
- C. Two Rivers Water & Light Recycle Event, Tuesday, August 25, 2020, 7:30 AM to 5:00 PM, 1415 Lake Street (Next Door to McDonalds)

- D. Central Park Concert Series, Thursday, August 27, 2020, 6:00-8:00 PM, Jerry Voelker and the Jolly Gents, Two Rivers Central Park
- E. Movie on the Beach: Pirates of the Caribbean - Dead Man's Chest, Friday, August 28, 2020, 7:30 PM, Neshotah Beach
- F. Celebrate Two Rivers, Saturday, August 29, 2020, 4-10 PM, Walsh Field, Music from Nettle Hill, food trucks, beer, concessions and more
- G. Kites Over Lake Michigan, Saturday, September 5 and Sunday, September 6, 2020, Two Rivers High School, 11:00 AM - 4:00 PM

13. CLOSED SESSION

The City Council reserves the right to enter into Closed Session, per Wisc. Stats 1985(1)(e) deliberating or negotiating the purchasing of public properties, the investment of public funds, or conducting other specified public business, whenever competitive or bargaining reason require a closed session

- Discuss Possible City Assistance to Economic Development Projects: Culver's, Others
- Discuss Status of Negotiations Regarding Former Hamilton Property

And per Wisc. Stats. 19.85(1)(c), considering employment, promotion, compensation or performance evaluation data of any public employee over which the governmental body has jurisdiction or exercises responsibility

- Discuss matters pertaining to City Manager's performance evaluation

14. RECONVENE IN OPEN SESSION

To consider possible actions in follow-up to closed session discussions

15. ADJOURNMENT

Motion to dispense with the reading of the minutes of the meeting and adjourn

Please note, upon reasonable notice, efforts will be made to accommodate the needs to disabled individuals through appropriate aids and services. For additional information or to request this service, please contact the Office of the City Manager by calling 793-5532.

It is possible that members of and possibly a quorum of governmental bodies of the municipality may be in attendance at the above stated meeting to gather information; no action will be taken by any governmental body at the above-stated meeting other than the governmental body specifically referred to above in this notice.

Date: 08/10/2020

WISCONSIN DEPARTMENT OF REVENUE
2020 STATEMENT OF CHANGES IN EQUALIZED VALUES BY CLASS AND ITEM

9.B.3.a
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County 36 Manitowoc
 City 286 Two Rivers

REAL ESTATE	2019 RE Equalized Value	Removal of Prior Year Compensation	% Change	\$ Amount of Economic Change	% Change	\$ Amount of New Constr	% Change	Correction & Compensation	% Change	\$ Amount of All Other Changes	% Change	2020 RE Equalized Value	Total \$ Change in R.E. Value	% Change
Residential														
Land	59,762,600	124,700	0%	2,405,600	4%	0	0%	507,600	1%	-186,300	0%	62,614,200	2,851,600	
Imp	343,325,900	-24,700	0%	13,745,900	4%	1,687,400	0%	691,600	0%	77,800	0%	359,503,900	16,178,000	
Total	403,088,500	100,000	0%	16,151,500	4%	1,687,400	0%	1,199,200	0%	-108,500	0%	422,118,100	19,029,600	
Commercial														
Land	12,038,000	-83,900	-1%	440,200	4%	303,800	3%	-575,800	-5%	-1,035,900	-9%	11,086,400	-951,600	
Imp	78,650,200	-530,800	-1%	3,087,700	4%	1,775,900	2%	-302,800	0%	-2,448,400	-3%	80,231,800	1,581,600	
Total	90,688,200	-614,700	-1%	3,527,900	4%	2,079,700	2%	-878,600	-1%	-3,484,300	-4%	91,318,200	630,000	
Manufacturing														
Land	2,448,400	0	0%	74,500	3%	0	0%	69,400	3%	0	0%	2,592,300	143,900	
Imp	22,384,200	0	0%	671,500	3%	477,900	2%	0	0%	-189,200	-1%	23,344,400	960,200	
Total	24,832,600	0	0%	746,000	3%	477,900	2%	69,400	0%	-189,200	-1%	25,936,700	1,104,100	
Agricultural														
Land/Total	10,500	0	0%	400	4%	0	0%	1,600	15%	0	0%	12,500	2,000	19%
Undeveloped														
Land/Total	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0	0%
Ag Forest														
Land/Total	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0	0%
Forest														
Land/Total	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0	0%
Other														
Land	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0	0%
Imp	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0	0%
Total	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0	0%
Total Real Estate														
Land	74,259,500	40,800	0%	2,920,700	4%	303,800	0%	2,800	0%	-1,222,200	-2%	76,305,400	2,045,900	
Imp	444,360,300	-555,500	0%	17,505,100	4%	3,941,200	1%	388,800	0%	-2,559,800	-1%	463,080,100	18,719,800	
Total	518,619,800	-514,700	0%	20,425,800	4%	4,245,000	1%	391,600	0%	-3,782,000	-1%	539,385,500	20,765,700	

PERSONAL PROPERTY	Non-Mfg Personal Property			Manufacturing Personal Property			Total of All Personal Property			
	2019	2020	% Change	2019	2020	% Change	2019 Total	2020 Total	Tot. \$ Chg in PP	% Change
Watercraft	700	200	-71%	0	0	0%	700	200	-500	-71%
Machinery Tools & Patterns	0	0	N/A	641,300	612,100	-5%	641,300	612,100	-29,200	-5%
Furniture Fixtures & Equip	3,241,200	3,072,100	-5%	908,500	870,100	-4%	4,149,700	3,942,200	-207,500	-5%
All Other	1,600,300	1,603,900	0%	86,600	99,000	14%	1,686,900	1,702,900	16,000	1%
Prior Year Compensation	-1,600	-9,500		0	0		-1,600	-9,500	-7,900	
Total Personal Property	4,840,600	4,666,700	-4%	1,636,400	1,581,200	-3%	6,477,000	6,247,900	-229,100	-4%
TOTAL EQUALIZED VALUE	2019 Total							2020 Total	Total \$	
Real Estate & Personal Property	525,096,800							545,633,400	20	

Packet Pg. 6

Attachment: State Equalized Values (2893 : State Department of Revenue Report on 2020 Equalized

WISCONSIN DEPARTMENT OF REVENUE
2020 STATEMENT OF CHANGES IN EQUALIZED VALUES BY CLASS AND ITEM

County 36 Manitowoc
 City 251 Manitowoc

REAL ESTATE	2019 RE Equalized Value	Removal of Prior Year Compensation	% Change	\$ Amount of Economic Change	% Change	\$ Amount of New Constr	% Change	Correction & Compensation	% Change	\$ Amount of All Other Changes	% Change	2020 RE Equalized Value	Total \$ Change in R.E. Value	% Cha
Residential														
Land	256,598,100	0	0%	7,697,900	3%	31,300	0%	0	0%	-147,800	0%	264,179,500	7,581,400	
Imp	1,087,428,800	0	0%	32,622,900	3%	8,081,000	1%	0	0%	-112,300	0%	1,128,020,400	40,591,600	
Total	1,344,026,900	0	0%	40,320,800	3%	8,112,300	1%	0	0%	-260,100	0%	1,392,199,900	48,173,000	
Commercial														
Land	120,455,300	0	0%	3,613,700	3%	0	0%	0	0%	654,500	1%	124,723,500	4,268,200	
Imp	361,982,400	0	0%	10,859,500	3%	14,724,800	4%	0	0%	525,200	0%	388,091,900	26,109,500	
Total	482,437,700	0	0%	14,473,200	3%	14,724,800	3%	0	0%	1,179,700	0%	512,815,400	30,377,700	
Manufacturing														
Land	15,510,900	0	0%	453,600	3%	0	0%	0	0%	-3,100	0%	15,961,400	450,500	
Imp	137,574,200	0	0%	3,965,800	3%	12,433,400	9%	0	0%	-524,700	0%	153,448,700	15,874,500	11%
Total	153,085,100	0	0%	4,419,400	3%	12,433,400	8%	0	0%	-527,800	0%	169,410,100	16,325,000	11%
Agricultural														
Land/Total	120,300	0	0%	4,900	4%	0	0%	0	0%	-1,500	-1%	123,700	3,400	3%
Undeveloped														
Land/Total	213,800	-600	0%	0	0%	0	0%	0	0%	0	0%	213,200	-600	-0%
Ag Forest														
Land/Total	18,500	0	0%	0	0%	0	0%	0	0%	0	0%	18,500	0	0%
Forest														
Land/Total	1,900	0	0%	1,800	95%	0	0%	0	0%	0	0%	3,700	1,800	95%
Other														
Land	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0	0%
Imp	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0	0%
Total	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0	0%
Total Real Estate														
Land	392,918,800	-600	0%	11,771,900	3%	31,300	0%	0	0%	502,100	0%	405,223,500	12,304,700	3%
Imp	1,586,985,400	0	0%	47,448,200	3%	35,239,200	2%	0	0%	-111,800	0%	1,669,561,000	82,575,600	5%
Total	1,979,904,200	-600	0%	59,220,100	3%	35,270,500	2%	0	0%	390,300	0%	2,074,784,500	94,880,300	5%
PERSONAL PROPERTY	Non-Mfg Personal Property			Manufacturing Personal Property			Total of All Personal Property							
	2019	2020	% Change		2019	2020	% Change		2019 Total	2020 Total	Tot. \$ Chg in PP	% Chan		
Watercraft	21,700	20,700	-5%		0	0	0%		21,700	20,700	-1,000	-5%		
Machinery Tools & Patterns	0	0	N/A		8,951,400	14,376,400	61%		8,951,400	14,376,400	5,425,000	61%		
Furniture Fixtures & Equip	24,907,100	25,653,700	3%		6,952,000	7,220,500	4%		31,859,100	32,874,200	1,015,100	3%		
All Other	9,401,100	7,325,300	-22%		2,227,500	2,215,800	-1%		11,628,600	9,541,100	-2,087,500	-18%		
Prior Year Compensation	0	0			0	0			0	0	0			
Total Personal Property	34,329,900	32,999,700	-4%		18,130,900	23,812,700	31%		52,460,800	56,812,400	4,351,600	8%		
TOTAL EQUALIZED VALUE	2019 Total									2020 Total	Total \$ Change	% Change		
Real Estate & Personal Property	2,032,365,000									2,131,596,900	99,231,900	5%		

WISCONSIN DEPARTMENT OF REVENUE
2020 STATEMENT OF CHANGES IN EQUALIZED VALUES BY CLASS AND ITEM

County 36 Manitowoc

COUNTY TOTALS

REAL ESTATE	2019 RE Equalized Value	Removal of Prior Year Compensation	% Change	\$ Amount of Economic Change	% Change	\$ Amount of New Constr	% Change	Correction & Compensation	% Change	\$ Amount of All Other Changes	% Change	2020 RE Equalized Value	Total \$ Change in R.E. Value	% Cha
Residential														
Land	782,630,400	176,400	0%	28,173,000	4%	1,132,600	0%	777,800	0%	-65,200	0%	812,825,000	30,194,600	
Imp	3,399,519,000	-35,500	0%	130,832,600	4%	36,480,800	1%	1,655,200	0%	13,683,600	0%	3,582,135,700	182,616,700	
Total	4,182,149,400	140,900	0%	159,005,600	4%	37,613,400	1%	2,433,000	0%	13,618,400	0%	4,394,960,700	212,811,300	
Commercial														
Land	168,956,900	-41,200	0%	3,885,400	2%	314,200	0%	-505,000	0%	2,866,100	2%	175,476,400	6,519,500	
Imp	598,791,800	-254,800	0%	13,045,300	2%	18,704,900	3%	2,009,200	0%	-2,933,100	0%	629,363,300	30,571,500	
Total	767,748,700	-296,000	0%	16,930,700	2%	19,019,100	2%	1,504,200	0%	-67,000	0%	804,839,700	37,091,000	
Manufacturing														
Land	24,663,200	0	0%	729,700	3%	0	0%	69,400	0%	18,500	0%	25,480,800	817,600	
Imp	233,051,300	0	0%	6,830,800	3%	17,347,000	7%	0	0%	68,300	0%	257,297,400	24,246,100	1
Total	257,714,500	0	0%	7,560,500	3%	17,347,000	7%	69,400	0%	86,800	0%	282,778,200	25,063,700	1
Agricultural														
Land/Total	39,957,500	22,500	0%	1,645,200	4%	0	0%	3,400	0%	4,600	0%	41,633,200	1,675,700	
Undeveloped														
Land/Total	42,562,500	-106,200	0%	-1,087,700	-3%	0	0%	315,800	1%	-87,000	0%	41,597,400	-965,100	-
Ag Forest														
Land/Total	43,292,300	-97,200	0%	-497,800	-1%	0	0%	155,600	0%	27,400	0%	42,880,300	-412,000	-
Forest														
Land/Total	56,294,400	-366,300	-1%	-248,200	0%	0	0%	-468,000	-1%	242,200	0%	55,454,100	-840,300	-
Other														
Land	30,923,000	-5,900	0%	-364,200	-1%	0	0%	-97,400	0%	-125,900	0%	30,329,600	-593,400	-
Imp	229,825,800	40,700	0%	-2,302,000	-1%	4,236,200	2%	-1,008,400	0%	-1,616,100	-1%	229,176,200	-649,600	
Total	260,748,800	34,800	0%	-2,666,200	-1%	4,236,200	2%	-1,105,800	0%	-1,742,000	-1%	259,505,800	-1,243,000	
Total Real Estate														
Land	1,189,280,200	-417,900	0%	32,235,400	3%	1,446,800	0%	251,600	0%	2,880,700	0%	1,225,676,800	36,396,600	
Imp	4,461,187,900	-249,600	0%	148,406,700	3%	76,768,900	2%	2,656,000	0%	9,202,700	0%	4,697,972,600	236,784,700	
Total	5,650,468,100	-667,500	0%	180,642,100	3%	78,215,700	1%	2,907,600	0%	12,083,400	0%	5,923,649,400	273,181,300	

PERSONAL PROPERTY	Non-Mfg Personal Property			Manufacturing Personal Property			Total of All Personal Property			
	2019	2020	% Change	2019	2020	% Change	2019 Total	2020 Total	Tot. \$ Chg in PP	% Chan
Watercraft	23,200	21,800	-6%	0	0	0%	23,200	21,800	-1,400	-
Machinery Tools & Patterns	0	0	N/A	25,618,400	31,423,700	23%	25,618,400	31,423,700	5,805,300	2
Furniture Fixtures & Equip	34,163,900	34,441,900	1%	9,617,100	10,165,400	6%	43,781,000	44,607,300	826,300	
All Other	13,939,300	12,282,600	-12%	3,409,900	3,400,700	0%	17,349,200	15,683,300	-1,665,900	-1
Prior Year Compensation	-25,800	-385,300		0	0		-25,800	-385,300	-359,500	
Total Personal Property	48,100,600	46,361,000	-4%	38,645,400	44,989,800	16%	86,746,000	91,350,800	4,604,800	

TOTAL EQUALIZED VALUE	2019 Total									2020 Total	Total \$ Change	% Change
Real Estate & Personal Property	5,737,214,100									6,015,000,200	277,786,100	4.8%

2020 Statement of Changes in TID Value
Wisconsin Department of Revenue
Equalization Bureau

Date: 08/11/20
Page: 609 of 1365

9.B.4.a

County 36 Manitowoc
City 286 Two Rivers
TID # 004 TID Type - Reg pre-95
School District 5824 Sch D of Two Rivers

Special District - 1 None
Special District - 2 None
Special District - 3 None
Union High None

Current Year Value

	Assessed Value *	Ratio	DOR Full Value	Amended Full Value **	Final Full Value
Non-Manufacturing Real Estate and Personal Property	\$2,703,000	92.76%	\$2,914,000		\$2,914,000
Manufacturing Real Estate			\$56,700		\$56,700
Manufacturing Personal Property			\$8,400		\$8,400
Prior Year Corrections:					
Non-Manufacturing Real Estate and Personal Property			-\$21,100		-\$21,100
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Frozen Overlap Value					\$0
Current Year TID Value					\$2,958,000
1994 TID Base Value					\$1,146,900
TID Increment Value					\$1,811,100

* Municipal Assessor's estimated values filed on 06/03/2020

** Amended Full Value based on information from Municipal Assessor

Changes in TID Equalized Values

2019 TID Value	2020 TID Value	Dollar Change	% Change
\$2,904,600	\$2,958,000	\$53,400	2

2020 Statement of Changes in TID Value
Wisconsin Department of Revenue
Equalization Bureau

County 36 Manitowoc
City 286 Two Rivers
TID # 006 TID Type - Reh/Cons post-95
School District 5824 Sch D of Two Rivers

Special District - 1 None
Special District - 2 None
Special District - 3 None
Union High None

Current Year Value

	Assessed Value *	Ratio	DOR Full Value	Amended Full Value **	Final Full Value
Non-Manufacturing Real Estate and Personal Property	\$848,600	92.76%	\$914,800		\$914,800
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Prior Year Corrections:					
Non-Manufacturing Real Estate and Personal Property			\$1,200		\$1,200
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Frozen Overlap Value					\$0
Current Year TID Value					\$916,000
2000 TID Base Value					\$0
TID Increment Value					\$916,000

* Municipal Assessor's estimated values filed on 06/03/2020

** Amended Full Value based on information from Municipal Assessor

Changes in TID Equalized Values

2019 TID Value	2020 TID Value	Dollar Change	% Change
\$1,163,000	\$916,000	-\$247,000	-21

2020 Statement of Changes in TID Value
Wisconsin Department of Revenue
Equalization Bureau

County 36 Manitowoc
City 286 Two Rivers
TID # 007 TID Type - Reh/Cons post-95
School District 5824 Sch D of Two Rivers

Special District - 1 None
Special District - 2 None
Special District - 3 None
Union High None

Current Year Value

	Assessed Value *	Ratio	DOR Full Value	Amended Full Value **	Final Full Value
Non-Manufacturing Real Estate and Personal Property	\$5,703,500	92.76%	\$6,148,700		\$6,148,700
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Prior Year Corrections:					
Non-Manufacturing Real Estate and Personal Property			\$8,200		\$8,200
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Frozen Overlap Value					\$0
Current Year TID Value					\$6,156,900
2001 TID Base Value					\$0
TID Increment Value					\$6,156,900

* Municipal Assessor's estimated values filed on 06/03/2020

** Amended Full Value based on information from Municipal Assessor

Changes in TID Equalized Values

2019 TID Value	2020 TID Value	Dollar Change	% Change
\$6,074,800	\$6,156,900	\$82,100	1

2020 Statement of Changes in TID Value
Wisconsin Department of Revenue
Equalization Bureau

County 36 Manitowoc
City 286 Two Rivers
TID # 008 TID Type - Blight post-95
School District 5824 Sch D of Two Rivers

Special District - 1 None
Special District - 2 None
Special District - 3 None
Union High None

Current Year Value

	Assessed Value *	Ratio	DOR Full Value	Amended Full Value **	Final Full Value
Non-Manufacturing Real Estate and Personal Property	\$6,896,000	92.76%	\$7,434,200		\$7,434,200
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Prior Year Corrections:					
Non-Manufacturing Real Estate and Personal Property			\$9,900		\$9,900
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Frozen Overlap Value					\$0
Current Year TID Value					\$7,444,100
2002 TID Base Value					\$0
TID Increment Value					\$7,444,100

* Municipal Assessor's estimated values filed on 06/03/2020

** Amended Full Value based on information from Municipal Assessor

Changes in TID Equalized Values

2019 TID Value	2020 TID Value	Dollar Change	% Change
\$7,172,600	\$7,444,100	\$271,500	4

2020 Statement of Changes in TID Value
Wisconsin Department of Revenue
Equalization Bureau

County 36 Manitowoc
City 286 Two Rivers
TID # 009 TID Type - Industrial post-95
School District 5824 Sch D of Two Rivers

Special District - 1 None
Special District - 2 None
Special District - 3 None
Union High None

Current Year Value

	Assessed Value *	Ratio	DOR Full Value	Amended Full Value **	Final Full Value
Non-Manufacturing Real Estate and Personal Property	\$6,100	92.76%	\$6,600		\$6,600
Manufacturing Real Estate			\$9,068,900		\$9,068,900
Manufacturing Personal Property			\$311,500		\$311,500
Prior Year Corrections:					
Non-Manufacturing Real Estate and Personal Property			\$0		\$0
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Frozen Overlap Value					\$0
Current Year TID Value					\$9,387,000
2003 TID Base Value					\$10,800
TID Increment Value					\$9,376,200

* Municipal Assessor's estimated values filed on 06/03/2020

** Amended Full Value based on information from Municipal Assessor

Changes in TID Equalized Values

2019 TID Value	2020 TID Value	Dollar Change	% Change
\$9,140,900	\$9,387,000	\$246,100	3

2020 Statement of Changes in TID Value
Wisconsin Department of Revenue
Equalization Bureau

County 36 Manitowoc
City 286 Two Rivers
TID # 010 TID Type - Reh/Cons post-95
School District 5824 Sch D of Two Rivers

Special District - 1 None
Special District - 2 None
Special District - 3 None
Union High None

Current Year Value

	Assessed Value *	Ratio	DOR Full Value	Amended Full Value **	Final Full Value
Non-Manufacturing Real Estate and Personal Property	\$2,021,700	92.76%	\$2,179,500		\$2,179,500
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Prior Year Corrections:					
Non-Manufacturing Real Estate and Personal Property			\$5,500		\$5,500
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Frozen Overlap Value					\$0
Current Year TID Value					\$2,185,000
2014 TID Base Value					\$2,070,700
TID Increment Value					\$114,300

* Municipal Assessor's estimated values filed on 06/03/2020

** Amended Full Value based on information from Municipal Assessor

Changes in TID Equalized Values

2019 TID Value	2020 TID Value	Dollar Change	% Change
\$4,112,500	\$2,185,000	-\$1,927,500	-47

2020 Statement of Changes in TID Value
Wisconsin Department of Revenue
Equalization Bureau

County 36 Manitowoc
City 286 Two Rivers
TID # 011 TID Type - Reh/Cons post-95
School District 5824 Sch D of Two Rivers

Special District - 1 None
Special District - 2 None
Special District - 3 None
Union High None

Current Year Value

	Assessed Value *	Ratio	DOR Full Value	Amended Full Value **	Final Full Value
Non-Manufacturing Real Estate and Personal Property	\$1,720,200	92.76%	\$1,854,500		\$1,854,500
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Prior Year Corrections:					
Non-Manufacturing Real Estate and Personal Property			\$145,000		\$145,000
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Frozen Overlap Value					\$0
Current Year TID Value					\$1,999,500
2016 TID Base Value					\$860,400
TID Increment Value					\$1,139,100

* Municipal Assessor's estimated values filed on 06/03/2020

** Amended Full Value based on information from Municipal Assessor

Changes in TID Equalized Values

2019 TID Value	2020 TID Value	Dollar Change	% Change
\$2,057,400	\$1,999,500	-\$57,900	-3

2020 Statement of Changes in TID Value
Wisconsin Department of Revenue
Equalization Bureau

Date: 08/11/20
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9.B.4.a

County 36 Manitowoc
City 286 Two Rivers
TID # 012 TID Type - Blight post-95
School District 5824 Sch D of Two Rivers

Special District - 1 None
Special District - 2 None
Special District - 3 None
Union High None

Current Year Value

	Assessed Value *	Ratio	DOR Full Value	Amended Full Value **	Final Full Value
Non-Manufacturing Real Estate and Personal Property	\$1,087,700	92.76%	\$1,172,600		\$1,172,600
Manufacturing Real Estate			\$103,000		\$103,000
Manufacturing Personal Property			\$500		\$500
Prior Year Corrections:					
Non-Manufacturing Real Estate and Personal Property			\$100		\$100
Manufacturing Real Estate			\$0		\$0
Manufacturing Personal Property			\$0		\$0
Frozen Overlap Value					\$0
Current Year TID Value					\$1,276,200
2018 TID Base Value					\$380,900
TID Increment Value					\$895,300

* Municipal Assessor's estimated values filed on 06/03/2020

** Amended Full Value based on information from Municipal Assessor

Changes in TID Equalized Values

2019 TID Value	2020 TID Value	Dollar Change	% Change
\$109,800	\$1,276,200	\$1,166,400	1,062

Celebrate

TWO RIVERS

SATURDAY
AUG. 29

WALSH FIELD
4-10PM

SCHEDULE OF EVENTS:

4:00 FOOD TRUCKS BEGIN SERVING

6-8:00 LIVE MUSIC BY **NETTLE HILL**

8:00 SHORT COMMUNITY ADDRESS

GREG BUCKLEY- CITY MANAGER

CURT ANDREWS- BRANDING COMMITTEE

8:45-10 NETTLE HILL RESUMES

FACE PAINTING • SURPRISES • GIVEAWAYS
ALL NIGHT LONG!



FOOD TRUCK VENDORS:

- BRIAN'S BARBEQUE
- CARIBBEAN CRUISER
- THE DOUGH SHOPPE
- GOURMET CORN
- ICE CLOUDS
- MA'S KETTLE KORN
- PARADISE FOODS
- WILD FIRE PIZZA



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Packet Pg. 17

#TRUEtoTWO

SHARE:

[Join Our Email List](#)

August 3, 2020 - League of Wisconsin Municipalities - COVID-19 Update #44



COVID-19 Coronavirus Update

[View as Webpage](#)

Is someone forwarding these emails to you? You can subscribe [here](#).

League COVID-19 Virtual Roundtable Conference Calls

*This call is for City/Village Officials,
including mgrs./adm. & Staff Only*

NOTE - Notice and call-in information will be provided on the League's [website](#) if there is no newsletter.

Tuesday, August 4 - 4:00-5:00 p.m.

Join Zoom Meeting

[https://us02web.zoom.us/j/94329452289?
pwd=WmdqT09TaFZvTHVxUHM4NjQ5Qm1kUT09](https://us02web.zoom.us/j/94329452289?pwd=WmdqT09TaFZvTHVxUHM4NjQ5Qm1kUT09)

Or Dial 312 626 6799

Meeting ID: 943 2945 2289

Password: 990365

If you aren't able to connect or have a question after participating, please contact Jerry Deschane at [email](#).

NEWSLETTER SCHEDULE - A reminder that going forward the League's Special Edition Covid-19 Newsletter will be sent as needed rather than weekly. Notice and call-in information will be provided on the League's [website](#) if there is no newsletter that week.

Highlights

Important - Please take action! This is the MOMENT!

As the August recess nears, the days are numbered for Congressional action on passing a 4th stimulus package containing state and local emergency relief.

This week is critical for negotiations around the next COVID-19 relief package .

Here's a link to a simple [fact sheet from the National League of Cities](#) explaining the need for federal aid for local governments, and here is another link to [additional resources](#) . But here's *the bottom line* : The Senate version of the bill includes some flexibility in how state and local governments may spend existing CARES Act dollars, but it does not provide additional financial support for lost revenue. The House bill provides relief for the estimated \$400 million in lost tax and utility revenue that Wisconsin cities and villages will incur. We need the Senate and the House to reach a middle ground that includes both flexibility AND support for lost revenue.

On July 15 the League worked with the Governors's Office and other local government associations to send a [joint letter](#) to the Wisconsin Congressional delegation urging passage of a stimulus package containing financial assistance for state and local governments. Read the letter [here](#) .

Contact information for the Wisconsin Congressional Delegation is available [here](#) .

Baldwin, Colleagues Urge Significant New, Flexible Funding for State and Local Governments

"U.S. Senator Tammy Baldwin (D-WI) joined her colleagues, led by Senator Bob Casey (D-PA), in sending a letter to Senate Majority Leader Mitch McConnell (R-KY) requesting that he support the funding amount and proposed funding flexibility for state and local governments that was included in the *HEROES Act* passed by the U.S. House of Representatives. The funding includes \$500 billion for states, \$375 billion for local governments and \$20 billion each for territories and tribal lands." Read the letter [here](#).

Governor Evers Issues Statewide Mandatory Mask Order

Gov. Tony Evers declared a Public Health Emergency and issued an Emergency Order requiring individuals to wear face coverings when indoors and not in a private residence, with some exceptions as clarified and defined in the order. The order was effective at 12:01 a.m. on Saturday, August 1, 2020, and will expire on September 28, 2020.

[Face mask order](#) & [FAQ on face coverings](#)

Video Service Provider Fee Report Form Due August 17

To replace the income your municipality is losing in 2021 from a state-mandated reduction in Video Service Provider fees municipalities impose on cable companies (VSP fee), municipal clerks must electronically file Form SL-310, the Video Service Provider Report, with the Department of Revenue no later than Monday, August 17, 2020. The form is available on [My DOR Government Account](#) .

The form requests the following information:

- Percentage (video service provider fee) rate imposed as of December 31, 2019
- Any rate changes during 2019



Tony Evers

Office of the Governor | State of Wisconsin

July 15, 2020

Senator Tammy Baldwin
709 Hart Senate Office Building
Washington, DC 20510

Senator Ron Johnson
328 Hart Senate Office Building
Washington, DC 20510

Representative Bryan Steil
1408 Longworth HOB
Washington, DC 20515

Representative Mark Pocan
1421 Longworth HOB
Washington, DC 20515

Representative Ron Kind
1502 Longworth HOB
Washington, DC 20515

Representative Gwen Moore
2252 Rayburn HOB
Washington, DC 20515

Representative Jim Sensenbrenner
2449 Rayburn HOB
Washington DC, 20515

Representative Glenn Grothman
1427 Longworth HOB
Washington, DC 20515

Representative Tom Tiffany
1714 Longworth HOB
Washington, DC 20515

Representative Mike Gallagher
1230 Longworth HOB
Washington, DC 20515

Members of the Wisconsin Congressional Delegation:

As Wisconsin enters the second year of its 2019-21 biennial budget and local governments look to their upcoming budget processes, we write to reiterate the importance of additional investment in Wisconsin's state and local government. While previous federal bills responding to the COVID-19 pandemic have provided much-needed resources to a variety of sectors and support for government efforts to respond directly to the pandemic, more robust and direct stimulus is urgently needed.

State and local governments are key employers in communities across Wisconsin. The budget actions needed to balance our budgets without additional federal investment will sadly result in lost jobs, lost investment in communities, and a ripple effect throughout the industries in which state and local governments direct our resources. Urgent federal action is needed to soften these potential further blows to our economy and our working families.

As you know, we are facing both an unprecedented public health crisis as well as an economic crisis. Between March 15 and July 4, 2020, Wisconsinites have filed nearly 4 million weekly claims for unemployment benefits. The Department of Workforce Development indicates that approximately 417,800 Wisconsinites have been paid over \$2.4 billion in benefits since March 15. The speed and scope of the economic downturn has meant extraordinary challenges for nearly every Wisconsin resident, industry, and community.

Wisconsin counties, cities, villages and towns are experiencing declines in 2020 revenues as a result of the economic impacts of the new coronavirus crisis. Projections show drops in sales tax, fines, fees, investment performance, hotel room taxes, transit fares, parking revenues and more.

For many cities and villages the most significant decline is in hotel room tax revenues, which are projected to fall by 50% due to COVID-19's impact on travel and leisure spending. Looking ahead to 2021 and beyond, municipalities are concerned that the state will be forced to address its projected budget shortfalls by making cuts to shared revenue and general transportation aids, two municipal aid programs that provide a significant part of the revenue stream for many municipalities.

Town government budgets are small and focused on providing core services, such as, roads, bridges, fire, EMS, police, and elections. Even minor changes in revenue, be it the current room tax cliff or potential decreases in intergovernmental aid, will have major negative impacts on these core services. In fact, towns are already pulling back on infrastructure investment due to the lack of certainty. In addition to the impact on mobility and supply chain, because town road and bridge work is largely performed by contractors, there will be an undeniable impact on the private sector.

Without additional flexible federal funding, Wisconsin's ability to effectively combat COVID-19 and economically recover will be hampered. Wisconsin has risen to the challenges presented by COVID-19, done more with less, and creatively stretched existing federal, state, and local resources. We have worked to respond directly to public health needs as well as the dire economic consequences for many individuals and businesses, and ensuring various partners, including K-12 schools, institutions of higher education, health care providers, nursing homes, and small businesses are able to continue providing needed services. The ongoing needs, however, significantly outweigh the state and local resources that will be available.

As revenue continues to plummet, state and local governments in Wisconsin are entering a precarious budget situation at a time when our continued investment in communities is critically needed. We have appreciated the partnership of the federal government in ensuring that resources were available to respond to the pandemic this spring and summer. However, as we look to the fall and to looming budget deficits at the state and local levels, we encourage you to zealously advocate for additional, flexible fiscal aid.

The fiscal cliff we face in Wisconsin is substantial, with earlier estimates putting the potential impact to state revenues at \$2 billion or more and our local governments facing their own shortfalls. Without robust and flexible federal aid to offset this lost revenue and ensure that we are able to continue investing in our communities, severe budget cuts will impact nearly every part of our operations and our support to partners – from education and healthcare to infrastructure and economic development. We ask that you strongly support the allocation of additional funds and flexibility to ensure that funds can be used by state and local governments to address these budget shortfalls stemming from COVID-19's economic impact.

With your partnership and support for additional, flexible state and local fiscal relief, we can begin to turn the tide on the economic consequences of the pandemic and ensure that our state and local governments are positioned to support Wisconsin's economic recovery in the coming months and years.

Sincerely,



Tony Evers
Governor



Mandela Barnes
Lt. Governor



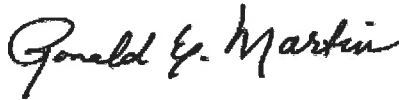
Jerry Deschane
Executive Director
League of Wisconsin Municipalities



Stephanie Bloomingdale
President
Wisconsin State AFL-CIO



Steve Kuranz
Board President
Wisconsin Health Care Association
Wisconsin Center for Assisted Living



Ron Martin
President
Wisconsin Education Association Council



Morna K. Foy, PhD
President
Wisconsin Technical College System



Tim Size
Executive Director
Rural Health Cooperative



Mark O'Connell
Executive Director
Wisconsin Counties Association

Wisconsin Association of Local Health Departments and Boards



Tommy G. Thompson
President
University of Wisconsin System



Rolf Wegenke
President
Wisconsin Association of Independent Colleges and Universities



John Sauer
President/CEO
LeadingAge Wisconsin



Kim Kohlhaas
President
AFT-Wisconsin



Mike Koles
Executive Director
Wisconsin Towns Association



Eric Borgerding
Executive Director & CEO
Wisconsin Hospitals Association



Layla Merrifield
Executive Director
Wisconsin Technical College District Boards Association

Wisconsin Public Health Association



City of Two Rivers Resolution Urging Emergency Federal Funding to Support State and Local Government Services in the Wake of The COVID-19 Pandemic

WHEREAS, cities, villages and towns across America provide vital services to the residents and businesses of their communities, including Police, Fire, Emergency Medical, Street and Bridge maintenance and Parks and Recreation Services; and

WHEREAS, in Wisconsin, an historic partnership between state and local governments has created a system for funding local services that is not solely based on local-source revenues, but also includes significant state funding, notably the Shared Revenues program, whose funding is derived primarily from State income and sales taxes; and

WHEREAS, the sharp downturn in the national economy caused by the COVID-19 pandemic and efforts in states across the nation to “flatten the curve” and slow the spread of the virus have negatively impacted local source revenues and created huge revenue shortfalls for states all across our nation; and

WHEREAS, in Wisconsin, we have seen and heard estimates that this pandemic-induced recession will result in a budget shortfall of at least \$2 billion in the State’s current fiscal year, and there is great uncertainty and great concern regarding the impact of any State Budget shortfall on state funding programs for local services; and

WHEREAS, our city’s \$10.4 million General Fund Budget is funded nearly 50 percent from State funding sources, including Shared Revenues, Street and Highway Aids, and Expenditure Restraint payments; and

WHEREAS, significant cuts to these funding programs would result in curtailment of critically important local services and further damage the local economy as the result of laying off public employees and reduced purchases of goods and services by local units; and

WHEREAS, these extraordinary times call for extraordinary measures by our Federal government, to help shore up the economy, sustain business activity, support families and sustain the services provided by state and local government; and

WHEREAS, negotiations between the leadership of the U.S. Senate and U.S. House of Representatives, and representatives of President Trump’s administration, regarding the need for additional Federal aid to the economy have recently reached an impasse, and that impasse appears to be at least in part over the issue of emergency funding for states and localities; and

WHEREAS, while state and local leaders are prepared to undertake serious budget-cutting measures to sustain vital local services, there is still a desperate need to provide Federal funding support to the states for state and local services; and

WHEREAS, local government advocacy groups, including the National League of Cities, Wisconsin League of Municipalities, Wisconsin Counties Association, Wisconsin Towns Associations and many others, are lobbying hard for such Federal funding support;

NOW, THEREFORE, BE IT RESOLVED, that the City of Two Rivers, Wisconsin does hereby urge our Wisconsin Congressional delegation to support funding for sustaining vital state and local government services in the next major funding bill to be acted upon by the Congress; and

BE IT FURTHER RESOLVED, that we urge President Trump to lend his support to such funding, provided that he is assured that such assistance will indeed go to funding basic services that impact residents' daily lives, and not to pay off long-term liabilities like underfunded pension systems and structural deficits; and

BE IT FURTHER RESOLVED that copies of this resolution be forwarded to Senators Tammy Baldwin and Ron Johnson, to Congressman Glenn Grothman and to the office of President Donald Trump, urging their support for such Federal funding, to help meet this unprecedented crisis.

Approved this 17th day of August, 2020.

Councilmember

Gregory E. Buckley
City Manager

**CITY OF TWO RIVERS
COUNCIL PROCEEDINGS
REGULAR MEETING
Monday, July 20, 2020 – 6:00 PM
Council Chambers – City Hall
MINUTES**

1. **CALL TO ORDER** by President Curt Andrews at 6:00 PM.

2. **PLEDGE OF ALLEGIANCE**

3. **ROLL CALL BY CITY CLERK**

Attendee Name	Title	Status	Arrived
Adam Wachowski	Councilmember	Present	
Bill LeClair	Councilmember	Present	
Bonnie Shimulunas	Councilmember	Present	
Curt Andrews	President	Present	
Darla LeClair	Councilmember	Present	
Jack Powalisz	Vice-President	Present	
Jay Remiker	Councilmember	Present	
John Casavant	Councilmember	Present	
Mark Bittner	Councilmember	Present	

Also present were Jim McDonald, Public Works Director; Steve Denzien, Fire Chief; Ken Kozak, Electric Director; Brian Delleman, Head Lineman; Brian Kohlmeier, Police Chief; Ross Blaha, Water Director; Dave Buss, Finance Director; Elizabeth Runge, Economic Development Director/City Planner; Terri Vosters, Parks & Recreation Director; Rick Powell, EDP Supervisor; Jack Bruce, City Attorney and Greg Buckley, City Manager.

4. **CONSIDERATION OF ANY COUNCIL MEMBER REQUESTS TO PARTICIPATE IN THIS MEETING FROM A REMOTE LOCATION**

None.

5. **PUBLIC HEARING**

None.

6. **INPUT FROM THE PUBLIC**

Carol Copesky, 7136 Tannery Road and Tippy Tomcheck, Jackson Street stated they would like to speak to item 11B on the agenda.

7. **COUNCIL COMMUNICATIONS**

Letters and other communications from citizens

Councilmember Wachowski stated he received a citizen concern about Lincoln and 22nd Street intersection, the person considers it a dangerous intersection and would like better signage. He also reported that he received a citizen call that there is no call in number for input from public on Council agendas. He also asked for a status update on the 16th and

Attachment: 07.20.20 cc min final (2883 : City Council - Regular Meeting)

Jefferson intersection. Mr. Buckley stated that this matter will appear on the Public Works Committee's August 5 agenda.

Council Remiker stated that he received a communication from a citizen regarding the matter listed as agenda item 11 D, COVID protocols. The person wanted to know if Manitowoc County Health Department would be having an information meeting.

Council President Andrews reported that he had heard from a citizen who was concerned about the beer garden ordinance regarding people smoking and the control of sound after 11 PM.

8. COUNCIL REPORTS FROM BOARDS/COMMISSIONS/COMMITTEES

Councilmember D. LeClair, Chairperson of the Public Works Committee gave a brief update on the July 8 meeting on the proposal to call for a moratorium on storm water pond construction.

9. CITY MANAGER'S REPORT

A. Invited Guests

1. Introduction of Terri Vosters, New Parks and Recreation Director

Mr. Buckley introduced Terri Vosters as the new Parks and Recreation Director.

2. Ken Kozak and Brian Delleman, Regarding Electric Utility Succession Plan Implementation

Ken Kozak and Brian Delleman addressed the Council regarding Electric Utility succession plan implementation; Mr. Delleman will be taking the position of Director upon Mr. Kozak's retirement in January 2021.

3. John Durbrow, Regarding Van Der Brohe Arboretum

Mr. Buckley introduced John Durbrow who gave a presentation on the Van Der Brohe Arboretum, being developed on the former Emerald Hills Golf Course property.

B. Status/Update Reports

1. Small Business Emergency Grant Program With City of Manitowoc and Chamber of Commerce

Mr. Buckley reported that Round 1 of grant application closed on July 12, with 38 applications from Two Rivers small businesses, totaling \$99,488. Round 2 opened for not-for-profit organizations, being funded entirely with private monies, \$79,847 is available. The Chamber will be issuing payments to the two cities, representing the "private share" for grants awarded to businesses in Round 1 with \$22,000 back to Two Rivers.

2. Downtown Hotel Development Project

Mr. Buckley reported the downtown hotel tentative opening date is August 7. The Manitowoc Area Visitor Convention Bureau will hold its next regular meeting at the hotel on August 13.

3. Washington Highlands/TID 8--New Construction Planned

Mr. Buckley reported per a phone conversation with John Lukas of Abby Ridge, LLC on July 17, Mr. Lukas has selected the contractor for construction of three additional duplex condo structures, with construction to start later this Summer. The Development Agreement between the City and Abbey Ridge calls for completion of three such units by year-end.

4. Applications for Temporary Outdoor Seating Areas

Mr. Buckley stated the application was approved for Lee's Inn and the application was reviewed for Lenny's II. The staff has fielded inquiries from other interested businesses.

5. 2020 Budget Status at Mid-Year

Mr. Buckley reported as of June 30, General Fund Revenues were at \$3,950,379 (37.3% of Budget), versus \$3,668,413 (35.4% of Budget) at this time last year. As of June 30, General Fund Expenditures were at \$5,033,543 (47.6% of Budget), versus \$5,212,370 (50.4% of Budget) at this time last year. Total overtime expenses (General Fund and Utilities) are down by about \$120,000 from this time last year.

He also reviewed the highlights of the 2020 Budget Status at Mid-Year: Room tax collections total \$30,946, versus \$29,269 at this time last year; Water Utility revenues 49% of Budget, \$1,381,105, within \$1,000 of last year; Water Utility operating expenses 42.3% of Budget, \$22,000 below last year; Sewer Utility revenues 50% of Budget, \$37,000 ahead of last year; Sewer Utility operating expenses 42.9% of Budget, \$15,000 below last year; Electric Utility revenues 43% of budget, \$63,000 below last year; Electric Utility operating expenses 45% of budget, \$34,000 below last year.

6. Community House Fitness Center

Mr. Buckley stated the Community House Fitness Center re-opened with new equipment. Permanent new flooring to be installed by end of August.

7. Upcoming Events

Mr. Buckley reported on the Bands on the Beach, Outdoor Movies, Music in the Park, Crazy from the Heat girls fast pitch softball tournament and Celebrate Two Rivers.

8. Other

C. Legislative/Intergovernmental Update

10. CONSENT AGENDA

A. Presentation of Minutes

1. **2020-155** Regular City Council Minutes-June 23, 2020 and Work Session July 29, 2020

Recommended Action:

Motion to waive reading and adopt the minutes

B. Applications and Petitions

1. Application for Beer Garden Permit

- a. Two Rivers Hotel Group LLC, DBA Cobblestone Hotel and Suites, 1407 16th Street

Recommended Action:

Motion to approve the application and authorize the City Clerk to issue the permit

2. Application for Temporary Class B License

- a. SCL Softball Club, Lonz's/SC Concrete Softball Tournament, Vietnam Veterans Park, August 14, 12:00 PM - 11:00 PM; August 15, 8:00 AM - 11:00 PM; August 16, 8:00 AM - 8:00 PM

Recommended Action:

Motion to approve the application and authorize the City Clerk to issue the license

3. Application for Taxi Driver License

- a. Robin S. Larson, 12315 Melnik Road, Whitelaw

Recommended Action:

Motion to approve the application and authorize the City Clerk to issue the license

C. Reports

1. **2020-156** Minutes of Meetings

- a. Advisory Recreation Board, June 9, 2020
- b. Library Board, June 9, 2020
- c. Public Utilities, July 7, 2020
- d. Public Works, July 8, 2020
- e. Plan Commission, July 13, 2020
- f. Business Industrial Development Committee/Community Development Authority May 26, 2020

Recommended Action:

Motion to receive and place on file

2. **2020-157** Department Reports for June 2020

- a. City Clerk
- b. Electric
- d. Fire
- e. Inspections
- f. Public Works
- g. Safety Program
- h. Water

Recommended Action:

Motion to receive and file

RECOMMENDED ACTION FOR CONSENT AGENDA

Motion to approve the Consent Agenda with the various actions recommended

RESULT: APPROVED WITH VOICE VOTE [UNANIMOUS]
MOVER: Adam Wachowski, Councilmember
SECONDER: Jay Remiker, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

11. CITY COUNCIL - FORMAL ITEMS

- A. Hearing on City Council's Intent to Not Renew the Operator's License of Charlotte Gundrum

Recommended Action:

Motion to deny the renewal application

RESULT: APPROVED WITH ROLL CALL [UNANIMOUS]
MOVER: Bonnie Shimulunas, Councilmember
SECONDER: Bill LeClair, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

- B. Hearing of Intent Not to Renew the Operator's License of Carol Copesky

Recommended Action:

Motion to renew the license

RESULT: APPROVED WITH ROLL CALL [UNANIMOUS]
MOVER: Adam Wachowski, Councilmember
SECONDER: Jay Remiker, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

- C. **2020-158** Code of Conduct for Elected Officials--Recommended for Approval City Council Finance and Personnel Committee (Tabled from July 6 City Council Meeting--Revised Draft provided with Agenda)

Recommended Action:

Motion to adopt the Code of Conduct, as recommended by the Personnel and Finance Committee

RESULT: APPROVED WITH ROLL CALL [8 TO 1]
MOVER: Mark Bittner, Councilmember
SECONDER: Jack Powalisz, Vice-President
AYES: Adam Wachowski, Bill LeClair, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner
NAYS: Bonnie Shimulunas

- D. Discussion: Local COVID Protection Protocols will follow CDC, State and County Health Department Guidelines (Request by Council President Andrews)

The Council President and the City Manager both noted that the City of Two Rivers does not have a health department, and will rely on guidance or orders from the Manitowoc County Health Department or State Department of Health Services when it comes to COVID-19 best practices and restrictions, such as mask orders.

- E. Discussion: Beach Parking, Maintenance and Management Issues

Mr. Buckley noted that beach area parking is still being heavily used, especially on weekends, and that the Advisory Recreation Board will be taking up this issue, along with the need for a long-range plan for Neshotah Beach and Park, over the coming Winter.

- F. Consideration of Amendment to Section 6-1-19B of City Ordinance, Pertaining to Beer Garden Hours and use of Beer Gardens as Smoking Areas after 11:00 PM (Request by Councilmember Wachowski)

Recommended Action:

Council discretion--staff recommends withholding action until comprehensive ordinance amendment on beer gardens is presented

RESULT: APPROVED WITH VOICE VOTE [8 TO 1]
MOVER: Bill LeClair, Councilmember
SECONDER: Jack Powalisz, Vice-President
AYES: Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner
NAYS: Adam Wachowski

- G. Permission for Overnight Camping in Parking Lot and on Beach, Catamaran Racing Association of Wisconsin at Neshotah Beach, August 8-9

Recommended Action:

Motion to authorize overnight camping at beach

RESULT: APPROVED WITH ROLL CALL [8 TO 1]
MOVER: Jay Remiker, Councilmember
SECONDER: Bill LeClair, Councilmember
AYES: Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner
NAYS: Adam Wachowski

RECOMMENDATIONS FROM THE PLAN COMMISSION JULY 13, 2020 MEETING

- H. Request for a Change in Zoning from R-3 Single and Double Family Residence District to B-1 Business for the Property Known as Lenny's II, 2113 Jefferson Street, Submitted by Mark Henrickson (owner)

Recommended Action:

Motion to schedule a Public Hearing on August 3, 2020 at 6:00 PM

RESULT: APPROVED WITH ROLL CALL [UNANIMOUS]
MOVER: Jay Remiker, Councilmember
SECONDER: Jack Powalisz, Vice-President
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

12. FOR INFORMATION ONLY

- A. In Person Absentee Voting for the August 11, 2020 Partisan Primary is available Monday through Friday at City Hall between the hours of 8:00 AM and 4:30 PM and on Friday, August 7, 8:00 AM - 5:00 PM
- B. Absentee Ballots for August 11, 2020 Partisan Primary can be requested on-line at myvote.wi.gov, City Clerk's Office or by mail with an acceptable photo ID through August 6, 2020
- C. City Council Work Session Meeting, Monday, August 31, 2020, 6:00 PM
- D. Music in the Park Series, Thursday, July 30, 2020, 6-8 PM, Bella Musik, Central Park
- E. Bands on the Beach-Nash Vegas, Saturday, August 1, 2020, 6-10 PM, Rotary Pavilion Neshotah Beach
- F. City Council Regular Meeting, Monday, August 17, 2020, 6:00 PM

13. CLOSED SESSION

At 8:30 PM, a motion to enter into Closed Session, per Wisc. Stats 1985(1)(e) deliberating or negotiating the purchasing of public properties, the investment of public funds, or conducting other specified public business, whenever competitive or bargaining reason require a closed session. Discuss Possible City Assistance to Economic Development Projects: Culver's, Others. Discuss Status of Negotiations Regarding Former Hamilton Property. Discuss Status of Negotiations Regarding Sale or Lease of Former Paragon Property.

And per Wisc. Stats 19.85(1)(f) Considering financial, medical, social or personal histories or disciplinary data of specific persons, preliminary consideration of specific personnel problems or the investigation of charges against specific persons except where par. (b) applies which, if discussed in public, would be likely to have a substantial adverse effect upon the reputation of any person referred to in such histories or data, or involved in such problems or investigations. Discuss personnel matters pertaining to the resignation of a former City employee

RESULT: APPROVED ROLL CALL [8 TO 0]
MOVER: Mark Bittner, Councilmember
SECONDER: Bill LeClair, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner
(Note: Councilmember Darla LeClair was out of the room when this vote was taken)

Councilmember Powalisz left the meeting at 9:00 PM.

14. RECONVENE IN OPEN SESSION

At 9:50 PM, a motion to reconvene in open session and consider possible actions in follow-up to closed session discussions.

RESULT: APPROVED VOICE VOTE [UNANIMOUS]
MOVER: Darla LeClair, Councilmember
SECONDER: Bill LeClair, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jay Remiker, John Casavant, Mark Bittner
ABSENT: Jack Powalisz

15. ADJOURNMENT

At 9:50 PM, a motion to dispense with the reading of the minutes of the meeting and adjourn.

RESULT: APPROVED VOICE VOTE [UNANIMOUS]
MOVER: Jay Remiker, Councilmember
SECONDER: Darla LeClair, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jay Remiker, John Casavant, Mark Bittner
ABSENT: Jack Powalisz

 Kim M. Graves
 City Clerk

**CITY OF TWO RIVERS
COUNCIL PROCEEDINGS
REGULAR MEETING
Monday, August 3, 2020 – 6:00 PM
Council Chambers – City Hall
MINUTES**

Note: To better accommodate public input during the Governor's Emergency Mask Order, citizens may call 920-793-5534 when the Council President requests public input (meeting can be viewed on City Website, www.two-rivers.org, on Two Rivers City Hall Face book page or Spectrum Two Rivers cable channel 993)

1. **CALL TO ORDER** by President Curt Andrews at 6:00 PM.
2. **PLEDGE OF ALLEGIANCE**
3. **ROLL CALL BY CITY CLERK**

Attendee Name	Title	Status	Arrived
Adam Wachowski	Councilmember	Present	
Bill LeClair	Councilmember	Present	
Bonnie Shimulunas	Councilmember	Present	
Curt Andrews	President	Present	
Darla LeClair	Vice-President	Present	
Jack Powalisz	Councilmember	Present	
Jay Remiker	Councilmember	Present	
John Casavant	Councilmember	Present	
Mark Bittner	Councilmember	Present	

Also present were Jeff Dawson, Library Director; Steve Denzien, Fire Chief; Brian Dellemann, Head Lineman; Brian Kohlmeier, Police Chief; Ross Blaha, Water Director; Dave Buss, Finance Director; Elizabeth Runge, Economic Development Director/City Planner; Rick Powell, EDP Supervisor; Jack Bruce, City Attorney and Greg Buckley, City Manager.

4. **CONSIDERATION OF ANY COUNCIL MEMBER REQUESTS TO PARTICIPATE IN THIS MEETING FROM A REMOTE LOCATION**
None.
5. **PUBLIC HEARING**

- A. **2020-159** Ordinance to Change Zoning from R-3 Single and Double Family Residence District to B-1 Business for the Property Known as Lenny's II, 2113 Jefferson Street, Submitted by Mark Henrickson (owner)

Recommended Action:

Motion to waive reading and adopt the Ordinance as recommended by the Plan Commission

President Andrews opened the first call.

Attachment: 08.03.20 cc min final (2883 : City Council - Regular Meeting)

Dorthory Tinkham Delo addressed the Council, stating that is opposed to spot zoning and did not want another residential area turned into a bar area.

On the second and third calls, no one addressed the Council. President Andrews closed the hearing.

RESULT: APPROVED WITH ROLL CALL [UNANIMOUS]
MOVER: Adam Wachowski, Councilmember
SECONDER: Bill LeClair, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

6. INPUT FROM THE PUBLIC

A. Lift Station Issue--Representatives of Washington Highlands Condo Association

James Brotke, 2707 River Lane addressed the Council regarding concerns about the lift station serving their condominiums being property of the sixteen condo owners who reside in that area. He noted that the City monitors and maintains 19 other lift stations and that his association wishes the City would take over the Washington Highlands lift station. He feels they aren't receiving the same services as others in the City.

Mr. Buckley stated that this concern will be addressed at the August 4 Public Utilities Committee meeting, he suggested that the committee look at a special meeting on this issue with the condo owners' group.

B. Other

1. Dorothy Tinkhan Delo, 2100 Garfield Street stated that Frontier is in bankruptcy and the City should provide everyone with Charter/Spectrum internet services.

2. Ann Knapp, 2101 East River stated that dogs are running loose on the beach and the need to reinforce the requirement that people clean up after their dogs. Mr. Buckley stated that the Advisory Recreation Board will look into this concern.

3. Jeff Dahlke, 3727 Adams Street asked for an update at the next council meeting regarding handicap access to the North Pier.

7. COUNCIL COMMUNICATIONS

Letters and other communications from citizens

Council President Andrews stated that he received a letter regarding mask requirement coverage. He stated that the City has no authority to overturn the Governor's order on masks.

Mr. Buckley stated that he had received an e-mail from a concerned citizen, who felt that the City should shut down Neshotah Beach due to COVID-19 concerns. He stated that he responded to this concern by saying that the City is keeping outdoor facilities open and relying on people judgment when it comes to social distancing at the beach, parks and trails.

Councilmember Wachowski received a concern about the signage on dogs at the beach.

8. COUNCIL REPORTS FROM BOARDS/COMMISSIONS/COMMITTEES

Councilmember Bittner, Chairperson of the Personnel & Finance Committee stated that the committee is working on a report for tracking progress on the City's goals and expect s to report back next month with a standard format for such reports.

9. CITY MANAGER'S REPORT

A. Invited Guests

1. Introduction and Swearing in New Part-Time Police Officer Casey Clarksen

Brian Kohlmeier, Police Chief introduced Part-Time Police Officer Casey Clarksen and City Clerk Graves administered the Oath of Office.

2. Maxwell Tegen, Blood Drive Friday, August 7, Behringer Room

Mr. Buckley introduced Maxwell Tegen, Two Rivers Eagle Scout. Max is planning his seventh annual blood drive to be held from 9 a.m. to 2 p.m. Friday, August 7, in the Behringer Room at the Two Rivers Community House.

B. Status/Update Reports

1. City Actions Related to Governor's Mask Order (Executive Order 82, Emergency Order 1)

Mr. Buckley reported signage was installed at City buildings, advising the public of the need to wear masks and that employees at indoor locations are required to wear masks when away from their work stations.

2. Selection of New Communication Coordinator--Whitney Froelich (contract position)

Mr. Buckley stated Whitney Froelich is the new Communication Coordinator, a contracted position.

3. Recent Personnel Changes

Mr. Buckley reported that Customer Service Supervisor, Jane Marcelle, who held the position since January 2019, recently announced her resignation and Melissa Tadych, Customer Service Billing Clerk since 2006 has been promoted to Customer Service Supervisor.

He then reported that the police lieutenant promotional process to fill the vacancy created by the promotion of Ben Meinnert to Assistant Chief that was completed last week. Patrol Officer Robert Strandt (hired January 2019) will soon begin his duties as lieutenant.

Mr. Buckley reported on other recent personnel changes. Part-time police officer Casey Clarkson was sworn-in tonight, a part-time police clerk position was vacated due to a resignation in mid-June and the vacancy is on-hold pending more information on the 2021 Budget. Also, Parks and Recreation Department Recreation Supervisor, Emma Aumiller, is the position since August 2019, recently resigned to take another position, this vacancy is on-hold pending more information on the 2021 Budget.

4. Downtown Hotel Development Project

Mr. Buckley reported the new downtown Cobblestone Hotel opened July 31 and ribbon-cutting event is planned for August 20.

5. City Work in East River Street/Jefferson Street Corridor--2020 Capital Budget Item

Mr. Buckley reported City crews last week stripped gravel from City property across the city-owned lots across Jefferson Street from the hotel and installed topsoil, grass seed and mulch. A contractor set the large stones along the harbor side of East River Street dead end sections. The stones placed along the west side are just stored there temporarily.

6. Culver's Project Cancellation

Mr. Buckley stated City staff learned on July 23 that the developer/franchisee Aaron Abt would not be moving forward with the project at the SE corner of 22nd and Washington Streets. He added that the City remains committed to working with property owners in this area who are still interested in selling their properties for redevelopment. Noting recent social media comments on this matter, the City Manager stated that the developer's decision to not proceed with the project had nothing to do with timeliness on the City's part, the terms for redevelopment agreement were finalized in March and all zoning approvals were completed in May. No public funds were paid out to the Developer; the City borrowed \$250,000 for its funding commitment per the Development Agreement, but still hold those funds.

7. Corps of Engineers Harbor Dredging/Beach Nourishment Project

Mr. Buckley reported on the Corps of Engineers dredging/beach nourishment project taking place.

8. New Signage for Spirit of the Rivers Wayside

Mr. Buckley reported the planned new signage, to be installed at either end of the wayside opposite Woodland Drive, has been approved by the SOTR Committee and the artist. The signs should be installed within two weeks.

9. Recent Events--Crazy from the Heat Softball Tournament, Beach Concerts

Mr. Buckley reported on the successful Crazy from the Heat Softball Tournament that was held July 31-August 2 at Vietnam Vets Park and on Nash Vegas Concert on August 1.

10. Upcoming Events--Outdoor Movies, Beach Concerts, Car Show and Cruise

Mr. Buckley reported on the 2020 Two Rivers Central Park Concert Series, Bands on the Beach and the Outdoor Movies schedules.

He also mentioned the Catamaran Racing Association of WI Two Rivers Regatta on August 8-9 Neshotah Beach and on Lake Michigan. Celebrate Two Rivers will be held Saturday, August 29, Walsh Field from 4-10 PM. The next Recycle Event will be Tuesday, August 25 at Two Rivers Water & Light, 1415 Lake Street from 8 AM-4:30 PM.

11. Dedication of Library/Lakeshore Park Trail in Memory of Patrick Gagnon--Sunday, August 16 at 1:30 PM

Mr. Buckley reported the Library/Lakeshore Park Trail will be dedicated to the memory of Patrick Gagnon, along with a bench dedication and awarding of the Leonard Stangel Community Service Award, at a ceremony to be held Sunday, August 16 at 1:30 PM.

12. Other

Mr. Buckley stated that he is aware of citizen concerns about repair of streets following lead lateral replacement and other utility work. 40 locations around the City were left graveled over the Winter, from lead lateral replacements in 2019. As of today, 30 permanent repairs have been completed, with a total investment of 740 person hours by DPW crews.

In 2020, there have been several (about 10) additional utility excavations to replace lead laterals or do repairs to water services. There is a total of about 20 locations that still need to be addressed.

Work on the east side, where lateral replacements first started last year, was completed in mid-July, except for one location. Crews are now completing repairs on the north side-that area should be done by Friday, August 14. Repairs on the south side should begin the third week in August and be completed by mid-September.

C. Legislative/Intergovernmental Update

10. CONSENT AGENDA

A. Presentation of Minutes

1. **2020-160** Regular City Council Minutes-July 6, 2020

Recommended Action:

Motion to waive reading and adopt the minutes

B. Applications and Petitions

1. Application for Temporary Class B License

- a. Manitowoc County Mariners, Football Game, Walsh Field, August 8, 2020, 4:00-10:00 PM

Recommended Action:

Motion to approve the application and authorize the City Clerk to issue the license

2. Application for Taxi Driver License

- a. Dwight R. Gibson, 2615 Forest Avenue, Two Rivers

Recommended Action:

Motion to approve the application and authorize the City Clerk to issue the license

3. Application for New Landscape/Tree Removal License -Recommended for Approval

- a. B&B Tree Service, LLC, 6815 E Hillcrest Road, Two Rivers

Recommended Action:

Motion to approve the application and authorize the City Clerk to issue the license

C. Reports

1. **2020-161** Minutes of Meetings

a. Business & Industrial Development Committee/Community Development Authority, June 30

Recommended Action:

Motion to receive and place on file

2. **2020-162** Finance Reports

- a. Debt Service, June 2020
- b. General Fund, June 2020
- c. Lester Library, June 2020
- d. 2nd Quarter Utilities

Recommended Action:

Motion to receive and place on file

RECOMMENDED ACTION FOR CONSENT AGENDA

Motion to approve the Consent Agenda with the various actions recommended

RESULT: APPROVED WITH VOICE VOTE [UNANIMOUS]

MOVER: Jay Remiker, Councilmember

SECONDER: Jack Powalisz, Councilmember

AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

11. CITY COUNCIL - FORMAL ITEMS

- A. **2020-163** Noise Ordinance Waiver Request for Wedding at Whisky D's, August 8, 2020 2:00 - 9:00 PM, 1215 26th Street in Beer Garden (to allow Business District Sound Limit of 70db)

Recommended Action:

Motion to approve the request as submitted

RESULT: APPROVED WITH ROLL CALL [UNANIMOUS]

MOVER: Jay Remiker, Councilmember

SECONDER: Darla LeClair, Vice-President

AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

- B. **2020-164** Board and Commission Vacancies Requiring Appointments

- 1. Community Development Authority
 - a. Tracey Koach, term to expire May 1, 2024
- 2. Business Improvement District Board

- a. Chow Chong, Unique Flying Objects term to expire May 1, 2021
 - b. Bill Kiel, Carron Net Company term to expire May 1, 2023
 - c. Marv Moore, The Medicine Shoppe term to expire May 1, 2023
 - d. Amy MacMillin, First Anderson Real Estate term to expire May 1, 2023
3. Zoning Board of Appeals
- a. David England as Alternate, term expiring May 1, 2023
 - b. Greg Erickson as Alternate, to a term expiring May 1, 2021

Recommended Action:

Motion to approve the various appointments as recommended by the City Manager

RESULT: **APPROVED WITH ROLL CALL [UNANIMOUS]**
MOVER: Mark Bittner, Councilmember
SECONDER: Jay Remiker, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla
 LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

- C. **2020-165** Resolution Regarding Membership of Environmental Advisory Board

Recommended Action:

Motion to waive reading and adopt the Resolution

RESULT: **APPROVED WITH ROLL CALL [UNANIMOUS]**
MOVER: Jack Powalisz, Councilmember
SECONDER: Bill LeClair, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla
 LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

- D. **2020-166** Resolution Dissolving Community Development Block Grant Housing Committee and Transferring Responsibilities to the Community Development Authority

Recommended Action:

Motion to waive reading and adopt the Resolution

RESULT: **APPROVED WITH ROLL CALL [UNANIMOUS]**
MOVER: Bill LeClair, Councilmember
SECONDER: Mark Bittner, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla
 LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

ACTIONS PERTAINING TO THE CITY'S COMMITMENT TO FAIR HOUSING

- E. **2020-167** Ordinance to Repeal Section 3-6-1 and Renumber Section 3-6-2 of the Municipal Code Regarding Fair and Open Housing

Recommended Action:

Motion to waive reading and adopt the Ordinance

RESULT: APPROVED WITH ROLL CALL [UNANIMOUS]
MOVER: Jack Powalisz, Councilmember
SECONDER: Darla LeClair, Vice-President
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

- F. **2020-168** Resolution Regarding Appointments to the Commission for Equal Opportunities in Housing

Recommended Action:

Motion to waive reading and adopt the Resolution

RESULT: APPROVED WITH ROLL CALL [UNANIMOUS]
MOVER: Adam Wachowski, Councilmember
SECONDER: Jack Powalisz, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

12. FOR INFORMATION ONLY

- A. In Person Absentee Voting for the August 11, 2020 Partisan Primary is available Monday through Friday at City Hall between the hours of 8:00 AM and 4:30 PM and on Friday, August 7, 8:00 AM - 5:00 PM
- B. Music in the Park Series, Thursday, August 6, 2020, 6-8 PM, Dorf Kapelle, Central Park
- C. Bands on the Beach-Honeygoats, Sunday, August 9, 2020, 2-5 PM, Rotary Pavilion Neshotah Beach
- D. 2020 Partisan Primary on Tuesday, August 11, 2020. Polling Hours of 7 AM - 8 PM at the four Polling Locations--Grace Congregational Church, St. Peter the Fisherman Parish Center, City Hall and Koenig School
- E. Sundae Thursday, Thursday, August 13, 2020, Central Park, 5:30 - 7:30 PM
- F. Outdoor Movie on the Big Screen: Field of Dreams, Friday, August 14, 6:00 PM, Walsh Field
- G. Cool City Classic Car Cruise, Friday, August 14, 2020, 4-9 PM; Downtown Two Rivers
- H. Cool City Annual Car Show, Saturday, August 15, 2020, Central Park, 10 AM – 4 PM
- I. City Council Regular Meeting, Monday, August 17, 2020, 6:00 PM
- J. City Council Work Session Meeting, Monday, August 31, 2020, 6:00 PM

13. CLOSED SESSION

At 7:53 PM, a motion to enter into Closed Session, per Wisc. Stats 1985(1)(e) deliberating or negotiating the purchasing of public properties, the investment of public funds, or conducting other specified public business, whenever competitive or bargaining reason require a closed session. Discuss Possible City Assistance to

Economic Development Projects: Culver's, Others. Discuss Status of Negotiations Regarding Former Hamilton Property. Discuss Status of Negotiations Regarding Sale or Lease of Former Paragon Property.

RESULT: APPROVED ROLL CALL [8 TO 1]
MOVER: Jack Powalisz, Councilmember
SECONDER: Darla LeClair, Vice-President
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, John Casavant, Mark Bittner
NAYS: Jay Remiker

Motion to allow Councilmember Wachowski to participate via phone in Closed Session.

RESULT: APPROVED VOICE VOTE [UNANIMOUS]
MOVER: Mark Bittner, Councilmember
SECONDER: Jack Powalisz, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

14. RECONVENE IN OPEN SESSION

At 8:45 PM, a motion to reconvene in open session and consider possible actions in follow-up to closed session discussions.

RESULT: APPROVED VOICE VOTE [UNANIMOUS]
MOVER: Jack Powalisz, Councilmember
SECONDER: Bill LeClair, Councilmember
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

15. ADJOURNMENT

At 8:45 PM, a motion to dispense with the reading of the minutes of the meeting and adjourn.

RESULT: APPROVED VOICE VOTE [UNANIMOUS]
MOVER: Jay Remiker, Councilmember
SECONDER: Darla LeClair, Vice-President
AYES: Adam Wachowski, Bill LeClair, Bonnie Shimulunas, Curt Andrews, Darla LeClair, Jack Powalisz, Jay Remiker, John Casavant, Mark Bittner

Kim M. Graves
City Clerk

Fee: \$25.00
Receipt # 1.086033
Date 8-3-20

\$50.00 New
\$25.00 Renewal ☒

10.B.2.a

**CITY OF TWO RIVERS
APPLICATION FOR LANDSCAPING/TREE REMOVAL LICENSE
(Mun. Code 4-2-16)**

For the period ending: June 30, 2021

I, the undersigned, hereby apply for a Landscaping or Tree Removal License for:

Please Check:

☒ To Plant, Prune, Spray, Trim & Remove Trees & Shrubs
☒ To Remove Trees, Tree Stumps, Wood Chips

I hereby agree to abide by existing rules and regulations and those which may hereafter be adopted by the City of Two Rivers.

Name of Business: Kulpa trees

Business Address: 1119 33 st

City/State/Zip Code: Two Rivers WI 54241

Signature of Owner: [Signature]

Printed Name of Owner: Randy Kupa

Owners Home Address: 1119 33 st

City/State/Zip Code: Two Rivers WI 54241

Phone Number: 920 323 6801

(DO NOT COMPLETE SPACES BELOW THIS LINE)

Approved by City Forester: _____

Council Approved: _____

Evidence of Insurance: _____

(Certificate of Insurance must be attached)

License Number: _____

Date Issued: _____

**LESTER PUBLIC LIBRARY
BOARD OF TRUSTEES MEETING
Tuesday, July 14, 2020 6:00 PM
Via Zoom Meeting**

Call to Order –President Ned Guyette called the meeting to order at 6:09 PM.

Roll Call – Members Present: Sharon Sleger, Stanley Palmer, Kirsten Sleger, David Pennefeather, Ned Guyette, and Larry Thomas. Absent and excused Rick Hendrickson, Tom Van Horn, and John Casavant. Also present: Chris Hamburg, Adult Services Coordinator and Jeff Dawson, Director.

Public Comment – None

Approval of Minutes – Motion to approve minutes of June 9, 2020 meeting, made by Thomas, second made by Pennefeather. Voice vote carried unanimously.

Expenditures & Financial Reports – Motion to receive and file the June, 2020 financial reports, made by Thomas, second made by Palmer. Voice vote carried unanimously.

Board Member Comment – Kirsten Sleger asked about Summer Reading Participation, Dawson responded while overall numbers are down from pre-virus statistics, library staff are pleased with the positive response from patrons of all ages.

Director's Report – Dawson reported that the Library Trail and Bench dedication and renaming to the Patrick Gagnon Trail will take place Sunday, August 16, 2020.

Report from City Council Representative – No report

Report from School District Representative – Administration is working toward a school opening plan that may be a mixture of in-person and online learning.

Report from County Representative – No report

It was at this point of the meeting, 6:29 pm, that technology failed and Zoom booted the meeting offline. The remaining Unfinished and New Business items will be carried over to the August 11, 2020 meeting.

Respectfully submitted, Jeff Dawson, Director

CITY OF TWO RIVERS CITY COUNCIL

PUBLIC WORKS COMMITTEE

Wednesday, August 5, 2020 – 5:15 P.M.

5:15 P.M. Meet at the Intersection of Pine Tree and 23rd Streets

Recess and Reconvene at City Hall: Third Floor – COMMITTEE ROOM

MINUTES

Present at Pine Tree & 23rd St – Public Works Committee: Darla LeClair, John Casavant**Staff:** Jim McDonald (City Engineer/Public Works Director), Scott Ahl (Civil Engineer II), Ben Meinnert (Asst Police Chief)**Public and Invited Guests:** Stanley Palmer, 331 23rd St; Larry Pruess & Peggy Bolle, 334 23rd St; Don DeBruyn, 2304 Neshotah Rd; Karen & David Loritz, 200 Park Rd; Robert Limon, Jr, 1412 20th St; Lori Becker, 320 23rd St; Calla Lodel, 2215 Pine Tree Rd**Viewed and discussed various terrace conditions and line of sight issues along 23rd St, Neshotah Rd to Pine Tree** – Terrace Ordinance requires terrace areas to be maintained as lawn; reviewed due to complaints; when parking, not able to open car door; PD gets many complaints (10 +/-) on various code violations each day

- L. Pruess would like to see various areas environmentally friendly; doesn't need pesticides; good for insects

Adjourned to City Hall @ 6:10pm**Reconvened in Council Chambers at City Hall****Call to Order @ 6:25pm****Review and Approval of Minutes**

Motion by John Casavant, and seconded by Darla LeClair, to approve minutes as presented. Motion carried upon unanimous voice vote.

Public and Invited Guests that reconvened to City Hall: Larry Pruess & Peggy Bolle, 334 23rd St

- L. Pruess – 23rd St is unique to this area due to proximity to beach nature area; terrace options viewed include managed native plantings; provided handout for nature plants & grasses; would like to see a change to ordinance to allow for various plantings in terrace
- may look at petition of property owners on block to allow planting in terrace areas
- refer to staff to look for grants to assist with development

Requests for Traffic, Pedestrian, and Parking Controls**Adams at 22nd Street – Flashing Stop Sign(s)** --installed**16th and Jefferson – Painting Hash Marks** in 'No Parking' area--completed**16th and Jefferson – Continued Concerns** – would like to see how area develops – if issue gets better; noted poor lighting at area and pedestrians crossing street; will review at next meeting**26th Street No Parking Request, West of Wilson** – Mailing?**Pavement Marking** – 22nd and Washington – being performed by DPW staff; utilizing staff; more concerned about intersections with designated turn lanes**Sign modifications at Highway Intersections** – Lincoln Avenue and 22nd – request to look at overhead signs; also look at westbound 22nd St @ Lincoln; noted a number of people missing stop sign

Request 15-20 Minute Parking (for deliveries) NE corner Washington and 20th St – Robert Limon stated parking along 20th St should be remarked

- no comments on Washington St parking
- staff will verify with Fatzo's if Washington St parking restriction of 15-30 min needed; if so, will recommend to Council; if not, will bring back to Committee. *Staff contacted Fatzo's, who stated they are requesting parking restrictions on 20th St, not Washington. This will be addressed at the September Committee meeting.*

Additional No Parking request – should consider looking at reducing parking restrictions (eliminate some yellow curb) in area of Vietnam Vets park @ 35th and Wilson; review at next meeting

2020 Project Status - Action as Needed

Large stones from Kewaunee Nuclear Plant Decommissioning and Jersey Barriers – Status
Mini Storm Sewer Needs – staff proposes sump pump connections @ \$1,500 (typical charge for sewer laterals installed when street projects have been constructed), with remainder paid by Storm Utility consensus by committee; in areas where issues have been noted with sump pump discharges, either to the street, or connections to sanitary sewer. Consensus by Committee to pursue this option when agreed upon with the property owners.

Letter to Property Owners on 24th, 25th and Madison Streets, areas of proposed 2021 construction. Committee reviewed the letter handed out at the last Committee meeting. No additional comments, staff will mail letter in the next week.

Storm Water Pond, Storm Water Utility – NOI by October 31.- TMDL; table until next meeting
 - storm outfall testing ≈ \$1,500/event to collect samples from 10 outfalls; noted results are likely variable & DNR may not accept results due to variations in storm sampling results ie how long since last rain fall, was testing at 1st part of storm, or towards the end, seasonal variations.

Current Project Updates:

Trail to South Pier (Breakwater) – western trail is done; staff looking at a connection along lakeside of trail to Mariners Trail

17th and Zlatnik Modifications/Inlets – installed storm sewer along Zlatnik, from 16th to 17th; staff is considering increasing width of pavement to allow for easier access for bikes and pedestrians in this area.

Date, Time and Agenda Items for next Public Works Committee Meeting

Next meeting will be held on Wednesday, September 2, 2020 at 5:15 pm

Adjournment:

Motion by John Casavant, seconded by Darla LeClair, to adjourn 7:56 pm

PUBLIC UTILITIES COMMITTEE

Tuesday, August 4, 2020

5:30 P.M.

City Hall: Third Floor – COUNCIL CHAMBERS

MINUTES

Call to Order

Roll Call - Committee members present: Bonnie Shimulunas, Bill LeClair**Staff Present:** Scott Ahl (Civil Engineer II), Dave Casebeer (WWTP), Ross Blaha (Water Utility), Brian Dellman (Electric Utility)**Others Present:** James & Deborah Brotcke, 2708 River Lane**Review and Approval of Minutes** – Motion by Bonnie Shimulunas, seconded by Bill LeClair, to accept the minutes as presented. Motion carried upon unanimous voice vote.**Public Input** – James & Deborah Brotcke (2708 River Lane): requesting the city to take over lift station; pay same wastewater rate, but Washington Highlands residents required to pay for lift station maintenance and repair; Noted that city takes care of 19 lift stations but not this station. In June, lift station failed; James Brotcke kept lift station operating ½ day until plumber arrived; spent ≈ \$7,000 this year alone; residents are older and should not be responsible for this.**(Item 6-c) Staff explained** this is an ejector station not tied to City Maintenance; station does not meet standards for city lift station. Preliminary estimate includes upgrading electrical to meet NEC standards; be able to tie into SCADA/System monitoring; replacement of pumps to standard city pumps so City staff can maintain.**2021 CWF and SDWF Street Utility Project Status**

Received notification that SDWLP (water main and laterals) eligible for DNR funding; sewer application due at end of Sept. Storm, sewer and roadway funding is part of City budget

Wastewater Utility:**Phase 2** – Digester cover installed; currently filled digester for testing; good results**Electric and Telecommunications Utilities:** Harbor camera not working; expect it to be repaired, under warranty, next week

A recent ruling from PSC does not allow utilities to be disconnected until after September 1 due to COVID issues; existing 300 +/- customers are currently delinquent.

As of September 1, staff can attempt to make deferred payment plans; If residents do not keep on the plans, it can push the time for utility disconnects until later fall when utilities cannot be shut off due to cold weather season; Utility has sent mailings requesting reconciliation of delinquent accounts.

Electronic Recycling Event, August 25th at shop; requesting residents to stay in vehicles; will contact HS students for help**Water Utility:****LSL replacements** – currently replacing some water services with defects**Corrosion study interim report** – attempted to install chemical flow meters; Meters did not operate correctly due to manufacturing issue. Staff is working to correct the issue.**Other Issues** – painted east water tower, currently sanitizing**Set Date, Time, and Agenda Items for next Committee Meeting**Next meeting will be held **Tuesday, September 1, 2020, at 6:00 P.M****Adjournment**

Motion by Bonnie Shimulunas, and seconded by Bill LeClair, to adjourn at 7:47 pm

**City of Two Rivers
Plan Commission**

**Monday, August 10, 2020
5:30 PM
City Hall Council Chambers**

Minutes

1. Call to Order

Chairman Buckley called the meeting to order at 5:30 PM.

2. Roll Call

Attendee Name	Title	Status	Arrived
Greg Buckley	Chairman	Present	
Rick Inman	Commissioner	Present	
Kay Koach	Commissioner	Present	
Connie Loden	Commissioner	Present	
Jim McDonald	Commissioner	Present	
Eric Pangburn	Commissioner	Late	5:34 PM
Adam Wachowski	Commissioner	Absent	

Also Present: Tracey Koach, City Planner Elizabeth Runge and Recording Secretary Vicky Berg.

3. Action Items

- A. Review Certified Survey Map to create Lot 1 located in the Southeast 1/4 of the Northwest 1/4 of Section 31, Township 20N, Range 25 East, City of Two Rivers, Manitowoc County, Wisconsin, being a resurvey of Lot 16, Block 2 of Sandy Bay Highlands Subdivision No. 2 plus additional lands submitted by City of Two Rivers (property owner)

Motion to approve the Certified Survey Map subject to the additional lands being designated as R-1/CSD.

RESULT: APPROVED WITH ROLL CALL VOTE [UNANIMOUS]
MOVER: Kay Koach, Commissioner
SECONDER: Connie Loden, Commissioner
AYES: Buckley, Inman, Koach, Loden, McDonald, Pangburn
ABSENT: Wachowski

- B. Review request to designate 0.18 acres of land adjacent to Lot 16, Block 2 in Sandy Bay Highland Subdivision No. 2 as Conservation Subdivision District as a conditional use in the R-1 Single and Double Family Residence District, submitted by the City of Two Rivers (owner)

Motion to recommend approval and forward to Council for public hearing. Upon a roll call vote, motion carried.

RESULT: RECOMMENDED APPROVAL [UNANIMOUS] **Next:** 8/17/2020 6:00 PM
MOVER: Connie Loden, Commissioner
SECONDER: Jim McDonald, Commissioner
AYES: Buckley, Inman, Koach, Loden, McDonald, Pangburn
ABSENT: Wachowski

- C. Consider Zoning Code Text Amendments in the Waterfront Business District related to restaurants with indoor or outdoor seating

Motion to recommend approval and forward to Council for public hearing. Upon a roll call vote, motion carried.

RESULT: RECOMMENDED APPROVAL [UNANIMOUS] **Next:** 8/17/2020 6:00 PM
MOVER: Connie Loden, Commissioner
SECONDER: Kay Koach, Commissioner
AYES: Buckley, Inman, Koach, Loden, McDonald, Pangburn
ABSENT: Wachowski

- D. Consider Zoning Code Text Amendment to repeal and recreate the City's Floodplain ordinance

Motion to recommend approval and forward to Council for public hearing. Upon a roll call vote, motion carried.

RESULT: RECOMMENDED APPROVAL [UNANIMOUS] **Next:** 8/17/2020 6:00 PM
MOVER: Eric Pangburn, Commissioner
SECONDER: Jim McDonald, Commissioner
AYES: Buckley, Inman, Koach, Loden, McDonald, Pangburn
ABSENT: Wachowski

4. Adjournment

- A. Motion to adjourn at 6:05 PM.

RESULT: APPROVED VOICE VOTE [UNANIMOUS]
MOVER: Eric Pangburn, Commissioner
SECONDER: Rick Inman, Commissioner
AYES: Buckley, Inman, Koach, Loden, McDonald, Pangburn
ABSENT: Wachowski

Vicky Berg, Recording Secretary

MEMO*from City Clerk's Office*

DATE: August 13, 2020

TO: Gregory Buckley, City Manager
City Council

FROM: Kim Graves, City Clerk

SUBJECT: Beverage Operator Applications

On May 4, 2020 the City Council approved the City Clerk to issue Beverage Operator Licenses.

Below is the list of licenses issued since the Council meeting on July 20, 2020:

BEVERAGE OPERATOR LICENSES ISSUED ON JULY 21, 2020		
NAME	ADDRESS	1 YEAR/2 YEAR
Carol J. Copeskey	7136 Tannery Rd #40	2 year

BEVERAGE OPERATOR LICENSES ISSUED ON JULY 23, 2020		
NAME	ADDRESS	1 YEAR/2 YEAR
Alexa Mohr	3117 48 th Street	2 year
Lanette Schleis	843 Oak Street, Mishicot	2 year

BEVERAGE OPERATOR LICENSES ISSUED ON JULY 27, 2020		
NAME	ADDRESS	1 YEAR/2 YEAR
Keith Laurent	3812 Mirro Drive, Manitowoc	2 year

BEVERAGE OPERATOR LICENSES ISSUED ON JULY 30, 2020		
NAME	ADDRESS	1 YEAR/2 YEAR
Kayla Brice	536 Madison Street, Reedsville	1 year
Christina Bruechert	2708 School Street	1 year
Kali DeBaere	2501 Johnston Dr Apt 22, Manitowoc	2 year
Austin Gordon	1803 South 18 th Street, Manitowoc	2 year

BEVERAGE OPERATOR LICENSES ISSUED ON August 7, 2020		
NAME	ADDRESS	1 YEAR/2 YEAR
Jessica S. Nicholson	1020 28 th Street	1

Attachment: Approved Beverage Operator Applications (2888 : Department Reports)

COMMUNITY DEVELOPMENT STAFF REPORT

8/3/2020

- I. Focus relentlessly on fiscal new revenue streams and operational sustainability.**
 - Met with a prospective entrepreneur and showed a property (with Water Department Director).
 - In contact with other businesses seeking information about funding for expansion.
- II. Deliver outstanding city services & innovations for both sustainability and to support future growth.**
 - Provided information about COVID funding assistance.
 - Completing administrative tasks for the CDI grant relating to the Cobblestone Hotel.
- III. Drive strategic community development.**
 - Provided business funding assistance to local business.
 - Conducted a Business Retention call to learn about operations in the current economy and inquired if there is anything they needed to discuss with the City / any assistance they may need.
- IV. Continue to grow a vibrant, sustainable, safe & connected community while respecting our traditions & history to attract new residents, visitors & new businesses.**
 - Worked with Inspections/Zoning, Public Works, and others to facilitate the sale of Lot 16 in Sandy Bay Highlands. The sale is progress.
- V. Encourage employees' personal and professional development, invest in employees to deliver the highest quality services for our community today and tomorrow while being a preferred city for career opportunities.**
- VI. Enhance and promote the City identity and brand story throughout the region.**
 - Lining up information posts for the social media calendar.
 - Working with Communications Coordinator to create a marketing plan, and the process of an internal and external method of sharing information.

Fire Department Monthly Report

10.C.2.c

July 2020

			Monthly			Year to Date 2020			Year to Year 2019		
Total Incident Responses				154			1061		1208		
EMS Response		Total EMS Incidents		132			817		1093		
	Total Patients			77			589		876		
	On Scene			110			738		668		
	Interfacility Transports			22			309		496		
	Intercepts			2			6		11		
	Other			0			0		7		
EMS Revenue	Date of Service Report		Monthly			Year to Date 2020			Year to Year 2019		
EMS Operations Billing Information	SDC and TRIP Revenue		\$3,260.54			\$29,224.90			\$57,781.88		
	Charges		\$142,470.00			\$907,769.04			\$1,067,082.52		
	Payments		\$44,162.09			\$400,899.92			\$557,547.55		
	Adjustments		\$57,012.03			\$371,580.37			\$456,814.82		
	Change + or - in Accounts Receivable		\$41,295.88			\$135,288.75			\$52,720.15		
Monthly Collection Percentage			31.00%			44.16%			52.25%		
Fire Incidents	Total Fire Incidents			22			113		119		
	Structural			3			6		4		
	Fire Other			1			12		4		
	Unauthorized			2			10		7		
	Hazardous Condition			8			31		39		
	False / Cancelled			6			29		20		
	Service Calls			2			15		24		
Overlapping Calls							149				209
Occup/ Inspect	Total Inspections			10			119		175		
	General		0	10			119		159		
	Special/Other/Consults		0	0			0		16		
			Violations		0		34		17		
			Corrections		4		17		36		
Training	Total Hours			474			3178.9		2870		
	Fire Training			324			2278.9		1150		
	EMS Training			90			600		1200		
	Community Based Outreach			60			360		420		
See attached training summary											
Public Education			Monthly			Year to Date 2020			Year to Year 2019		
Totals / Events	Staff Hours	Participants	0	0	0	42	61.5	290	33	64.75	304
CPR Classes	Staff Hours	Participants	0	0	0	8	19.25	55	19	57.25	96
Station Tours	Staff Hours	Participants	0	0	0	1	1	30	1	1	30
Presentations	Staff Hours	Participants	0	0	0	33	41.25	215	13	41.5	178
Maintenance			Monthly			Year to Date 2020			Year to Year 2019		
Total Hours			225.45			1519.75			1603.75		
Building Care, Cleaning, Maintenance			88			504.6			616.1		
Grounds Care			12.5			68.5			105.5		
Vehicle Checks			108.55			780.2			706.8		
Vehicle Cleaning			6.5			103.75			102.75		
Vehicle Maintenance			9.9			57.3			72.6		
Current Events											
2 Paramedic intern students started											
2 High school intern started											
Haz-mat and water rescue training											
Preplan tours of Cobblestone and Riverside Foods for crews											
Anniversaries											
Cap. Kris Klein 21 years, Cap. Eric Isselmann 16 years, FF/P Brandon Burke 6 years, POC Nick Walesh 17 years											

Attachment: TRFD July Report 2020 (2888 : Department Reports)

Monthly EMS Training Report for July 2020

I would like to encourage all City of Two Rivers City Council members to contact me to set up a time that I can give you a personal view of TRFD operations and training. (920)-901-3810

Follow The City of Two Rivers Fire Department on Facebook to see pictures/videos of Training, Operational Events and Community Outreach.

Notable Events

ALL EMERGENCY ORDERS FOLLOWED

Daily COVID-19 Updates

- COVID-19 Protocols, Policies, and Education Continues (CDC and Best Practice)
- No TRFD Paramedics tested positive for COVID-19
- All FT TRFD staff tested for COVID-19
- Daily Documentation of all PPE use and Self-Monitoring Continues
- All TRFD staff required to wear masks while on duty (in station and operationally)
- IFT Transport Collaboration with community partners (MTM)
- IFT meetings with TRFD staff and AMCMC (MTM)
- Continued “Best Practice” TRFD Ambulance/Station Disinfection
- All TRFD Paramedics continued Paramedic/CCP Training (Guidelines Followed)
- All TRFD shifts completed QI/QA Training/Education (Daily)
- Daily collaboration with relevant community partners
- Daily communication with Medical Director
- Daily QI/QA shift EMS Education
- 2 LTC Paramedic students started their internship (Louis Kumbalek and Braedyn Ahl)

EMS: 90 hrs

The TRFD EMS training program encompasses paramedic, critical care paramedic, and tactical paramedic training. EMS training or tasks connected to EMS training. The TRFD paramedics strive to offer empathic, competent and professional care that exceeds the expectations of those we serve. There are countless hours of EMS training each day at the TRFD. This training is formal and informal. TRFD paramedics have three formats of formal education: Target Solutions on-line assignments, Formal Lecture, and Practical Exercises. Dr. Painter, the TRFD Medical Director provides oversight to all TRFD EMS training, as well as QI/QA. The TRFD is committed to offer “best practice” care now and in the future.

Training hours above are conservative.

- **Continuing Paramedic/Critical Care paramedic education (Target Solutions)**
- **Protocol Review/Collaboration/Update**
- **EMS Remediation based on QI/QA**
- **EMS Competencies/Evaluations/Education**
- **Medical Director collaborative QI/QA**
- **Pod/Web Casts (Fire Engineering/EMS World)**
- **Shift case studies Lecture/Target Solutions (company level EMS training)**
- **Paramedic QI/QA (all reports) Krajnik/Menges/Murack/Painter**
- **EMS Probationary Firefighter/Paramedics/Interns/Recruits**
- **TEMS training**
- **Shift Officers EMS/AMCMC Update Meetings**
- **EMS Related Meetings/Training/Updates (COVID-19)**

Community Based Paramedic Outreach: 60 hours**COVID-19 PREVENTION and INFORMATION**

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

This is a very important program that requires continuous training updates with the TRFD staff. This program is rapidly developing throughout the United States. State legislation has recently been passed to allow ambulance providers to bill for preventive care. There is daily communication between TRFD employees as providers of preventative medicine and other community resources. Being proactive in community outreach mitigates many unnecessary ambulance responses and decreases operating cost to the city. More importantly community paramedicine objectively improves the quality of life and decreases mortality rates of those who have health related disparities in our community. This program operates 24/7 365. It is very difficult to give a accurate number to this training. The above hours noted are very conservative.

Important to note is, the hospital equipment program at TRFD is a Community Outreach program (the time from that program is averaged in with the above number).

- **Community Outreach visits/calls/visits**
- **Collaboration with PAAW**
- **Unnecessary 911 call mitigation**
- **Public health meetings (COVID-19)**
- **Health Department Meeting updates (COVID-19)**
- **Operational collaboration with various agencies**
- **Phone calls to citizen's at risk**
- **Collaboration with Public Health and other area agencies**
- **Community Education**



Be Well

For more detailed information feel free to contact me.

-Respectfully Submitted

David R. Murack

Assistant Chief

Emergency Operations/Community Outreach

City of Two Rivers Fire Department

2122 Monroe Street, Two Rivers WI, 54241

Station: 920-793-5521

Cell: 920-901-3810

"Let no public safety service member's ghost ever come back and say their training failed them."

Web Page: <http://www.two-rivers.org/fire/fire-department.php>

Monthly Fire Operations Report for July 2020

News

- July focused on Haz-Mat supportive operations training. This month's training consisted of boat and containment boom deployment. It was great training that most have never experienced. Dress out drills continue for all shifts to increase their efficiency in putting their PPE on for response. Blue Card Command and Control online training continues, there is two Captain and one Assistant Chief that needs to complete the training. Joseph Ewert completed his Motor Pump operator and Aerial truck operator training and testing. Joe has been operating as an MPO for the past month. Andrew Taddy, Clay Kautzer, and Matt Miller will be finishing up their department MPO testing in August and will go online starting September 2020.
- Aerial truck operator and Fire Officer I class state practical test was completed in July. Everyone that participated passed their written and practical tests.
- Fire crews toured the new Coble Stone Hotel and Riverside Seafood expansion. Pre-planning possible incidents to these locations took place.



Fire Operations

<u>Fire Operations training:</u>	303 hours
<u>Pre-Plan Development</u>	21 hours
<u>Fire Inspections:</u>	10 Inspections, 0 Violations, 4 Correction–12 hours
<u>Public Education:</u>	5 CPR practical check off, 2.5 hours

These number reflect total training hours per member, not hours per training segment. For example: If there is a 2-hour training segment and there were 4 members that participated, the recorded time for the training would be 8 hours not 2 hours.

Two Rivers Electric Department
Monthly Report For
August 2020

Electric Consumption in KWH:

This Month: July Data

2015	2016	2017	2018	2019	2020	%Change from 2015-2020	%Change from 2019-2020
7,760,694	8,077,009	7,919,253	8,146,687	8,301,539	9,178,562	18.27%	10.56%

Year-to-Date:

2015	2016	2017	2018	2019	2020	%Change from 2015-2020	%Change from 2019-2020
48,829,093	48,365,615	47,804,935	48,560,270	48,207,068	48,906,051	0.16%	1.45%

Cost of Electricity Purchased in Dollars:

This Month:

2015	2016	2017	2018	2019	2020
\$ 607,802.69	\$ 625,247.93	\$ 759,123.00	\$ 727,259.00	\$ 685,741.00	\$ 724,361.07

Cost of Electricity Purchased in Dollars per kWh:	%Change from 2015-2020	%Change from 2019-2020
\$ 0.07832 \$ 0.07741 \$ 0.09586 \$ 0.08927 \$ 0.08260 \$ 0.07892	0.77%	-4.46%

10.C.2.f

Location	Description of work performed
12th St Washington - School St	Conversion cleanup
Eastside	Pole replacements
Southside	Primary switch replacement
Northend	Pole replacements / Wire removals

Attachment: Electric Report 08-20 (2888 : Department Reports)

Packet Pg. 58

INSPECTIONS DEPARTMENT

MONTHLY SUMMARY
JULY 2020

	Permits Issued		Permit Revenue		Project Value	
	Month	YTD	Month	YTD	Month	YTD
Building (residential)	34	167	2,400	14,790	208,670	1,354,109
Building (commercial)	4	17	900	4,660	88,380	1,796,030
Electrical	19	98	895	6,200	16,125	437,293
Heating	19	116	1,356	7,666	115,884	951,889
Home Occupation	-	-	-	-	-	-
Moving	-	2	-	100	-	10,508
Plumbing	13	65	1,735	8,580	73,966	662,286
Sign	2	14	100	700	600	41,012
Tank	-	-	-	-	-	-
Wrecking	-	3	-	174	-	54,900
Totals	91	482	7,386	42,870	503,625	5,308,027

YTD Comparison	Permits Issued		Permit Revenue		Project Value	
	2020	2019	2020	2019	2020	2019
Building	184	152	19,450	17,141	3,150,139	1,842,884
Electrical	98	116	6,200	6,405	437,293	158,844
Heating	116	109	7,666	7,259	951,889	897,577
Home Occupation	-	-	-	-	-	-
Moving	2	2	100	100	10,508	8,780
Plumbing	65	63	8,580	6,760	662,286	220,110
Sign	14	18	700	900	41,012	13,156
Tank	-	1	-	-	-	-
Wrecking	3	5	174	208	54,900	8,735
Totals	482	466	42,870	38,773	5,308,027	3,150,086

Other Activities

Received and responded to requests for information from the general public and staff
 Prepared agenda packet and minutes for Plan Commission meeting
 Prepared notices, ordinances & related documents for public hearings

**Lester Public Library
Director's Report
July 2020**

News

- Dedication for naming the library garden trail after Patrick Gagnon is set for Sunday, August 16, 2020 at 1:30 pm. The City will also dedicate a park bench in Patrick's honor.
- Interlibrary Loan services will re-start August 3, 2020. Books not found in our system (MCLS) may now be requested from other Wisconsin libraries.
- Help Desk are asking patrons if they'd like to turn on the reading history function, so that staff can keep track of what patrons have already checked out when providing reader advisory services.
- Staff is creating a "browsable" new list of 10 new fiction and 10 new non-fiction for handing out to patrons. This will alert patrons of new materials found specifically at the Lester Public Library. We will start on a three week cycle for new lists. We may do the same for young adult and children's materials.
- With the building closed to patrons, staff took the opportunity to wrap up our inventory project. We identified well under 500 items missing in the project. We know where the majority of these missing items are – they are items patrons have either lost or not returned. The goal of the inventory was to investigate the need for expensive security solutions. This was the first inventory we have undertaken during my 13 year tenure at the library and does not reflect an annual rate of loss. The rate of shrinkage, or loss, for LPL is less than 0.5%. While data for library shrinkage varies greatly we can look to the National Retail Federation (NRF) 2019 National Retail Security Survey for some comparison. The average *annual* shrink rate in the retail industry is 1.38% of sales, which has stayed approximately the same since 2014. One in four retailers report 2% and above losses. Our number, 0.5%, reflects shrinkage well below the national average for retailers.

Library Foundation

- At their July 21, 2020, virtual meeting the Lester Public Library Foundation Board unanimously approved the annual pledge for 2020 as \$33,462.39. Many thanks to the Foundation for this financial support.
- Donations to the Lester Public Library Foundation for 2020 passed the \$10,000 mark in July.
- Approved the slate of officers for 2020/21 – Collette Tegen, President; Teri Wagner, Vice President; Bob Fay, Treasurer; Stephanie Carpenter, Secretary.

Library Legislation – No Report

Activities

7/01/20 – City Department Heads Meeting
7/02/20 – Call with Ned Guyette, President, Lester Public Library Board of Trustees
7/06/20 – City Council Meeting
7/13/20 – City Interview Team for 2 City Communications Coordinator Interviews
7/14/20 – Virtual Lester Public Library Board Meeting
7/15/20 – City Department Heads Meeting
7/17/20 – Virtual Manitowoc Calumet Library Automated Resource Sharing Consortium
(LARS) Participants Council Meeting, with Chris Hamburg
7/21/20 – Lester Public Library Foundation Virtual Meeting
7/30/20 – Call with Ned Guyette, President, Lester Public Library Board of Trustees

Jeff Dawson, Director, Lester Public Library 8/03/2020



Parks and Recreation Department

Hamilton Community House

1520 17th Street

Two Rivers WI 54241-0087

Office (920) 793-5592

Senior Center (920) 793-5596

Fax (920) 793-5529

Date: August 14, 2020

To: Greg Buckley

CC: City Council, Recreation Staff, Advisory Recreation Board

From: Tammy Stadler

Subject: Recreation Department July Report

The usage of the J. E. Hamilton Community House for the month is as follows:

➤ Senior Center Programs	4,818
➤ Building Rentals	462
➤ Recreation Program	478
➤ Total building usage	5,758

The J. E. Hamilton Community House was open **30 days** in the month of **July** for an average daily usage of **192 people per day**.

July Program & Facility Reservation Cancellations / Refunds Due to COVID-19 Facility Closure

Fitness Center	Daily Drop-In	300 participants (<i>approx.</i>)
Senior Center Programs	29 programs	1384 participants (<i>approx.</i>)
Senior Center TRUST Car	Daily Rides	301 participants (<i>approx.</i>)

Administration

- Terri Vosters - New Parks & Recreation Director

Senior Center

- 761 Cold Bag Lunches were delivered to Home Delivered Meal recipients in addition to the 1462 hot meals through a stimulus program supplied by the State of WI and ADRC of the Lakeshore. The Cold Bag Lunch program was reduced in July to 3 days a week.
- Curbside Cold Bag Lunch, 133 meals distributed
- Resumed in person Committee on Aging meetings
- July Birthday calls, mailed birthday cards & anniversary cards
- July newsletter - mailed, emailed, dropped off at local businesses, available at Community House, website (tworiversseniors.org) & Facebook
- Central Park Concerts Beverage Stand Profit \$287.50
- Programs resumed with limited participants for physical distancing for the following programs: Quilting, Arthritis Exercise, Wii Bowling, Monday Movies
- Trust Car service resumed three days a week with shortened hours, Time slots longer to allow for cleaning between each ride. (49 rides given).
- Attended Wisconsin Association of Senior Centers Zoom Meeting - Covid reopening plans for centers throughout the state.
- Updated Committee on Aging Bylaws
- July Cancellations: Creating your own directives Presentation, What's the difference? Presentation, Strawberry Shortcake Fundraiser, Baraboo Three Day Bus Trip

Special Events & Athletics

- 3 weekends of successful Appleton Heat Tournaments totaling over 4k in revenue
- 5 Concerts in the park
- 1 movie on the beach
- Mens softball League
- Pony league
- Fourth of July event
- Setting up Catamaran event for Aug 5
- Setting up Sundae Thursday for Aug 13
- Setting up for Lonz's tournament Aug 14
- Working with the Raiders football team for July/Aug games
- Active in Branding committee and committee requests
- Setting up for movie on the beach Aug 14
- Met with Emma to assist with current Recreation programs
- Researching fall program guide activities
- Promotion to Recreation Supervisor

J. E. Hamilton Community House Program Rental July 2020

Programs (Senior Center)	Number	Room	
Art & Craft Classes		Library	
Bean Bags		Koska	
Benefit Specialist/Medicare Review		Koska	
Bingo		Koska	
Blood Pressure Screening	5	Koska	
Book Club		Library	
Books & Puzzles		Library	
Bowling League (Resumes in Fall)		Koska	
Bowling - Wii	12	Koska	
Card Creators		Library	
Chorus (Resumes end of August)		Library	
Cornhole Friday			
Dartball (Resumes in Sept)		Koska	
Dominos		Library	
Exercise - Arthritis	12	Behringer	
Exercise - Cardio Drumming		Behringer	
Exercise - Line Dancing		Gym	
Exercise - Morning Walking		Gym	
Exercise - Silver Sneakers (ROM & Yoga)		Behringer Room	
Exercise - Simply Seniors	96	Gym	
Foot Care	14	Conference Room	
Frustration Dice Game		Koska	
Information & Assistance	1190	Koska	
Intergenerational			
Knit & Stitch		Library	
Legal Assistance (via phone)	2	Conference Room	
Mahjong		Library	
Meetings - Friends Board/COA	14	Conference Room	
Movie Matinee	6	Koska	
Newsletter Assembly		Koska	
Nutrition: Noon Lunch		Koska (Correct #712)	
Nutrition: Meals on Wheels	1811	Koska (Correct # 1285)	
Nutrition: Cold Lunch Bag Delivery	761		
Nutrition: Curbside Cold Lunch Bag Pick up	133		
Quilting	10	Library	
Red Hattitudes		Library	
Sheepshead/Cribbage		Koska	
Special Event		Koska/Behringer/Gym	
Special Programs/Theme Days		Koska	
Special Speaker	2	Koska	
Trips		Koska	
TRUST Transportation	63		
Visitors (Checked in at the Senior Center)	547	Koska	
Volunteer (Kitchen, Office, Newsletter, Etc)	140		
Participants usage at J.E.H.C.H.	4818		
Volunteer Hours Recorded at Senior Center	241		
Number of Individual Volunteers through Senior Center	54		
Total # Contacts Records	6,145		
Total # People in Contact	1219		
Total # New Contacts	16		

Attachment: Park & Rec July Report (2888 : Department Reports)

J. E. Hamilton Community House Program Rental July 2020

Closed 4th of July			
Rentals			
Advisory Recreation Board Mtg	12	Koska Room	
Baby Shower	40	Behringer Room	
Kennedy Basketball	40	Gym	
Parma Graduation Party	80	Behringer Room	
Reinemann Basketball Practice	180	Gym	
Scheller Basketball Practice	70	Gym	
Xiong Bridal Shower	40	Behringer Room	
Rental Usage Total	462		
Programs (Rec)			
DIY Beauty	3	Behringer Room	
Firm & Burn	28	Behringer	
Fitness Center	58	Fitness Center	
Ice Cream Science	3	Behringer Room	
Mother/Daughter Paint Night	22	Gym	
Open Gym / Drop In	60	Gym	
Slime	2	Behringer Room	
Vertical Jump classes	252	Gym	
Zombee Apocalzpsse Servival Camp	50	Walsh Field	
Program Participation Total	478		
Front Desk Inquiries			
Park Rentals			
Beach House/ 2 Rentals	65		
Central Park / 3 Rental	200		
Harbor Park/ rental			
Horseshoe 3 Rentals	190		
Jaycee / 2 Rentals	140		
Neshotah Park / 3 Rentals	115		
Neshotah Beach Rotary / Rental		Not including Band on the Beach	
Riverside			
Vietnam Baseball/ & tournaments	5,000	Numbers are estimated	
Walsh Field	2,000	Fire Works	
Walsh Field / 1 Rental	200		
Washington / 4 Rentals	175		
Washington Park Playground	0	Playground closed/Covid	
Vets Park			
Zander / Rentals			
Total Park Rental	8085		
Cancelations due to COVID-19 /			
Fish Derby	5000		
Park Shelters	595	11 rental	
Community House	50	1 Rental	

Attachment: Park & Rec July Report (2888 : Department Reports)

2020 Public Works/WWTP Tracking		2020		2019	
		July	Year-to-Date	July	Year-to-Date
ENGINEERING 2020					
	Landfill Leachate Pumpage (gallons)	448,035	5,444,568	1,200,237	6,924,105
	Precipitation	6.55	23.44	2.51	22.11
STREET DIVISION 2020 (Manhours)		July	Year-to-Date	July	Year-to-Date
	Work for Engineering			310	571
	Shop/Vehicle Maintenance	438	2,956		1,291
	Street Maintenance	178	709	193	1,028
	Street Cleaning	145	598	132	426
	Street Signs/Painting	88	552	49	409
	Snow & Ice		777		1,468
	PT Snowplowers		292		612
	Bridge - maintenance		46	5	16
	Old Dump/Landfill/River Sediment				20
	17th Street Bridge opening	56			
	Storm Sewers				
	Refuse/Garbage		36		2
	Recycling/Leaf Collection		53	84	97
	Weed Cutting	52	144	73	97
	Work for Others	592	2,814	377	1,412
	Special Events				
	PBS Sewers	3	48	3	25
	Salted Streets				37
	Plowed all city streets				9
	Open 17th Street Bridge	389	927	213	658
WASTEWATER UTILITY 2020		July	Year-to-Date	July	Year-to-Date
	Wastewater Treated, Gallons	110,132,000	693,997,000	87,071,000	565,181,000
	MONTHLY AVERAGE: Daily Flow, Gallons	3,553,000	3,249,857	2,809,000	2,606,000
	MONTHLY AVERAGE: Daily BOD, Lbs.	4,051	4,544	5,201	4,088
Plant Discharges (MONTHLY AVERAGE)					
	Biological Oxygen Demand (BOD), mg/l	6.00	9.33	7.00	9.31
	Suspended Solids, mg/l	6.10	6.14	6.50	6.11
	Ammonia, mg/l	0.08	0.53	0.33	0.58
	Phosphorus, mg/l	0.40	0.25	0.26	0.23
	Fecal Coliform, per 100ml	34.00	33.57	16.00	18.00
	pH, Min (6.0)	7.10	6.96	7.00	6.89
	pH, Max (9.0)	7.20	7.17	7.20	7.10
Chemicals					
	Polymer, Gallons	88	616	88	616
	Ferric Chloride, Gallons	2,087	15,563	2,213	15,395
	Chemical Costs for the month	\$ -	\$ 30,892.02	\$ -	\$ 31,600.50
	Mishicot Payment	\$ 8,260.53	\$ 64,814.98	\$ 7,220.50	\$ 60,173.57
	Emergency call-ins	9	27	3	16

Attachment: Public Works (2888 : Department Reports)



Parks and Recreation Department

Hamilton Community House

1520 17th Street

Two Rivers WI 54241-0087

Office (920) 793-5592

Senior Center (920) 793-5596

Fax (920) 793-5529

Date: August 3, 2020

To: Greg Buckley

CC: City Council, Recreation Staff, Advisory Recreation Board

From: Tammy Stadler

Subject: Recreation Department June Report

The usage of the J. E. Hamilton Community House for the month is as follows:

➤ Senior Center Programs	4,410
➤ Building Rentals	355
➤ Recreation Program	122
➤ Total building usage	4,887

The J. E. Hamilton Community House was open **15 days** in the month of **June** for an average daily usage of **55 people per day**.

June Program & Facility Reservation Cancellations / Refunds Due to COVID-19 Facility Closure

Recreation Programs	29 programs	1250 participants (<i>approx.</i>)
CH Facility Reservations	38	517 participants (<i>approx.</i>)
Fitness Center	Daily Drop-In	300 participants (<i>approx.</i>)
Senior Center Programs	26 programs	1643 participants (<i>approx.</i>)
Senior Center TRUST Car	Daily Rides	350 participants (<i>approx.</i>)
CH Reservation Rescheduled	4	820 participants (<i>approx.</i>)

Senior Center

- 1168 Cold Bag Lunches were delivered to Home Delivered Meal recipients in addition to the hot meal through a stimulus program supplied by the State of WI and ADRC of the Lakeshore.
- New - Curbside Cold Bag Lunch, 177 meals distributed
- Customer Service window opened for walk-in guests.
- Resumed Footcare, 23 appts
- June Birthday calls, mailed birthday cards & anniversary cards
- June newsletter - mailed, emailed, dropped off at local businesses, available outside of the building, as of June 15 available inside.
- Cookies & Cream Fundraiser - Profit \$258.28. 157 sundaes/floats, 15 doz cookies
- 50 people picked up Farmers Market Vouchers through the state nutrition program.
- Canceled Elder Abuse Presentation, Spring Trash to Treasure Rummage Sale Fundraiser, Brewer Game Bus Trip, What Happens in Vegas bus trip to the Fireside Theatre
- Canceled Pancake Breakfast Fundraiser Rescheduled to August 15

Special Events & Athletics

- Hired and training seasonal staff for scorekeeping and concessions- Also staff for Ice Cloud vendor
- Created spreadsheets/tables for all 2020 Special Events including sponsors donations and event dates and performers costs
- Set up all advertising and for events and tournaments and welcome kits through Manitowoc Visitors and Convention Bureau
- Set up, organized and worked with the help of Jared the Neshotah Beach concession stand on 6/4 and 6/5
- Organized attendants to run concessions out at beach concessions for 6/8-6/11
- Worked closely with Josh from Ice Clouds - vendor for beach concessions in organization to successfully get certified by Health Dept and opened for business.
- Attended the following meetings: 6/4 Snow Fest, 6/8 WI Heat tournaments, 6/9 Rec Board, 6/15 Single A draft, 6/19 CH Attendant training, 6/19 4th of July
- Organized and Event Manager for WI Heat Tournament June 26-28
- Completed all schedules for 2020 youth and men's softball and baseball seasons
- Hired Umpires for 2020 season
- Set up Volunteers & schedules w/ Restorative Justice Program - Manitowoc Co
- Ordered uniforms for youth baseball and Softball programs.
- Run Vietnam concessions for Men's softball games with volunteers.

Administration

- Community House COVID-19 Closure – through June 14
- Issued refunds or account credits for the cancellation of the month of June for Facility reservations and Recreation programs
- Continue hiring of Seasonal Employees
- Advisory Recreation Board meetings to resumed
- Track new hires for Work Permit State paperwork

J. E. Hamilton Community House Program Rental June 2019

Programs (Senior)	Number	Room
Artist in You		
Bean Bags		Koska
Benefit Specialist		Koska
Bingo		Koska
Blood Pressure Clinic		Koska
Books & Puzzles		Library
Bowling - Wii		Koska
Card Creators		Library
Dominos		.
Exercise - Arthritis		Behringer
Exercise - Drumming for Fitness		Behringer
Exercise-Line Dancing		Behringer
Exercise-Morning Walking		Gym
Exercise-Silver Sneakers		Behringer Room
Exercise-Simply Senior	44	Gym
Exercise-Zumba Gold		Gym
Exercise-Zumba Gold Chair		
Farmers Market Voucher Distribution		Koska Room
Foot Care Clinic	23	Conference Room
Frustration Dice Game		Koska Room
Information and Assistance	1124	
Knit & Stitch		Library
Legal Counsel		Conference Room
Mahjong		Library
Meetings - Senior Center (all)		Conference Room
Movie Matinee		Koska
Newsletter Assembly		Koska
Nutrition: Noon Lunch		Koska
Nutrition: Meals on Wheels	1479	
Nutrition: Cold Lunch Bag Delivery	1168	
Nutrition: Curbside Cold Lunch Bag Pick up	177	
Presentations		
Quilting		Library
Red Hattitudes		Library
Sheepshead/Cribbage		Koska
Special Event -		
Special Programs		Koska
Trips		Koska
TRUST Transportation	29	
Visitors**	366	Koska Room
Participants usage at J.E.H.C.H.	4410	
Volunteer Hours Recorded @ Senior Center	177	
Number of Individual Volunteers @ Sr. Ctr.	36	
Drop In**		
**Drop in Register, often don't attend activities, just stop to see who is here and if there is anything they are interested in participating in.		
Total # Contacts Records	6,244	
Total # People in Contact	1,426	
Total # New Contacts	5	

Attachment: Park & Rec June Report (2888 : Department Reports)

J. E. Hamilton Community House Program Rental June 2019

Senior Center Pancake Breakfast Fundraiser - Rescheduled to August 15		
Two Rivers Sundae Thursday - SC Schedules Volunteers		
Rentals		
Bruechert Baby Shower	60	Gym
Coupar Bridal Shower	20	Koska Room
Haack Basketball Practice	110	Gym
Karen McGaffney Health Screening	40	Behringer Room
Reinemann Basketball	85	Gym
Sohaller Basketball Practice	40	Gym
Rental Usage Total	355	
Programs (Rec)		
Firm & Burn	2	Behringer Room
Fitness Center	closed-Covid	Fitness Center-
Pound	1	Koska Room
Vertical Jump	119	Stage
Front Desk Inquiries		
Park Rentals		
Beach House / 3 Rentals	129	Does not include beach users
Harbor Park / Rentals		
Horseshoe/ 2 Rentals	90	
Jaycee / 2 Rentals	100	
Neshotah / 1 Rentals	200	
Riverside / Rental		
Rotary Beach Pavilion/ 1 Rentals	50	
Vets/ Rental		
Vietnam (estimated)		Leagues / Tournaments
Walsh/ Rental		
Washington / 3 Rentals	200	
Washington Park		Playground-Open 10 days
Zande/ Rental		
Total Park Rental	769	

Attachment: Park & Rec June Report (2888 : Department Reports)



Municipal Electric Utilities of
Wisconsin
Service. Advocacy. Safety.
725 Lois Drive
Sun Prairie, WI 53590
T: 608-837-2263
F: 608-837-0206
www.meuw.org

Two Rivers
July 2020

Prepared By: Ken Kozak/Mike C – MEUW Regional Safety Coordinator

SAFETY REPORT

ACCOMPLISHMENTS

1. Training
 - a. No in person city wide
 - b. Monthly City Safety meetings continue.
2. Audits/Inspections
 - a. No Inspections
3. Compliance/Risk Management
 - a. COVID weekly calls and spreadsheet is available, resources on MEUW website
 - b. Some topics may be available on line on request

GOALS AND OBJECTIVES

1. Training
 - a. No trainings scheduled
 - b. Planning to offer CPR refresher by MEUW later in October or November or early December.
2. Audits/Inspections
 - a. Field Inspection (Electric Only)
 - b. No Facility Inspections
3. Compliance/Risk Management

Candidate search is still underway for a new Regional Safety Coordinator. Until a replacement has been hired, if there are any questions, concerns, or safety related needs, please reach out to MEUW Safety Manager, Mike Czuprynski at (608) 393-7702. Monthly City Safety meetings continue.

Attachment: Safety Report TR (2888 : Department Reports)

ULTRAFILTRATION FACILITY MONTHLY OPERATING REPORT

ULTRAFILTRATION MEMBRANE FACILITY PRODUCTION

TOTAL PRODUCTION	35,699,390 GAL/MONTH
LESS BACKWASH WATER	4,389,910 GAL/MONTH
WATER TO CITY	31,309,480 GAL/MONTH
MAX. DAILY WATER PRODUCTION	1,345,090 GAL/DAY
MIN. DAILY WATER PRODUCTION	1,001,900 GAL/DAY
AVERAGE DAILY WATER PRODUCTION	1,151,590 GAL/DAY

TOTAL PRODUCTION	35699390 GAL/MONTH
WATER TO CITY	31309480 GAL/MONTH

PUMP OPERATION

LOWLIFT PUMPS

1	2	3	
240	264	240	HR/MO
7.74	8.52	7.74	HR/DAY

HIGHLIFT PUMPS

1	2	3	4	
744				HR/MO
24				HR/DAY

USED FOR PRODUCTION ONLY

CHEMICAL USAGE

INTAKE SODIUM HYPOCHLORITE
 PRE MEMBRANE HYPOCHLORITE
 POST SODIUM HYPOCHLORITE
 RESERVOIR HYPOCHLORITE
 50% SODIUM HYDROXIDE
 FLUORIDE
 50% CITRIC ACID
 CLEARITAS

POUNDS USED	PMG	PPM
0.0	0.00	0.00
5399.3	0.17	0.00
3222.8	0.09	0.00
511.2	0.01	0.00
2225.0	0.00	0.00
860.0	0.02	0.00
0 gals	----	----

RESERVOIR OPERATIONS

HOURS OF OPERATION

PUMP HOURS PER MONTH

TOTAL GALLONS PUMPED PER MONTH

MAXIMUM GALLONS PER DAY

MINIMUM GALLONS PER DAY

AVERAGE GALLONS PER DAY

HR/MONTH			
PUMP 7	PUMP 8	PUMP 9	TOTAL
408	0	336	744
			9,474,000 GAL/MONTH
			424,000 GAL/DAY
			249,000 GAL/DAY
			305,613 GAL/DAY

REPORT PREPARED BY

Garret Wachowski/RB

DATE

8/11/2020

Attachment: Water Report (2888 : Department Reports)

CITY OF TWO RIVERS

Check Register - Monthly Bill Summary
Check Issue Dates: 7/1/2020 - 7/31/2020Page: 1
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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/24/2020	125973	Downing, Darren	Refund - Overpayment on final bill	4/17/2020	17.89-
Total 125973:					17.89-
07/01/2020	126567	Airgas USA LLC	Oxygen - DPW	9102109764	98.71
Total 126567:					98.71
07/01/2020	126568	Aladtec Inc.	Online Employee Scheduling & Workforce Man	2020-1593	2,995.00
Total 126568:					2,995.00
07/01/2020	126569	Arbortech Tree Care	Install Autumn Blaze Maple Neshota Beach	6292020-1	270.00
Total 126569:					270.00
07/01/2020	126570	B&M Waste Service Inc	Toilet rental-Neshotah Beach	151363	470.00
07/01/2020	126570	B&M Waste Service Inc	Toilet rental-Seagull Marina	151375	80.00
07/01/2020	126570	B&M Waste Service Inc	Toilet rental-Blue Goose Tavern	151376	80.00
07/01/2020	126570	B&M Waste Service Inc	Toilet rental-Coast Guard Station	151377	80.00
07/01/2020	126570	B&M Waste Service Inc	Toilet rental-Vets Park	151378	80.00
07/01/2020	126570	B&M Waste Service Inc	Toilet rental-LB Clarke	151435	80.00
Total 126570:					870.00
07/01/2020	126571	Ball Auto & Truck Parts Inc	socket set - WWTP	189561	225.99
07/01/2020	126571	Ball Auto & Truck Parts Inc	Gloves-WTP	190146	56.97
Total 126571:					282.96
07/01/2020	126572	Bauer Built Tire-Manitowoc	Tires - PW	170066844	453.16
Total 126572:					453.16
07/01/2020	126573	Braun Building Center	Street Supplies - DPW	BB070649501	126.96
07/01/2020	126573	Braun Building Center	Lumber for work order - DPW	BB070759701	2,217.65
Total 126573:					2,344.61
07/01/2020	126574	Carron Net Company Inc	Volleyball Net-Rec	343459	142.80

Attachment: Summary of Bills July 2020 (2797 : Summary of Verified Bills)

CITY OF TWO RIVERS

Check Register - Monthly Bill Summary
Check Issue Dates: 7/1/2020 - 7/31/2020Page: 2
Jul 30, 2020 11:02AM

Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126574:					142.80
07/01/2020	126575	Center Point Large Print	Alp-Lib	1775008	249.27
Total 126575:					249.27
07/01/2020	126576	CivicBrand	Branding Project	2942	700.00
Total 126576:					700.00
07/01/2020	126577	CliftonLarsonAllen LLP	Progress Billing/Dec 2019 Audit	2538249	1,000.00
Total 126577:					1,000.00
07/01/2020	126578	Core & Main LP	Supplies - Wtr	M515962	172.65
Total 126578:					172.65
07/01/2020	126579	DeBruyn, Don	Solar Credit Refund - Acct 8421 00	06/23/20	141.80
Total 126579:					141.80
07/01/2020	126580	FASTER Asset Solutions Inc	Faster support-PW	CINV-002247	2,491.72
Total 126580:					2,491.72
07/01/2020	126581	Fire & Safety II Inc	Equipment - PD	MB0068-1	210.00
Total 126581:					210.00
07/10/2020	126582	Foster Coach Sales Inc	Parts-FD	19876	.00
Total 126582:					.00
07/01/2020	126583	Frank's Radio Service Inc.	Services - FD	116400	89.50
Total 126583:					89.50
07/01/2020	126584	GAT Tenor	Street tools-DPW	359468-1	101.51
07/01/2020	126584	GAT Tenor	Street tools returned - DPW	359660-1	106.12-

Attachment: Summary of Bills July 2020 (2797 : Summary of Verified Bills)

CITY OF TWO RIVERS

Check Register - Monthly Bill Summary
Check Issue Dates: 7/1/2020 - 7/31/2020Page: 3
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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/01/2020	126584	GAT Tenor	Inventory-DPW	364441-1	585.43
07/01/2020	126584	GAT Tenor	Inventory return - DPW	365102-1	67.99-
Total 126584:					512.83
07/01/2020	126585	Granicus	IQM2 Agenda & Minutes - CM	128151	500.00
Total 126585:					500.00
07/01/2020	126586	Hach Company	Chemicals-Wtr	11999974	877.76
Total 126586:					877.76
07/01/2020	126587	Hawkins Inc	Flow Meter - WTR	4738320	1,774.29
Total 126587:					1,774.29
07/01/2020	126588	Herb Fitzgerald Co Inc	Service-FD	0192808-IN	201.22
Total 126588:					201.22
07/01/2020	126589	Hubbart Electric Inc	Labor to troubleshoot scoreboard on West field	11044	519.75
Total 126589:					519.75
07/01/2020	126590	Kulpa Jr, Frank	Solar Credit Acct #8419-0	06/23/2020	182.60
Total 126590:					182.60
07/01/2020	126591	LeClair Bros Heat/AC Inc	Clean & Check HVAC - DPW	C8288	155.00
Total 126591:					155.00
07/01/2020	126592	Luisier Plumbing Inc	Backflow test - Community House	19326	146.00
Total 126592:					146.00
07/01/2020	126593	Mammoth Construction	Repair leaking water service 1910 28th Street-W	838	4,165.00
Total 126593:					4,165.00

Attachment: Summary of Bills July 2020 (2797 : Summary of Verified Bills)

CITY OF TWO RIVERS

Check Register - Monthly Bill Summary
Check Issue Dates: 7/1/2020 - 7/31/2020Page: 4
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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/01/2020	126594	Manitowoc Disposal Inc	Recycling & Refuse Collect 6/13/2020-6/26/202	7/2/2020	14,157.64
Total 126594:					14,157.64
07/01/2020	126595	Manitowoc Trophy	Name Plates - Council	36900	38.00
07/01/2020	126595	Manitowoc Trophy	Name Plate - Council	36966	30.00
Total 126595:					68.00
07/01/2020	126596	MBM	Meter Charge 5/29/20-6/28/20	IN500026	1,890.98
Total 126596:					1,890.98
07/01/2020	126597	MSA Professional Services Inc	Sanitary & Storm GIS Upgrades	R10511015.0-2	1,940.00
Total 126597:					1,940.00
07/01/2020	126598	Northeast Asphalt Inc.	Black top-PW	1685046	716.93
Total 126598:					716.93
07/01/2020	126599	Northern Lake Service Inc	Testing - Wtr	379881	42.00
07/01/2020	126599	Northern Lake Service Inc	DW Samples-Wtr	380309	560.00
Total 126599:					602.00
07/01/2020	126600	Office Depot	Office Supplies - City Mgr	505609099001	32.43
07/01/2020	126600	Office Depot	Office Supplies - City Mgr	505614725001	16.99
07/01/2020	126600	Office Depot	Office Supplies - City Mgr	505614726001	11.99
07/01/2020	126600	Office Depot	Supplies-Eng	509310620001	134.36
Total 126600:					195.77
07/01/2020	126601	Old Northwest Research	Riverview Pond report	ONR 20-06-TR RIVERVIE	2,750.00
Total 126601:					2,750.00
07/01/2020	126602	Panic Station LLC	Bands on the Beach-7/11/20	06/30/20	2,000.00
Total 126602:					2,000.00

Attachment: Summary of Bills July 2020 (2797 : Summary of Verified Bills)

CITY OF TWO RIVERS

Check Register - Monthly Bill Summary
Check Issue Dates: 7/1/2020 - 7/31/2020Page: 5
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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/01/2020	126603	Pier, Marie Ann	Interpreter Services / G. Santiago	6-24-2020	72.05
Total 126603:					72.05
07/01/2020	126604	Prairie Farms Dairy Inc	Dairy - Sr. Cntr.	9084615	93.66
Total 126604:					93.66
07/01/2020	126605	Prompt Printing Center	500 Building permits-Vicky	34592	82.00
Total 126605:					82.00
07/01/2020	126606	R&J Fricke Inc	6 Bag cement - DPW	9328	1,575.00
07/01/2020	126606	R&J Fricke Inc	6 Bag cement - DPW	9329	925.00
07/01/2020	126606	R&J Fricke Inc	6 Bag cement - DPW	9330	900.00
Total 126606:					3,400.00
07/01/2020	126607	Ramaker & Associates inc	CIMA Maintenance 6/23/20-5/25/21-Rec	87630	458.00
Total 126607:					458.00
07/01/2020	126608	Reinders	Supplies - Rec	2685507-00	190.68
07/01/2020	126608	Reinders	Supplies - Rec	ORDER # 2685507-01	1,106.00
07/01/2020	126608	Reinders	Mulch & Seed inventory - DPW	ORDER NO. 2685931-00	586.96
Total 126608:					1,883.64
07/01/2020	126609	Reinhart Foodservice	Food-Sr Ctr	144159	470.74
07/01/2020	126609	Reinhart Foodservice	Food-Sr Ctr	148505	390.12
Total 126609:					860.86
07/01/2020	126610	Schaus Roofing/Mechanical	Supplies-FD	43991	32.78
07/01/2020	126610	Schaus Roofing/Mechanical	Sanitizer & Cleaner-FD	43998	178.50
Total 126610:					211.28
07/01/2020	126611	SHI International Corp.	Novell Open Enterprise Server	B11910088	5,580.00

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126611:					5,580.00
07/01/2020	126612	Smogoleski, Scott	Engergy Star Partners Rebate-Clothes Washer	06/24/2020	30.00
Total 126612:					30.00
07/01/2020	126613	Spectrum Corp	Scoreboard Parts-Rec	0186346-IN	352.48
Total 126613:					352.48
07/01/2020	126614	St Vincent De Paul	Covid-19 Community Funds-Elec	06/25/2020	2,000.00
Total 126614:					2,000.00
07/01/2020	126615	Strand Associates Inc	Prof. Svcs. 5/1/20-5/31/20	0160740	315.68
Total 126615:					315.68
07/01/2020	126616	Superior Chemical Corp	D-Germ Hand Rinse-FD	269038	109.35
Total 126616:					109.35
07/01/2020	126617	Thuermer Law Office	June 2020 Services	JUNE 24, 2020	1,471.00
Total 126617:					1,471.00
07/01/2020	126618	Truck Equipment Inc	Parts-PD	906218-00	450.00
Total 126618:					450.00
07/01/2020	126619	Two Rivers Ecumenical Pantry	Covid-19 Community Funds-Elec	06/25/2020	2,000.00
Total 126619:					2,000.00
07/01/2020	126620	Two Rivers Historical Society	July 2020 Monthly Support Pymt	JULY2020	250.00
Total 126620:					250.00
07/01/2020	126621	USA Blue Book	Supplies-WTP	232701	58.65
07/01/2020	126621	USA Blue Book	Supplies for outfall testing-Storm Water	269779	72.86

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126621:					131.51
07/01/2020	126622	Vanderveren, Sally A	June 2020 Services	0620	3,658.33
Total 126622:					3,658.33
07/01/2020	126623	WEX Bank	Gasoline	65952433	6,155.81
Total 126623:					6,155.81
07/01/2020	126624	Whipp, Len	Two Rivers Central Park Concert Series-Sugar	6/30/2020	495.00
Total 126624:					495.00
07/01/2020	126625	Wisc Dept of Revenue	Payment for #2688-13 @ 1615A Washington St	06/24/2020	125.00
Total 126625:					125.00
07/01/2020	126626	Wisconsin Dept. of Revenue	SDC Collections Fee Owed / Culp, Thomas	06/24/20	96.68
07/01/2020	126626	Wisconsin Dept. of Revenue	SDC Collections Fee Owed / Buda, Robert J.	06/25/20	115.45
Total 126626:					212.13
07/01/2020	126627	Wisconsin Public Service	1300 35th Street - Rec	0401271669-07;6/20	26.72
07/01/2020	126627	Wisconsin Public Service	1916 COLUMBUS ST - Elec	0401271669-10;06/20	31.56
07/01/2020	126627	Wisconsin Public Service	PARK SHELTER	0401271669-14;6/20	23.61
07/01/2020	126627	Wisconsin Public Service	CITY HALL	0401271669-24;6/20	174.45
07/01/2020	126627	Wisconsin Public Service	Bridge Bldg - Engineering	0401271669-30;06/20	17.88
07/01/2020	126627	Wisconsin Public Service	1401 Lake Street	0401271669-35;6/20	388.19
07/01/2020	126627	Wisconsin Public Service	GENERATOR	0401271669-38;06/20	19.56
07/01/2020	126627	Wisconsin Public Service	1520 17TH ST - Rec	0401271669-4;6/20	230.15
07/01/2020	126627	Wisconsin Public Service	606 PARKWAY BLVD (PARAGON)	0401271669-44;6/20	157.81
07/01/2020	126627	Wisconsin Public Service	CEMETERY	0401271669-5;6/20	18.84
Total 126627:					1,088.77
07/01/2020	126628	Wisconsin Retirement System	May 2020 Contributions	MAY 2020	105,571.47
Total 126628:					105,571.47

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07/09/2020	126629	Abendroth, Tim & Kay	Refund for Taste of Madison-trip cancelled	07/02/2020	256.00
Total 126629:					256.00
07/09/2020	126630	ABL Enterprises Inc.	Small Business COVID-19 Relief Fund	7/9/2020	4,015.26
Total 126630:					4,015.26
07/09/2020	126631	Anderson, Bill	Refund for Taste of Madison	07/02/2020	128.00
Total 126631:					128.00
07/09/2020	126632	AnSer Services	After hours answering service-Elec & Wtr	6502-070120	190.00
Total 126632:					190.00
07/09/2020	126633	August Winter & Sons Inc	Payment #10 for Project # TR 24	PAYMENT #10	308,085.00
Total 126633:					308,085.00
07/09/2020	126634	Aurora Health Care	Drug Screens	369163	150.00
Total 126634:					150.00
07/09/2020	126635	B&M Waste Service Inc	Portable Restroom Rental-6/30/20-7/29/20-Rec	151610	160.00
07/09/2020	126635	B&M Waste Service Inc	Portable Restroom Rental-7/3/20-7/5/20-Rec	151646	430.00
Total 126635:					590.00
07/09/2020	126636	Ball Auto & Truck Parts Inc	supplies - WWTP	188626	144.00
07/09/2020	126636	Ball Auto & Truck Parts Inc	Fuel Filter-WTP	188803	163.89
07/09/2020	126636	Ball Auto & Truck Parts Inc	Filter-WTP	188905	156.56
07/09/2020	126636	Ball Auto & Truck Parts Inc	supplies - WWTP	188914	22.97
Total 126636:					487.42
07/09/2020	126637	Bauer, Dorothy	Refund for Joseph & Amazing Dreamcoat	7/2/20	150.00
Total 126637:					150.00
07/09/2020	126638	Bayer, Thomas	Refund for Taste of Madison	07/02/2020	128.00

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Total 126638:					128.00
07/09/2020	126639	Bornemann, Anita	Refund for Taste of Madison	07/02/2020	128.00
Total 126639:					128.00
07/09/2020	126640	CADstruction Services LLC	Small Business COVID-19 Relief Fund	7/9/2020	2,500.00
Total 126640:					2,500.00
07/09/2020	126641	Center Point Large Print	Alp-Lib	1775634	60.00
Total 126641:					60.00
07/09/2020	126642	Charter Communications Inc	1520 17th Street - Rec	0000265061920	80.33
Total 126642:					80.33
07/09/2020	126643	Cherney, Wayne	Refund for Taste of Madison	7/2/2020	138.00
Total 126643:					138.00
07/09/2020	126644	Christensen, Mindy	Small Business COVID-19 Relief Fund	7/9/2020	2,224.00
Total 126644:					2,224.00
07/09/2020	126645	Civic Systems LLC	Semiannual support fees 7/1/20-12/31/20	CVC19616	9,199.00
Total 126645:					9,199.00
07/09/2020	126646	Cole, Catherine	Refund for Taste of Madison	7/2/2020	128.00
Total 126646:					128.00
07/09/2020	126647	Complete Office of Wisconsin	Paper - PD	687325	60.40
Total 126647:					60.40
07/09/2020	126648	Cool City Cleaners Inc	Towels/Mops June - WTP	101203	70.00

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126648:					70.00
07/09/2020	126649	Creative Touch Salon LLC	Small Business COVID-19 Relief Fund	7/9/20	2,500.00
Total 126649:					2,500.00
07/09/2020	126650	Crowe, Jessica	Small Business COVID-19 Relief Fund	7/9/2020	4,262.32
Total 126650:					4,262.32
07/09/2020	126651	Custer Street Towing/Repair	Incident #20-01834-PD	1739	410.00
Total 126651:					410.00
07/09/2020	126652	D & D Woodcrafters LLC	Small Business COVID-19 Relief Fund	7/9/2020	2,500.00
Total 126652:					2,500.00
07/09/2020	126653	Dalebroux Jewelry Inc.	Small Business COVID-19 Relief Fund	07/09/2020	2,500.00
Total 126653:					2,500.00
07/09/2020	126654	Dickenshied, Jacqueline	Energy Star Rebate - Dehumidifier	7/6/2020	15.00
Total 126654:					15.00
07/09/2020	126655	Dirkman, Robert & Anne	Refund for Taste of Madison	7/2/20	256.00
Total 126655:					256.00
07/09/2020	126656	Dorner Inc.	Contract 1-2019 - Final Payment	CONTRACT #1-2019 FINA	5,090.59
Total 126656:					5,090.59
07/09/2020	126657	E F Becker & Sons Inc	Substation HWY 310 & Columbus St Labor & E	06/23/20	60.00
Total 126657:					60.00
07/09/2020	126658	Eesley, Mary	Refund for Taste of Madison & Joseph & Amazi	7/2/20	268.00

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126658:					268.00
07/09/2020	126659	Eis, Marvin & Joan	Refund for Taste of Madison	7/2/20	128.00
Total 126659:					128.00
07/09/2020	126660	Erickson Sports Apparel	T-shirts - Parks & Rec Staff	102170	408.00
Total 126660:					408.00
07/09/2020	126661	Ewald's Hartford Ford LLC	2020 Ford F-350 - Cem	6/30/2020-35626	45,180.00
Total 126661:					45,180.00
07/09/2020	126662	Fencil, Ron	Small Business COVID-19 Relief Fund	7/9/2020	767.61
Total 126662:					767.61
07/09/2020	126663	Fire Dept Petty Cash	Petty cash reimbursement	07/07/2020	48.78
Total 126663:					48.78
07/09/2020	126664	Fireline Sprinkler LLC	Annual Sprinkler Inspection	6103-20	324.00
07/09/2020	126664	Fireline Sprinkler LLC	Annual Sprinkler Inspection	6140-20	250.00
Total 126664:					574.00
07/09/2020	126665	Foley, Diane	Refund for Taste of Madison	7/2/20	128.00
Total 126665:					128.00
07/09/2020	126666	Foster, Liz	Refund for Taste of Madison & Joseph & Amazi	7/2/20	268.00
Total 126666:					268.00
07/09/2020	126667	Frank's Radio Service Inc.	Battery - PD	116414	95.00
Total 126667:					95.00
07/09/2020	126668	Frontier	Telephone - Water	0443;6/20	52.70

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126668:					52.70
07/09/2020	126669	Gates Insurance Agency	Small Business COVID-19 Relief Fund	7/9/2020	2,500.00
Total 126669:					2,500.00
07/09/2020	126670	Grainger	Supplies-WTP	9561829038	96.93
07/09/2020	126670	Grainger	Supplies-WTP	9563158287	86.12
07/09/2020	126670	Grainger	Supplies-WTP	9563612689	2.84
Total 126670:					185.89
07/09/2020	126671	Gunderson, Ariane C.	Small Business COVID-19 Relief Fund	07/09/2020	2,043.50
Total 126671:					2,043.50
07/09/2020	126672	Haefner, Jean	Refund for Taste of Madison	7/2/20	128.00
Total 126672:					128.00
07/09/2020	126673	Harmony Technologies LLC	Consulting/Support-FD	4731	113.75
Total 126673:					113.75
07/09/2020	126674	Heller, Carol	Refund for Joseph & Amazing Dreamcoat	7/2/20	145.00
Total 126674:					145.00
07/09/2020	126675	Hendrick, Wayne & Gaylynn	Refund for Taste of Madison	7/2/20	256.00
Total 126675:					256.00
07/09/2020	126676	Janet Malfroid	Refund for Taste of Madison	7/2/20	128.00
Total 126676:					128.00
07/09/2020	126677	Joyce LaPalm	Refund for Taste of Madison	7/2/20	128.00
Total 126677:					128.00

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/09/2020	126678	Kaat's Water Conditioning Inc	Bottled water, 6303 Riverview Dr-Eng	06/30/2020	68.05
Total 126678:					68.05
07/09/2020	126679	Kemira Water Solutions Inc.	FERRIC CHLORIDE - WWTP	9017677257	6,277.92
Total 126679:					6,277.92
07/09/2020	126680	Kitzerow, Sharon	Refund for Taste of Madison	7/2/20	128.00
Total 126680:					128.00
07/09/2020	126681	Klein, Janice	Refund for Taste of Madison & Joseph & Amazi	7/2/20	268.00
Total 126681:					268.00
07/09/2020	126682	Klein, Patricia Ann	Simply Seniors Exercise Class - 6/18/20-6/30/2	7/7/20	26.40
Total 126682:					26.40
07/09/2020	126683	Klein, Rita	Refund for Taste of Madison & Joseph & Amazi	7/2/20	273.00
Total 126683:					273.00
07/09/2020	126684	Klein's Hardware Hank	Supplies- Wtr	WATER DEPT 6/2/20	8.49
Total 126684:					8.49
07/09/2020	126685	KONE Inc	Maintenance 7/1/20-9/30/20-Elec	959590977	366.33
Total 126685:					366.33
07/09/2020	126686	Konop, Linda	Refund for Taste of Madison	7/2/20	128.00
Total 126686:					128.00
07/09/2020	126687	Kornely, Edd & Alice	Refund for Taste of Madison	7/2/20	256.00
Total 126687:					256.00
07/09/2020	126688	Kotarek, Irene	Refund for Joseph & Amazing Dreamcoat	7/2/20	145.00

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Total 126688:					145.00
07/09/2020	126689	Krajnik Chevrolet	Stolen Car Accident-Incident #20-03078-PD	1929	150.00
Total 126689:					150.00
07/09/2020	126690	Krall, Dennis	Refund for Taste of Madison	7/2/20	128.00
Total 126690:					128.00
07/09/2020	126691	Laurin, Leon & Maria	Refund for Taste of Madison	7/2/20	256.00
Total 126691:					256.00
07/09/2020	126692	LeClair Bros Heat/AC Inc	Clean & Check Two Unit Heaters @ 1916 Colu	C8301	125.00
07/09/2020	126692	LeClair Bros Heat/AC Inc	Clean & Check 2 Furnaces in High Lift Bldg - Wt	C8302	125.00
Total 126692:					250.00
07/09/2020	126693	Lemanchek, Leah	Refund for Joseph & Amazing Dreamcoat	7/2/20	145.00
Total 126693:					145.00
07/09/2020	126694	Lemberger, Sue	Refund for Taste of Madison	7/2/20	133.00
Total 126694:					133.00
07/09/2020	126695	Levene, Paul	Refund for Taste of Madison	7/2/20	256.00
Total 126695:					256.00
07/09/2020	126696	Liberty Mutual Insurance Co	WWTP-Crane to Veh #643	13645023	36.00
Total 126696:					36.00
07/09/2020	126697	Manitowoc Disposal Inc	Small Box / Neshotah / Walsh Field - Rec	47092	460.00
Total 126697:					460.00
07/09/2020	126698	Manitowoc Public Utilities	2124 Woodland Dr-WTP	408117;6/20	29.68

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126698:					29.68
07/09/2020	126699	McMahon Associates Inc	UNPS Riverview Pond	0918782	2,132.30
07/09/2020	126699	McMahon Associates Inc	20th St/Eggers Pond Grant app	918783	3,107.22
Total 126699:					5,239.52
07/09/2020	126700	Merholz, James	Overpayment of ambulance charges	07/06/2020	800.00
Total 126700:					800.00
07/09/2020	126701	Minnesota Life Insurance Co	Life Insurance premium - August 2020	7/6/2020	4,325.72
Total 126701:					4,325.72
07/09/2020	126702	Moore, Diann	Refund for Joseph & Amazing Dreamcoat	7/2/20	140.00
Total 126702:					140.00
07/09/2020	126703	Mtwc Area Visitor/Conv Bureau	Portion of room tax collected - May 2020	MAY 2020	3,883.18
Total 126703:					3,883.18
07/09/2020	126704	Mueller, Peggy	Refund for Taste of Madison	7/2/20	133.00
Total 126704:					133.00
07/09/2020	126705	Northeast Asphalt Inc.	Asphalt Inventory-DPW	1686605	2,268.10
Total 126705:					2,268.10
07/09/2020	126706	Old Northwest Research	Eggers Pond Archaeological Report - Eng	ONR 20-07-TR EGGERS	750.00
Total 126706:					750.00
07/09/2020	126707	OpenPoint LLC	OpenPoint Subscription - July 2020 - Elec	1073	12,350.00
Total 126707:					12,350.00
07/09/2020	126708	Paczkowski Family Detal SC	Small Business COVID-19 Relief Fund	7/9/2020	5,000.00

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126708:					5,000.00
07/09/2020	126709	Patsy's Hwy 42 Mobil Mart LLC	Small Business COVID-19 Relief Fund	7/9/2020	5,000.00
Total 126709:					5,000.00
07/09/2020	126710	Powell, Barbara	Refund for Taste of Madison	7/2/20	128.00
Total 126710:					128.00
07/09/2020	126711	Press, Olive	Refund for Taste of Madison	7/2/20	128.00
Total 126711:					128.00
07/09/2020	126712	Prompt Printing Center	Garbage stickers - Cust Serv	34593	1,080.00
Total 126712:					1,080.00
07/09/2020	126713	R&J Fricke Inc	6 Bag cement - DPW	9374	925.00
07/09/2020	126713	R&J Fricke Inc	6 Bag cement - DPW	9375	1,000.00
Total 126713:					1,925.00
07/09/2020	126714	Rakovszky, Dennise D.	Small Business COVID-19 Relief Fund	7/9/2020	612.14
Total 126714:					612.14
07/09/2020	126715	Registration Fee Trust	2020 Ford F350 - Cem	7/9/2020	169.50
Total 126715:					169.50
07/09/2020	126716	Reinemann, Debra	Partial Refund-Gymnasium	7/6/20	23.10
Total 126716:					23.10
07/09/2020	126717	Reisbeck, Sharon	Refund for Taste of Madison	7/2/20	133.00
Total 126717:					133.00
07/09/2020	126718	RESCO	Materials - Elec	786403-01	25.12

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Total 126718:					25.12
07/09/2020	126719	Robinson, Allen & Linda	Refund for Taste of Madison	7/2/20	276.00
Total 126719:					276.00
07/09/2020	126720	Rudy's Lanes	Small Business COVID-19 Relief Fund	7/9/2020	1,172.26
Total 126720:					1,172.26
07/09/2020	126721	Ruether, Tracy L.	Small Business COVID-19 Relief Fund	07/09/2020	900.00
Total 126721:					900.00
07/09/2020	126722	Sauer, Jean	Refund for Taste of Madison	7/2/20	128.00
Total 126722:					128.00
07/09/2020	126723	Sauer, Michael	Refund for Joseph & Amazing Dreamcoat	7/2/20	280.00
Total 126723:					280.00
07/09/2020	126724	Schmidt, Ellen	Refund for Taste of Madison	07/02/20	128.00
Total 126724:					128.00
07/09/2020	126725	Schroeder Bros Co	Small Business COVID-19 Relief Fund	7/9/2020	5,000.00
Total 126725:					5,000.00
07/09/2020	126726	Sepia Wedding Chapel LLC	Small Business COVID-19 Relief Fund	7/9/2020	4,374.65
Total 126726:					4,374.65
07/09/2020	126727	Shambeau, Russell & Bonnie	Refund for Taste of Madison	7/2/20	256.00
Total 126727:					256.00
07/09/2020	126728	Siebert, Leona	Refund of Taste of Madison	7/2/2020	128.00

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126728:					128.00
07/09/2020	126729	Sonntag, Shirley	Refund for Taste of Madison	7/2/20	128.00
Total 126729:					128.00
07/09/2020	126730	Superior Chemical Corp	Nitrile Glove-WTP	267964	83.16
07/09/2020	126730	Superior Chemical Corp	Gloves-WTP	269308	101.16
Total 126730:					184.32
07/09/2020	126731	Swanson, Jo Marie	Refund for Taste of Madison & Joseph & Amazi	7/2/20	268.00
Total 126731:					268.00
07/09/2020	126732	Tapped On The Lakeshore	Small Business COVID-19 Relief Fund	7/9/2020	2,175.00
Total 126732:					2,175.00
07/09/2020	126733	Tisler, Karen	Refund for Joseph & Amazing Dreamcoat	7/2/20	140.00
Total 126733:					140.00
07/09/2020	126734	Tonkin, Bonnie	Refund for Taste of Madison	7/2/20	133.00
Total 126734:					133.00
07/09/2020	126735	Uniform Shoppe	Clothing - Fire	300633	94.72
Total 126735:					94.72
07/09/2020	126736	Unique Flying Objects	Flag - FD	2046	55.00
07/09/2020	126736	Unique Flying Objects	Small Business COVID-19 Relief Fund	7/9/2020	2,500.00
Total 126736:					2,555.00
07/09/2020	126737	US Alliance Fire Protection Inc.	Annual Sprinkler Inspection - Lib	1046-F035801	300.00
Total 126737:					300.00

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/09/2020	126738	Vondruska, Harold	Refund for Taste of Madison (Harold \$128 + Del	7/2/20	266.00
Total 126738:					266.00
07/09/2020	126739	Wells Fargo Financial Leasing	Copier Charges - 6/21/20-7/20/20	5010922468	2,700.00
Total 126739:					2,700.00
07/09/2020	126740	Wichlacz, Gertrude	Refund for Taste of Madison	07/02/20	128.00
Total 126740:					128.00
07/09/2020	126741	Wilker, Bonnie	Refund for Joseph & Amazing Dreamcoat(Shar	7/2/20	300.00
Total 126741:					300.00
07/09/2020	126742	Wind, Judy M.	Refund for Joseph & Amazing Dreamcoat	7/2/20	145.00
Total 126742:					145.00
07/09/2020	126743	Wisconsin Public Service	RESEVOIR	0401271669-02;6/20	20.43
07/09/2020	126743	Wisconsin Public Service	SOUTH TWR	0401271669-25;6/20	1.89
07/09/2020	126743	Wisconsin Public Service	EAST TWR	0401271669-26;6/20	18.20
07/09/2020	126743	Wisconsin Public Service	HIGH LIFT	0401271669-32;6/20	31.56
Total 126743:					72.08
07/14/2020	126744	Zoerb, Wilfred & Joyce	Refund for Taste of Madison	7/2/20	.00
Total 126744:					.00
07/16/2020	126745	A Cut Above	Small Business Covid-19 Relief Fund	07/15/2020	599.28
Total 126745:					599.28
07/16/2020	126746	ADRC of the Lakeshore	June 2020 donations - Sr Ctr	JUNE 2020	517.44
Total 126746:					517.44
07/16/2020	126747	Advanced Disposal	Dumpster fee - DPW	B20000456391	711.72

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126747:					711.72
07/16/2020	126748	Air One Equipment Inc	Helmet-FD	157374	319.00
Total 126748:					319.00
07/16/2020	126749	Al's Transmissions & Auto	Parts - DPW	15077	2,554.59
Total 126749:					2,554.59
07/16/2020	126750	American Public Works Assoc	APWA Membership 10/1/20-9/30/21 - McDonal	832083 - 7/8/2020	223.00
Total 126750:					223.00
07/16/2020	126751	Aurora EAP	EAP - Quarterly 7/1/20-9/30/20	IN 22244	1,071.36
Total 126751:					1,071.36
07/16/2020	126752	B&M Waste Service Inc	Toilet rental-Magee	151791	80.00
Total 126752:					80.00
07/16/2020	126753	Braun Building Center	Lumber for bike trail - DPW	BB070799001	63.56
Total 126753:					63.56
07/16/2020	126754	Casa Mexico Restaurants LLC	Small Business Covid-19 Relief Fund	7/15/20	4,675.00
Total 126754:					4,675.00
07/16/2020	126755	Casavant, Terry	Energy Star Rebate - Dehumidifier	7/9/2020	15.00
Total 126755:					15.00
07/16/2020	126756	City of Two Rivers	Real Estate Taxes - 606 Parkway Blvd - 3rd Inst	211-102-001-8 3RD INSTA	16,155.42
Total 126756:					16,155.42
07/16/2020	126757	Communications Engineering Co	Prof. Serv - Lib	339204	375.00

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126757:					375.00
07/16/2020	126758	Connie's Diner	Small Business Covid-19 Relief Fund	7/15/2020	1,528.60
Total 126758:					1,528.60
07/16/2020	126759	Core & Main LP	Supplies - Wtr	M547218	821.23
07/16/2020	126759	Core & Main LP	Supplies - Wtr	M563987	414.80
Total 126759:					1,236.03
07/16/2020	126760	Country Visions Cooperative	Fuel & Supplies - DPW	STATEMENT 6/30/20	3,175.57
Total 126760:					3,175.57
07/16/2020	126761	Cretton Enterprises Inc	June 2020 Services - Lib	9127	1,623.50
Total 126761:					1,623.50
07/16/2020	126762	Dept. of Workforce Development	Unemployment	000010174714	1,470.95
Total 126762:					1,470.95
07/16/2020	126763	Digger's Hotline	Services 5/31/20-6/29/20	200 6 43901	65.10
Total 126763:					65.10
07/16/2020	126764	Election Systems & Software	Licensing & Maintenance 9/1/20-8/31/21	1139171	2,190.12
Total 126764:					2,190.12
07/16/2020	126765	Ellerman Glass Inc	Clear Acrylic - CH	24472	45.82
Total 126765:					45.82
07/16/2020	126766	Emanuel United Methodist Church	Refund - Credit Balance Due to Overcharge	7/9/2020	1,389.07
Total 126766:					1,389.07
07/16/2020	126767	Fastenal	Supplies - Wtr	WIMAN267189	88.21

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126767:					88.21
07/16/2020	126768	Fireside Pub LLC	Small Business Covid-19 Relief Fund	07/15/20	4,675.00
Total 126768:					4,675.00
07/16/2020	126769	Frank's Radio Service Inc.	Parts inventory - DPW	116405	54.00
Total 126769:					54.00
07/16/2020	126770	Halogen Supply Company	Supplies - Rec	00551698	676.52
Total 126770:					676.52
07/16/2020	126771	Hawkins Inc	Supplies-Wtr	4744559	113.73
Total 126771:					113.73
07/16/2020	126772	Kip Gulseth Construction Co	Harbor Street - Lead Shut Off	2961	549.00
Total 126772:					549.00
07/16/2020	126773	Klein, Todd	Small Business Covid-19 Relief Fund	07/15/2020	2,500.00
Total 126773:					2,500.00
07/16/2020	126774	Kowalski, Craig	Energy Star Rebate - Room Air Conditioner	07/14/2020	20.00
Total 126774:					20.00
07/16/2020	126775	Linzmeier, Lana	Tree Power Incentive - 1 Autumn Blaze Pear	07/14/2020	50.00
Total 126775:					50.00
07/16/2020	126776	Lonz's Tannery Club	Small Business Covid-19 Relief Fund	07/15/2020	2,078.56
Total 126776:					2,078.56
07/16/2020	126777	Lori's Hair Care	Small Business Covid-19 Relief Fund	07/15/20	1,292.46

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126777:					1,292.46
07/16/2020	126778	Lucky Paws Pet Boutique	Small Business Covid-19 Relief Fund	7/15/2020	5,000.00
Total 126778:					5,000.00
07/16/2020	126779	Mammoth Construction	Stone hauling from Kewaunee Nuclear	844	32,842.50
07/16/2020	126779	Mammoth Construction	Public Svc @ 1711 21st Street	846	10,090.00
07/16/2020	126779	Mammoth Construction	Kewaunee Nuclear Plant Stone	847	17,253.75
07/16/2020	126779	Mammoth Construction	Hauling Barriers from Kewaunee Nuclear Plant	849	2,131.25
07/16/2020	126779	Mammoth Construction	Public Svc @ 1017 18th Street	853	9,280.00
07/16/2020	126779	Mammoth Construction	Public Svc @ 1415 16th St	854	16,290.00
07/16/2020	126779	Mammoth Construction	Shoreline Protection	858	31,301.31
Total 126779:					119,188.81
07/16/2020	126780	Manitowoc Co Clerk of Courts	Noxious Weed Notice	7/13/2020	397.49
Total 126780:					397.49
07/16/2020	126781	Manitowoc Co Register Of Deeds	June 2020 Charges	JUNE 2020	30.00
Total 126781:					30.00
07/16/2020	126782	Manitowoc Co Treasurer	June 2020 Jail & Driver Improvement Surcharge	07/02/2020	1,502.40
Total 126782:					1,502.40
07/16/2020	126783	Manitowoc Disposal Inc	Recycling & Refuse Collect 6/27/20-7/10/20	6/27/20-7/10/20	14,157.64
Total 126783:					14,157.64
07/16/2020	126784	Manitowoc Public Utilities	Service - 5000 Memorial Dr.	6/30/2020	636.96
Total 126784:					636.96
07/16/2020	126785	Manitowoc Trophy	July 4th Plaques-Rec	37003	6.50
Total 126785:					6.50

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/16/2020	126786	Marco Technologies LLC	Prof Serv - Library	INV7762304	75.71
Total 126786:					75.71
07/16/2020	126787	MBM	HP 250 G7 i3 Laptop	IN500622	522.86
07/16/2020	126787	MBM	Replace Drum - Rec	IN501588	120.00
Total 126787:					642.86
07/16/2020	126788	Payment Service Network	Service 6/1/2020-6/30/2020	218125	7.95
Total 126788:					7.95
07/16/2020	126789	Phil & Michelle's Bar and Grill LLC	Small Business Covid-19 Relief Fund	7/15/2020	916.67
Total 126789:					916.67
07/16/2020	126790	Postmaster	Postage - TMS #118200	7/10/2020	5,000.00
Total 126790:					5,000.00
07/16/2020	126791	Prairie Farms Dairy Inc	Dairy - Sr. Cntr.	9088134	93.66
07/16/2020	126791	Prairie Farms Dairy Inc	Dairy - Sr. Cntr.	9091910	103.85
Total 126791:					197.51
07/16/2020	126792	PrecisionChem LLC	On-Site Testing and System Evaluation - CH	13844	105.00
Total 126792:					105.00
07/16/2020	126793	Pritzl Auto Sales LLC	Small Business Covid-19 Relief Fund	7/15/2020	516.66
Total 126793:					516.66
07/16/2020	126794	R&J Fricke Inc	Concrete - PWD	9435	450.00
07/16/2020	126794	R&J Fricke Inc	Concrete - PWD	9436	725.00
07/16/2020	126794	R&J Fricke Inc	Concrete - PWD	9437	728.00
Total 126794:					1,903.00
07/16/2020	126795	Reinders	Supplies - Rec	2685507-02	381.36

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126795:					381.36
07/16/2020	126796	Reinhart Foodservice	Food-Sr Ctr	157340	559.46
Total 126796:					559.46
07/16/2020	126797	RESCO	Supplies-Elec	785243-00	2,165.09
07/16/2020	126797	RESCO	CREDIT - Elec	787943-00	130.00-
Total 126797:					2,035.09
07/16/2020	126798	Sandpiper Bar & Grill Inc.	Small Business Covid-19 Relief Fund	7/15/2020	2,175.00
Total 126798:					2,175.00
07/16/2020	126799	SEERA	Focus Program - 06/30/2020	07/10/2020	3,669.36
Total 126799:					3,669.36
07/16/2020	126800	Seizert, Beth	Energy Star Rebate - Refrigerator	7/9/2020	30.00
Total 126800:					30.00
07/16/2020	126801	Stapleton, Patrick	Energy Star Rebate-Clothes Washer	7/9/2020	30.00
Total 126801:					30.00
07/16/2020	126802	State of Wisconsin	June 2020 penalty surcharges	07/02/2020	2,825.10
Total 126802:					2,825.10
07/16/2020	126803	USA Blue Book	Storm water outfall supplies	281760	94.97
Total 126803:					94.97
07/16/2020	126804	Village of Mishicot Treasurer	June 2020 Municipal Court Forfeitures	07/02/2020	697.60
Total 126804:					697.60
07/16/2020	126805	Water Quality Investigations LLC	Services from 4/6/20-5/30/20 - WTR	0520_41	1,475.40

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/16/2020	126805	Water Quality Investigations LLC	Services from 6/1/20-7/5/20 - WTR	0720_23	1,550.44
Total 126805:					3,025.84
07/16/2020	126806	Wisc Dept Of Revenue-DEBITMEMO	June 2020 Sales Tax	JUNE 2020	22,691.93
Total 126806:					22,691.93
07/16/2020	126807	Wisconsin Dept. of Revenue	SDC Collections Fee Owed / Gabaldon, Jarren	07/08/2020	108.60
Total 126807:					108.60
07/16/2020	126808	Wisconsin Retirement System	June 2020 Contributions	JUNE 2020	106,954.75
Total 126808:					106,954.75
07/16/2020	126809	WPPI - Debit Memo	June 2020 Purchased Power	25-62020	546,002.65
Total 126809:					546,002.65
07/16/2020	126810	WPPI Energy	Water Plant equipment retrofit Monthly Loan Py	INV13884	390.23
07/16/2020	126810	WPPI Energy	Water Pump Efficiency Retrofit - Wtr	INV13885	117.30
07/16/2020	126810	WPPI Energy	Library HVAC retrofit project Loan Payment - Ju	INV13886	1,075.67
07/16/2020	126810	WPPI Energy	LED Street Light - Elec	INV13888	252.92
Total 126810:					1,836.12
07/16/2020	126811	Zoerb, Joyce	Refund for Taste of Madison	07/14/2020	128.00
Total 126811:					128.00
07/16/2020	126812	Zunker, Rodger	Energy Star Rebate - Clothes Washer	7/9/2020	30.00
Total 126812:					30.00
07/16/2020	126813	Zunker, Ryan	Energy Star Rebate - Room A/C	7/9/2020	20.00
Total 126813:					20.00
07/22/2020	126814	U.S. Bank-Debit Memo	Credit Card Usage - June/July 2020	STMT;7/6/20	38,780.57

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126814:					38,780.57
07/23/2020	126815	Advanced Disposal	Dumpster fee - WWTP	B20000456392	210.20
Total 126815:					210.20
07/23/2020	126816	Airgas USA LLC	Cylinder Rent - WWTP	9971545201	262.26
Total 126816:					262.26
07/23/2020	126817	Aupperle, Katherine	Refund/Overpayment 2019 Real Estate Propert	7/17/20	215.64
Total 126817:					215.64
07/23/2020	126818	B&M Waste Service Inc	Portable Restroom Rental-7/9/20-8/8/20-Rec	151882	80.00
07/23/2020	126818	B&M Waste Service Inc	Portable Restroom Rental-7/16/20-8/15/20-Rec	152165	80.00
Total 126818:					160.00
07/23/2020	126819	Badgerland Aggregates LLC	Concrete Sand - DPW	10128	984.52
Total 126819:					984.52
07/23/2020	126820	Best Price Auto LLC	Small Business Covid-19 Relief Fund	7/15/2020	2,500.00
Total 126820:					2,500.00
07/23/2020	126821	Biermann, Laurie	Two Rivers Central Park Concert Series	7/17/2020	300.00
Total 126821:					300.00
07/23/2020	126822	Brabazon Pump Co. LTD	Service - Wtr	5192503	172.00
Total 126822:					172.00
07/23/2020	126823	Civic Systems LLC	Fixed Asset Training - Finance	CVC19659	225.00
Total 126823:					225.00
07/23/2020	126824	Core & Main LP	CLAMP, REPAIR 4"x12"x1"	M579751	1,353.26

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126824:					1,353.26
07/23/2020	126825	Delta Dental of Wisconsin	Delta Premiums - August 2020	AUGUST 2020	4,324.15
Total 126825:					4,324.15
07/23/2020	126826	Employee Benefits Corp	COBRASecure / Admin Fee	2951928	98.60
Total 126826:					98.60
07/23/2020	126827	Erickson Sports Apparel	4th of July Shirts-Rec	102187	180.00
Total 126827:					180.00
07/23/2020	126828	Fastenal	Supplies-Wtr	WIMAN267255	292.83
07/23/2020	126828	Fastenal	Supplies-Wtr	WIMAN267314	163.89
07/23/2020	126828	Fastenal	Supplies-Wtr	WIMAN267318	160.59
Total 126828:					617.31
07/23/2020	126829	Froelich, Craig	Energy Star Rebate - Dehumidifier	7/20/2020	15.00
Total 126829:					15.00
07/23/2020	126830	Frontier	Telephone	5741;7/20	81.68
Total 126830:					81.68
07/23/2020	126831	GameTime	Supplies-Rec	PJI-0137581	1,607.87
Total 126831:					1,607.87
07/23/2020	126832	Hastings Fiber Glass Products	Repairs-Elec	594078	387.71
Total 126832:					387.71
07/23/2020	126833	Hawkins Inc	Chemicals - Wtr	4737581	706.90
07/23/2020	126833	Hawkins Inc	Supplies-Wtr	4752336	3,619.61
07/23/2020	126833	Hawkins Inc	Roller Assembly - Wtr	4754218	873.08

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126833:					5,199.59
07/23/2020	126834	Hietpas, Jonathan	Special Event Entertainment/Bands on the Beac	7/17/2020	1,950.00
Total 126834:					1,950.00
07/23/2020	126835	HydroCorp	Cross Connection Control Prog - June 2020 -	0057900-IN	3,138.00
Total 126835:					3,138.00
07/23/2020	126836	Kip Gulseth Construction Co	Storm Lateral - 13th & Adams	2978	3,492.01
Total 126836:					3,492.01
07/23/2020	126837	Magill, Tammy	Energy Star Rebate - Clothes Washer	7/20/2020	30.00
Total 126837:					30.00
07/23/2020	126838	Malley Printing Co	Business Card - Terri Vosters	27852	65.00
Total 126838:					65.00
07/23/2020	126839	Mammoth Construction	1130 Harbor Street	855	3,066.25
Total 126839:					3,066.25
07/23/2020	126840	Manitowoc Disposal Inc	Empty & Haul - Rec	47236	360.00
Total 126840:					360.00
07/23/2020	126841	Marco Technologies LLC	Prof Serv - Library	INV7770134	389.65
Total 126841:					389.65
07/23/2020	126842	MBM	Meter Charge 6/1/2020-6/30/2020	IN501321	262.84
Total 126842:					262.84
07/23/2020	126843	Midwest Meter Inc	Supplies - Wtr	0122710-IN	11,790.00

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126843:					11,790.00
07/23/2020	126844	Packer City Intl Trucks Inc.	Parts - DPW	X101126605:01	46.93
07/23/2020	126844	Packer City Intl Trucks Inc.	Parts - DPW	X101126822:01	78.88
Total 126844:					125.81
07/23/2020	126845	Piggly Wiggly	Supplies-SrCtr	STATEMENT 7/1/20	52.17
Total 126845:					52.17
07/23/2020	126846	Prairie Farms Dairy Inc	Dairy - Sr. Cntr.	9095476	103.55
Total 126846:					103.55
07/23/2020	126847	R&J Fricke Inc	Concrete-PW	9513	1,400.00
Total 126847:					1,400.00
07/23/2020	126848	Reinhart Foodservice	Food-Sr Ctr	153510	503.65
07/23/2020	126848	Reinhart Foodservice	Dry goods-Sr Ctr	156223	26.27
07/23/2020	126848	Reinhart Foodservice	Supplies-SrCtr	161264	476.79
Total 126848:					1,006.71
07/23/2020	126849	RESCO	Supplies-Elec	791153-00	269.70
07/23/2020	126849	RESCO	Supplies-Elec	791154-00	334.80
Total 126849:					604.50
07/23/2020	126850	Schindler Elevator Company	Preventive Maint-CH	8105371427	801.57
Total 126850:					801.57
07/23/2020	126851	Schroeder Bros Co	UPS fees - WWTP	91058	64.72
Total 126851:					64.72
07/23/2020	126852	Simono, Patrick	Energy Star Rebate - Dehumidifier	7/20/2020	15.00

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CITY OF TWO RIVERS

Check Register - Monthly Bill Summary
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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126852:					15.00
07/23/2020	126853	Stadler, Julie	Energy Star Rebate - Dehumidifier	7/16/2020	15.00
Total 126853:					15.00
07/23/2020	126854	Strand Associates Inc	Prof. Svcs. 6/1/20-6/30/20	0161662	459.17
Total 126854:					459.17
07/23/2020	126855	Streicher's	Ammunition - PD	I1424881	617.14
07/23/2020	126855	Streicher's	Clothing-PD	I1429551	880.98
07/23/2020	126855	Streicher's	Clothing-PD	I1432609	9.78
07/23/2020	126855	Streicher's	Clothing-PD	I1434303	46.00
Total 126855:					1,553.90
07/23/2020	126856	Suettinger's Keys LLC	Latch protector-Rec	124144	15.49
Total 126856:					15.49
07/23/2020	126857	Two Rivers Historical Society	August 2020 Monthly Support Pymt	AUG2020	250.00
Total 126857:					250.00
07/23/2020	126858	Two Rivers Municipal Utilities	606 Parkway Blvd	045-00007334-03;7/20	80.00
07/23/2020	126858	Two Rivers Municipal Utilities	606 Parkway Blvd	045-00007335-03;7/20	1,523.03
07/23/2020	126858	Two Rivers Municipal Utilities	606 Parkway Blvd	045-00007336-03;7/20	1,742.23
07/23/2020	126858	Two Rivers Municipal Utilities	606 Parkway Blvd	045-00007337-03;7/20	36.40
07/23/2020	126858	Two Rivers Municipal Utilities	606 Parkway Blvd	045-00007338-03;7/20	54.61
07/23/2020	126858	Two Rivers Municipal Utilities	1326 E River Street	070-00002595-06;7/20	5.75
Total 126858:					3,442.02
07/23/2020	126859	USA Blue Book	Supplies-WWTP	285961	41.26
Total 126859:					41.26
07/23/2020	126860	Wells Fargo Vendor Financial Services L	Compact Track Loaders T595	5011062875	932.74
07/23/2020	126860	Wells Fargo Vendor Financial Services L	Toolcat 5600	5011062876	1,185.38

Attachment: Summary of Bills July 2020 (2797 : Summary of Verified Bills)

CITY OF TWO RIVERS

Check Register - Monthly Bill Summary
Check Issue Dates: 7/1/2020 - 7/31/2020Page: 32
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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126860:					2,118.12
07/23/2020	126861	Wisc State Laboratory/Hygiene	Flouride - Wtr	638109	26.00
Total 126861:					26.00
07/23/2020	126862	Wisconsin Dept. of Revenue	SDC Collections Fee Owed / Dixon, Tommie Le	7/20/20	35.00
Total 126862:					35.00
07/23/2020	126863	Wisconsin Media	Ads - Elec	0003374409	450.00
Total 126863:					450.00
07/23/2020	126864	Wisconsin Public Service	114 DAVIS STREET	0401271669-1;7/20	17.08
07/23/2020	126864	Wisconsin Public Service	3801 Mishicot Rd.	0401271669-4;7/20	37.39
07/23/2020	126864	Wisconsin Public Service	Pavillion	0401271669-42;7/20	18.78
Total 126864:					73.25
07/30/2020	126865	4 K's Pest Control LLC	Pest control - Sr. Center	14981	45.00
Total 126865:					45.00
07/30/2020	126866	Anthem Blue Cross and Blue Shield	Health Insurance Premiums for August 2020	000663372D	147,213.40
Total 126866:					147,213.40
07/30/2020	126867	August Winter & Sons Inc	Payment #11 for Project # TR 24	PAY REQUEST NO. 11	38,715.35
Total 126867:					38,715.35
07/30/2020	126868	Aurora Health Care	Pharmacy - Junel 2020	IN 488	338.71
Total 126868:					338.71
07/30/2020	126869	B&M Waste Service Inc	Portable Restroom Rental-7/19/20-8/18/20-Rec	152197	320.00
07/30/2020	126869	B&M Waste Service Inc	Toilet rental-Seagull Marina	152364	175.00
07/30/2020	126869	B&M Waste Service Inc	Toilet rental-Blue Goose	152365	80.00
07/30/2020	126869	B&M Waste Service Inc	Toilet rental-Coast Guard	152366	175.00

Attachment: Summary of Bills July 2020 (2797 : Summary of Verified Bills)

CITY OF TWO RIVERS

Check Register - Monthly Bill Summary
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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/30/2020	126869	B&M Waste Service Inc	Portable Restroom Rental-7/21/20-08/20/20-Re	152367	80.00
07/30/2020	126869	B&M Waste Service Inc	Toilet rental-LBC	152390	80.00
07/30/2020	126869	B&M Waste Service Inc	Toilet rental-Neshotah Beach	152402	80.00
Total 126869:					990.00
07/30/2020	126870	Banyon Data Systems Inc	Property Tax Billing Support - Fin	00160568	795.00
Total 126870:					795.00
07/30/2020	126871	Buelow Vetter Buikema Olson & Vliet LL	FFCRA leave-Kim-CM	STATEMENT NO. 114	8,630.55
07/30/2020	126871	Buelow Vetter Buikema Olson & Vliet LL	FMLA Research - CM	STATEMENT NO. 115	484.50
07/30/2020	126871	Buelow Vetter Buikema Olson & Vliet LL	FMLA Research - CM	STATEMENT NO. 5	867.00
Total 126871:					9,982.05
07/30/2020	126872	Carron Net Company Inc	Vinyl Hose Carrier - FD	343642	157.50
Total 126872:					157.50
07/30/2020	126873	Charter Communications Inc	Service 7/19/20-8/18/20- Sr. Cntr	0000265071920	80.33
Total 126873:					80.33
07/30/2020	126874	Cole, Catherine	Refund - Columbus, OH Trip Cancelled	7/23/20	534.00
Total 126874:					534.00
07/30/2020	126875	Cretton Enterprises Inc	June 2020 Services - CH	9114	3,134.70
Total 126875:					3,134.70
07/30/2020	126876	Deer Creek Technologies	Jan - Dec 2020 Subscription - PD	2020-143	455.00
Total 126876:					455.00
07/30/2020	126877	Downing, Darren	Refund - Overpayment on final bill	4/17/2020 (2ND)	17.89
Total 126877:					17.89
07/30/2020	126878	Elliott, Wendy	Refund / Overpayment of ambulance charges	7/22/2020	237.65

Attachment: Summary of Bills July 2020 (2797 : Summary of Verified Bills)

CITY OF TWO RIVERS

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126878:					237.65
07/30/2020	126879	Erickson Sports Apparel	Jerseys - Rec	102193	2,454.00
Total 126879:					2,454.00
07/30/2020	126880	Fire Dept Petty Cash	Petty cash reimbursement	7/29/20	100.10
Total 126880:					100.10
07/30/2020	126881	Gordon, Alice & Ronald	Refund - Mackinac Island Trip Cancelled	7/23/20	2,580.00
Total 126881:					2,580.00
07/30/2020	126882	Grainger	Supplies-WTP	9587660060	189.54
07/30/2020	126882	Grainger	Supplies-WTP	9590307774	70.07
Total 126882:					259.61
07/30/2020	126883	Green Acres Lawn/Garden Ctr	Sod-Cem	5690	30.00
Total 126883:					30.00
07/30/2020	126884	Industrial Chem Labs	Eliminator-Rec	308100	481.41
Total 126884:					481.41
07/30/2020	126885	Kornely, Richard & Sharon	Refund - Mackinac Island Trip Cancelled	7/23/20	700.00
Total 126885:					700.00
07/30/2020	126886	Malley Printing Co	Billing Envelopes - Cus Serv	27844	2,310.30
Total 126886:					2,310.30
07/30/2020	126887	Manitowoc Co Public Works	Badger Net Circiut; July-Sept 2020	455TIME-8947-T	465.00
Total 126887:					465.00
07/30/2020	126888	Manitowoc Co Solid Waste	Account #162 June 2020 Service - Eng	36144	10,202.63

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/30/2020	126888	Manitowoc Co Solid Waste	Account #239 June 2020 Service - Eng	36178	1,943.43
Total 126888:					12,146.06
07/30/2020	126889	Manitowoc Disposal Inc	Recycling & Refuse Collect 7/11/20-7/24/20	7/30/20	14,157.64
Total 126889:					14,157.64
07/30/2020	126890	MBM	HP Toner / Clerks Office	IN502915	361.74
Total 126890:					361.74
07/30/2020	126891	North American Rescue	Rescue Task Force Vest - PD	IN451011	1,659.94
Total 126891:					1,659.94
07/30/2020	126892	Northern Lake Service Inc	Testing - Wtr	381157	1,496.00
07/30/2020	126892	Northern Lake Service Inc	Testing - Wtr	381231	434.40
07/30/2020	126892	Northern Lake Service Inc	Testing - Wtr	381261	434.40
Total 126892:					2,364.80
07/30/2020	126893	Office Depot	Supplies-Insp	103952997001	100.74
07/30/2020	126893	Office Depot	Return - Insp.	104081940001	13.99
07/30/2020	126893	Office Depot	Supplies-Insp	104088443001	13.99
07/30/2020	126893	Office Depot	Supplies - City Mgr	108553001001	68.59
Total 126893:					169.33
07/30/2020	126894	Penworthy Company LLC, The	Jef-Lib	0563746-IN	299.62
Total 126894:					299.62
07/30/2020	126895	Peserik, Katie	Behringer Room Cancellation	7/27/2020	49.20
Total 126895:					49.20
07/30/2020	126896	Prairie Farms Dairy Inc	Dairy - Sr. Cntr.	9099028	103.85
Total 126896:					103.85

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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/30/2020	126897	Psychologie Clinique S.C.	Officer Evaluation-Clarksen	STATEMENT 7/21/20	525.00
Total 126897:					525.00
07/30/2020	126898	R&J Fricke Inc	Concrete - PWD	09514	525.00
07/30/2020	126898	R&J Fricke Inc	Concrete - PWD	09515	625.00
07/30/2020	126898	R&J Fricke Inc	Concrete - PWD	09516	500.00
07/30/2020	126898	R&J Fricke Inc	Concrete - PWD	09517	650.00
Total 126898:					2,300.00
07/30/2020	126899	Recycle Technologies Inc	Servcie-FD	203469	403.45
Total 126899:					403.45
07/30/2020	126900	Reinhart Foodservice	Food-Sr Ctr	166194	502.57
Total 126900:					502.57
07/30/2020	126901	Schaus Roofing/Mechanical	HVAC - FD	77899	914.72
Total 126901:					914.72
07/30/2020	126902	Sitkiewitz, Barbara	Refund - Mackinac Island Trip Cancelled	7/23/20	575.00
Total 126902:					575.00
07/30/2020	126903	Skarvan, Dave	Refund - Mackinac Island Trip Cancelled	7/23/20	700.00
Total 126903:					700.00
07/30/2020	126904	The Honeygoats	Bands on the Beach - Rec	7/27/2020	900.00
Total 126904:					900.00
07/30/2020	126905	Thuermer Law Office	July 2020 Services	JULY 21, 2020	1,471.00
Total 126905:					1,471.00
07/30/2020	126906	Town & Country Engineering Inc	WWTP WI MS Program Assistance	021796	3,945.00
07/30/2020	126906	Town & Country Engineering Inc	2020 SDW & CWF Loan Apps	021797	1,375.00

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CITY OF TWO RIVERS

Check Register - Monthly Bill Summary
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Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
07/30/2020	126906	Town & Country Engineering Inc	Digester & RAS Improvements	021798	4,992.65
07/30/2020	126906	Town & Country Engineering Inc	Digester & RAS Improvements	021799	4,317.00
Total 126906:					14,629.65
07/30/2020	126907	Two Rivers Hotel Group LLC	CDI Grant - WEDC	7/21/2020	250,000.00
Total 126907:					250,000.00
07/30/2020	126908	Vanderveren, Sally A	July 2020 Services	0720	3,658.33
Total 126908:					3,658.33
07/30/2020	126909	Watson's Naturally Pure Water	Statement - WWTP 6/30/2020	181174	108.95
07/30/2020	126909	Watson's Naturally Pure Water	Statement - WWTP 6/30/2020	181433	82.95
Total 126909:					191.90
07/30/2020	126910	WEX Bank	Gasoline	66471799	6,877.76
Total 126910:					6,877.76
07/30/2020	126911	Wisconsin Media	Legal Ads	0003416674	680.11
Total 126911:					680.11
07/30/2020	126912	Wisconsin Public Service	FIRE DEPT	0401271669-03;7/20	49.59
07/30/2020	126912	Wisconsin Public Service	1300 35th Street - Rec	0401271669-07;7/20	18.16
07/30/2020	126912	Wisconsin Public Service	WARM BLDG	0401271669-12;7/20	18.44
07/30/2020	126912	Wisconsin Public Service	LIBRARY	0401271669-23;7/20	125.56
07/30/2020	126912	Wisconsin Public Service	CITY HALL	0401271669-24;7/20	468.19
07/30/2020	126912	Wisconsin Public Service	1401 LAKE STREET	0401271669-35;7/20	183.04
07/30/2020	126912	Wisconsin Public Service	GENERATOR	0401271669-38;7/20/2020	16.51
Total 126912:					879.49
07/30/2020	126913	WOMT	After Further Review 2020-2021	886-00058-0000	82.00
Total 126913:					82.00
07/30/2020	126914	Wood, Michelle D.	Refund - Classes Cancelled/Low Enrollment	7/28/2020	26.00

Attachment: Summary of Bills July 2020 (2797 : Summary of Verified Bills)

CITY OF TWO RIVERS

Check Register - Monthly Bill Summary
Check Issue Dates: 7/1/2020 - 7/31/2020

Check Issue Date	Check Number	Payee	Description	Invoice Number	Invoice Amount
Total 126914:					26.00
Grand Totals:					2,178,292.02

Attachment: Summary of Bills July 2020 (2797 : Summary of Verified Bills)

State of Wisconsin
 Department of Natural Resources
 Bureau of Community Financial Assistance
 101 S. Webster St., P O Box 7921
 Madison WI 53707-7921
 Phone (608) 266-7555
 Fax (608) 267-0496

Environmental Improvement Fund (EIF) Project Acceptance Certification

Form 8700-280 (R 1/11)

Notice: This form is authorized by ss. 281.58 and 281.61, Wis. Stats. Submittal to the Department of a completed form is mandatory for all recipients of EIF loans. A separate form is required for each prime contractor. Failure to submit a completed form shall result in the denial of final disbursement of loan funds.

Personally identifiable information provided on this form will be used to determine compliance with closeout procedures as outlined in the Financial Assistance Agreement and may be made available upon request under Wisconsin's Open Records laws (ss. 19.32-19.39, Wis. Stats.) and requirements.

Project Information

Municipality Name

City of Two Rivers

Prime Contractor

Miron Construction, Inc.

Contract Number

2018 Headworks Improvements

Upon final inspection and approval of all change order(s), all work performed by the awarded contractor(s) and subcontractor(s) (if any) has been constructed according to the plans and specifications approved by the Department of Natural Resources (DNR).

DNR Plan and Specification Approval Number

S-2017-0673

Date Approved

10/20/2017

Project Description

Processes, equipment and structures that will be incorporated into the wastewater treatment facility will include:

- Structure 15 – Headworks Building

A new headworks building, denoted as Structure 15, will be constructed on the south side of the plant property. The new headworks building will house preliminary treatment including mechanical fine screening with washer/compactor, grit removal and classifier/washer, superintendent's office, and a bathroom. The mechanical fine screen will be located in a concrete channel, with two parallel channels for manual bar screen bypass and overflow channels. Both the mechanical fine screen and grit removal systems will discharge into roll-off garbage dumpsters for landfill disposal. A new asphalt access road on the south side of the plant will be constructed to accommodate the new headworks building.

- Supervisory Control & Data Acquisition (SCADA) System

A new SCADA system will be implemented at the Two Rivers WWTP as part of this project. The SCADA system will provide plant operators with centralized computer stations to monitor and control plant treatment processes.

Engineer Certification

On behalf of the engineering consulting firm contracted by the above named municipality, I hereby certify to the best of my knowledge that the above mentioned project has been constructed and inspected to conform to the referenced specifications.

Name of Engineer

Gregory J. Droessler

Signature of Engineer

Name of Engineering Firm

Town and Country Engineering, Inc.

Date Signed

8/12/2020

Municipal Certification

The above named municipality has accepted at its regular meeting of officials the above mentioned project from the contractor and engineer.

Name of Authorized Representative

Gregory Buckley

Signature of Authorized Representative

Title

City Manager

Date Signed



Manitowoc County Emergency Services

1024 South 9th Street - Manitowoc, WI 54220

Director Travis Waack

920-683-4207 - traviswaack@co.manitowoc.wi.us

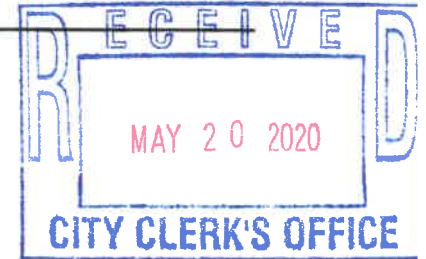
MEMORANDUM

DATE: May 12th, 2020

TO: Municipal Clerks

FROM: Kayla Beckerdite, Emergency Services Program Manager, Manitowoc County

SUBJECT: Manitowoc County Multi-Hazards Mitigation Plan 2020-2025



Dear Municipal Clerks,

The Manitowoc County Multi-Hazards Mitigation Plan 2020-2025 has been approved by Wisconsin Emergency Management and FEMA pending adoption by the local municipalities. This plan has been developed from the information gathered through a county-wide survey distributed in December of 2018, a public information meeting, and Manitowoc County Emergency Management Committee meetings. Enclosed is a resolution for adoption of the plan. By adopting this plan your jurisdiction will remain eligible for FEMA's Hazard Mitigation grant programs which can assist greatly when recovering from disasters or developing mitigation projects to reduce losses from future disasters. Included in the plan must be a copy of all resolutions from jurisdictions who choose to adopt the plan. If you could address this resolution at your earliest convenience prior to November 15th, we would greatly appreciate it. If you do adopt the plan, please send me a copy of the adopting resolution. If you have any questions please do not hesitate to contact me at 920-683-4360.

You can view the Manitowoc County Multi-Hazards Mitigation Plan by visiting the Manitowoc County Emergency Management page and going to the Resources tab.

Thank you,

Kayla Beckerdite
Manitowoc County Emergency Services Program Manager
kaylabeckerdite@co.manitowoc.wi.us
920-683-4360

Enclosures:
Adopting Resolution

Attachment: Memo Hazard (2861 : Manitowoc County Multi-Hazard Mitigation Plan 2020-2025)



RESOLUTION

Adopting the Manitowoc County Multi-Hazards Mitigation Plan 2020-2025

WHEREAS, the City of Two Rivers recognizes the treat that natural hazards pose to people and property; and

WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

WHEREAS, an adopted multi-hazards mitigation plan is required as a condition of future grant funding for mitigation projects; and

WHEREAS, the City of Two Rivers participated jointly in the planning process with Manitowoc County and the other local units of government within the County to prepare a Multi-Hazards Mitigation Plan;

NOW, THEREFORE, BE IT RESOLVED that the City of Two Rivers hereby adopts the Manitowoc County Multi-Hazard Mitigation Plan 2020-2025,

BE IT FURTHER RESOLVED that a copy of this resolution be forwarded to the Manitowoc County Emergency Management Department, in evidence of the City's adoption of said plan.

Adopted this 17th day of August, 2020.

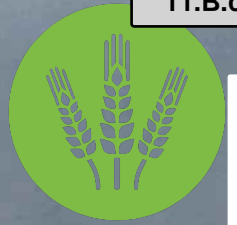
Council Member

Gregory E. Buckley
City Manager



MANITOWOC COUNTY, WISCONSIN

Hazard Mitigation Plan 2020 - 2025



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MANITOWOC COUNTY, WISCONSIN

HAZARD MITIGATION PLAN



Adopted: January 21, 2020

Prepared by:

Bay-Lake Regional Planning Commission
425 S Adams Street, Suite 201
Green Bay, WI 54301
(920) 448-2820



The preparation of this document was financed through contract #18010-05 between Manitowoc County and the Bay-Lake Regional Planning Commission. The cost to develop this plan was paid for through a grant from the Federal Emergency Management Agency (FEMA) through the Pre-Disaster Mitigation program. A local match for the grant was provided through in-kind efforts by Manitowoc County.



FEMA

Resolution of County Adoption

No. 2019/2020-64

RESOLUTION ADOPTING 2020 TO 2025 HAZARD MITIGATION PLAN

TO THE MANITOWOC COUNTY BOARD OF SUPERVISORS:

1 WHEREAS, Manitowoc County recognizes the threat that natural hazards pose to people
2 and property; and

3
4 WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the
5 potential for harm to people and property and save taxpayer dollars; and

6
7 WHEREAS, an adopted natural hazard mitigation plan is required as a condition of future
8 grant funding for mitigation projects; and

9
10 WHEREAS, in recognition of the need to prepare for the mitigation of natural hazards,
11 Manitowoc County has prepared its *Manitowoc County Wisconsin Multi Hazards Mitigation Plan*
12 *2020-2025* (the "Plan"); and

13
14 WHEREAS, Wisconsin Emergency Management ("WEM") has reviewed and approved
15 the Plan; and

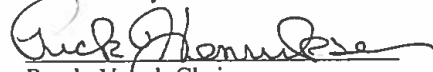
16
17 WHEREAS, after careful consideration and review, the Public Safety Committee
18 recommends the County Board of Supervisors of the County of Manitowoc adopt the Plan;

19
20 NOW, THEREFORE, BE IT RESOLVED, that the County Board of Supervisors of the
21 County of Manitowoc hereby adopts the *Manitowoc County Wisconsin Multi Hazards Mitigation*
22 *Plan 2020-2025* as approved by WEM as the County's official Hazard Mitigation Plan; and


23
24 BE IT FURTHER RESOLVED, that upon approval of the Manitowoc County, Wisconsin
25 Hazard Mitigation Plan (2020-2025), the Bay-Lake Regional Planning Commission will submit
26 the Plan to Wisconsin Emergency Management and Federal Emergency Management Agency
27 officials for final approval, as required under the Hazard Mitigation Grant Program.

Dated this 21st day of January 2020.

Respectfully submitted by the
Public Safety Committee


Randy Vogel, Chair

FISCAL IMPACT: None.

FISCAL NOTE: Reviewed and approved by Comptroller. 

LEGAL NOTE: Reviewed and approved as to form by Corporation Counsel. 

APPROVED:


Bob Ziegelbauer, County Executive


Date 1/21/2020

FEMA/WEM Approval Letters



STATE OF WISCONSIN
DEPARTMENT OF MILITARY AFFAIRS

DIVISION OF EMERGENCY MANAGEMENT

Darrell L. Williams, Ph.D.
Administrator

Tony Evers
Governor

December 6, 2019

Mr. Travis Waack, Director
Manitowoc County Emergency Management
1024 South 9th Street
1st Floor, Room 113
Manitowoc, WI 54220

Dear Mr. Waack:

Wisconsin Emergency Management (WEM) has reviewed the *Manitowoc County Wisconsin Multi-Hazards Mitigation Plan 2020-2025*. The Federal Emergency Management Agency (FEMA) and WEM have signed a Program Administration by States operational agreement, dated November 9, 2017, allowing WEM to review local mitigation plans to ensure they meet the required criteria for a multi-jurisdiction hazard mitigation plan outlined in 44 CFR Part 201. Upon review, Manitowoc County has met the required criteria for a multi-jurisdictional hazard mitigation plan.

The county and participating jurisdictions *must now adopt* the plan in order to have a FEMA-approved hazard mitigation plan and be eligible for funding through the Hazard Mitigation Grant Program, Pre-Disaster Mitigation program, and the Flood Mitigation Assistance program.

I have emailed a copy of the WEM Mitigation Plan Review Tool for your records.

If you have any questions, please call Katie Sommers at (608) 242-3222.

Sincerely,

Charles Nettesheim
Hazard Mitigation Specialist
Wisconsin Emergency Management

Enclosures

Cc: Steve Fenske, East Central Region Emergency Management Director
Madison Smith, Bay Lake Regional Planning Commission Representative

FEMA/WEM Approval Letters



STATE OF WISCONSIN
DEPARTMENT OF MILITARY AFFAIRS
DIVISION OF EMERGENCY MANAGEMENT

Darrell L. Williams, Ph.D.
 Administrator

Tony Evers
 Governor

February 3, 2020

Mr. Travis Waack, Director
 Manitowoc County Emergency Management
 1024 South 9th Street
 1st Floor, Room 113
 Manitowoc, WI 54220

Dear Travis:

It gives me great pleasure to inform you that the *Manitowoc County, Wisconsin, Hazard Mitigation Plan 2020-2025* has officially been approved by FEMA for the County! Approval for the other participating jurisdictions is contingent upon receipt of their adoption resolutions.

The plan complies with the requirements of the Disaster Mitigation Act of 2000. The approved jurisdictions are eligible to apply for funding through the Hazard Mitigation Grant Program, Pre-Disaster Mitigation program, and Flood Mitigation Assistance program through February 2, 2025, for projects identified in the Plan. Per regulation, the Plan must be updated and resubmitted for approval every five years for the participating jurisdictions to remain eligible for mitigation funding.

Along with the Meets Requirements letter, you received the Local Mitigation Plan Review Tool, which includes recommended revisions for the five-year update.

Congratulations on the approval of your Plan! Our office commends the County for its commitment to mitigation and reducing future disaster losses, and we look forward to working with you in the future.

If you have any questions, please call me at (608) 242-3222 or Robyn Fennig at (608) 888-5292.

Sincerely,

Katie Sommers, CFM
 Hazard Mitigation Section Supervisor

Enclosure

Cc: Steve Fenske, East Central Region Emergency Management Director, WEM
 Madison Smith, Environmental Planner, Bay-Lake Regional Planning Commission

Attachment: manitowoc-county-hazard-mitigation-plan-2020-2025 (2861 : Manitowoc County Multi-Hazard Mitigation Plan 2020-2025)

FEMA/WEM Approval Letters

FEB 03 2020



U.S. Department of Homeland Security
536 S. Clark St. 6th Floor
Chicago, IL 60605

FEMA

Ms. Robyn Fennig
State Hazard Mitigation Officer
Wisconsin Emergency Management
2400 Wright Street, P.O. Box 7865
Madison, WI 53707-7865

Dear Ms. Fennig:

Thank you for submitting the adoption documentation for the Manitowoc County Wisconsin Multi-Hazards Mitigation Plan 2020-2025. The plan was reviewed based on the local plan criteria contained in 44 CFR Part 201, as authorized by the Disaster Mitigation Act of 2000. The Manitowoc County plan met the required criteria for a multi-jurisdiction hazard mitigation plan and the plan is now approved for the county. Please submit the adoption resolutions for any remaining jurisdictions who participated in the planning process.

The approval of this plan ensures continued availability of the full complement of Hazard Mitigation Assistance (HMA) Grants. All requests for funding, however, will be evaluated individually according to the specific eligibility and other requirements of the particular program under which the application is submitted.

We encourage Manitowoc County and the participating jurisdictions to follow the plan's schedule for monitoring and updating the plan, and to continue their efforts to implement the mitigation measures. The expiration date of the Manitowoc County plan is five years from the date of this letter. To continue project grant eligibility, the plan must be reviewed, revised as appropriate, resubmitted, and approved no later than the plan expiration date.

Please pass on our congratulations to Manitowoc County. If you or the communities have any questions, please contact Cadence Peterson at cadence.peterson@fema.dhs.gov or at 312-408-5260.

Sincerely,

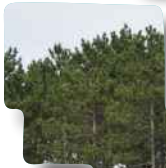
Julia McCarthy
Chief, Risk Analysis Branch
Mitigation Division

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BAY LAKE
 Regional Planning Commission | Since 1972



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EXECUTIVE SUMMARY

PLAN UPDATE SUMMARY

Table 0.1 below lists the plan changes made to the previous Manitowoc County, Wisconsin Hazard Mitigation Plan. Table 0.2 lists the updates made to the previously identified mitigation strategies.

Table 0.1: Plan Update Summary

Plan Chapter	Overview of Plan Update
Chapter 1: Introduction	Updated recent disasters, planning process participants, and public review information. Several updates were made to the original steering committee to reflect the changes in positions since the last plan was adopted. The steering committee updated the prioritized order of the hazards to be addressed and added coastal hazards, landslides, subsidence, and dam failure.
Chapter 2: Planning Area	Updated demographic profile information using the 2010 Census. Updated land use information.
Chapter 3: Risk Assessment	All hazard profiles, occurrences, and probabilities were updated. In addition, the risk assessments were updated. Hazard occurrences were updated to include all from 1995 to 2011 (original plan covered 1990 to 2005). Hazard probabilities were updated based on updated occurrences. Updated critical facilities and changed some categories names. A risk assessment was added for coastal hazards, landslide, subsidence, and dam failure.
Chapter 4: Mitigation Strategy	Updated the mitigation action plan to account for completed projects, updated timetables, and new project additions. Added specific municipal mitigation actions.
Chapter 5: Plan Maintenance and Adoption Process	Updated plan maintenance process and plan update schedule.



Table 0.2: Mitigation Strategy Updates

Project	Changes
All Hazards	
Establish Mutual Aid Agreements for utility and communications systems including 9-1-1 that are similar to the Mutual Aid Box Alarm System (MABAS)	Completed for communications systems, a similar effort has been completed for utilities.
Develop a central data collection process to report hazard incidences and resulting deaths, injuries, and property or crop damages.	Addition
Add capability for the Dispatch Center to accept text messages.	Addition
Maintain Code Red (i.e. Reverse 911) capability.	Addition. Capability provided in 2013, \$22K/year to maintain
Develop land use policies that guide development away from hazardous areas; reduce density in hazardous areas; and/or encourage greater development restrictions in hazardous areas	Completed
Update Comprehensive Plan and include land use policies that guide development away from hazardous areas; reduce density in hazardous areas; and/or encourage greater development restrictions in hazardous areas	Addition
Collect building footprints for all structures in the County to allow for analysis of where facilities/structures are located	Completed for City of Manitowoc +3 miles. Priority changed from "Medium" to "Low" for the remaining of the county. Timetable changed from "2009-2010" to "2015-2020".
Collect building height data for all structures in the County	Priority changed from "Medium" to "Low".
Work with County, State, and Federal agencies to maintain a consistent critical facility database	Changed Responsible Party from "Manitowoc County Planning and Park Commission and Manitowoc County Emergency Management" to "Manitowoc County Hazard Mitigation Plan Steering Committee." Priority changed from "Low" to "High".
Acquire updated air photos and LIDAR data	Addition
Outage management software to help triage outage repairs	Addition
Ability to test individual sirens after repairs	Addition
Develop Comprehensive Safety Plan for all municipal-owned buildings	Addition
Tornado and Strong Wind	
Assist personnel in schools and businesses, public facility managers, mobile home park managers, and citizens in determining "best available" tornado safety areas or need to construct safe rooms	Added "mobile home park manager" and "or need to construct safe rooms" to Project
Continued investment in state-of-the-art early warning systems	Combined with another project
Use of early warning system through pagers, NOAA weather radios, and sirens to first responders	Added "continued investment" and "social media and Code Red" to Project
Consider adoption of ordinances requiring construction of safe shelters for mobile home parks, fairgrounds, shopping malls, or other vulnerable public places	Removed "shopping malls" from Project and changed Timetable from "2008-2012" to "2015-2020"

Table 0.2: Mitigation Strategy Updates (cont'd)

Project	Changes
Tornado and Strong Wind	
Harden utility infrastructure to make more resistant to tornadoes and high winds (i.e., burying of telephone lines)	Removed
Review and update Comprehensive Safety Plan for all county buildings	Added "-owned" to Project
Revise and amend zoning and building ordinances to require anchoring of manufactured and mobile homes and exterior attachments (such as carports and porches)	Removed "...and exterior attachments (such as carports and porches)" from Project and changed Timetable from "2010" to "2015". Changed Estimated Cost from "~\$25.00/mobile home for tie down and then additional costs for leveling and installation" to "Costs to be determined"
Inform public of severe weather	Changed project wording from "Disseminate severe weather safety information to the public" to "Inform public of severe weather"
Hail	
Harden utility infrastructure to make more resistant to hail (i.e., burying of telephone lines)	Changed Timetable from "2010-2012" to "2015-2020" and changed Responsible Party from "Manitowoc County Emergency Management Department, in conjunction with local utility companies" to "local utility companies, and local jurisdictions"
Animal Protection	Added "Costs to be determined" for Estimated Cost
Promote purchase of hail crop insurance	For Project, replaced "Promote purchase of..." with "Provide information about..." Added "Covered by existing budgets" to Estimated Cost
Winter Storms	
Utilization of the media to disseminate emergency information	Added "highway depts" to Responsible Party
Provide educational materials to the public regarding safety during winter storm events	Changed Responsible Party from "Local highway departments and local law enforcement departments" to "County Emergency Management and State EM (readywisconsin.wi.gov)"
Flooding	
Dissemination of instructions to the public through the media	Added "highway depts" to Responsible Party
Handle the evacuation of people and property in the case of a severe flood event	Added "County Emergency Management, County Highway Dept, County Aging Dept, and County Health Dept" to Responsible Party
Sand-bagging when necessary	Added "County Emergency Management, local public works depts" to Responsible Party. Changed Priority from "Low" to "Medium"
Review and update floodplain zoning ordinances as necessary	Added Note "Updated in 2010; approved by FEMA and WDNR"
Land use planning	Added Note "Updated in 2008 with Comprehensive Planning; will update again in 10 years." Changed Timetable from "2008-2011" to "2018-2020". Changed Priority from "High" to "Low"

Table 0.2: Mitigation Strategy Updates (cont'd)

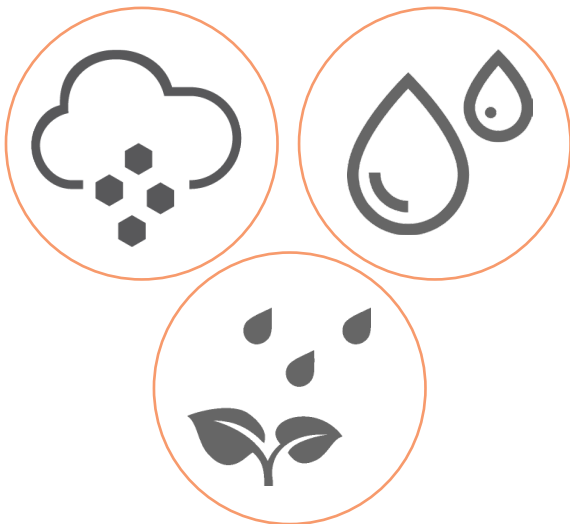
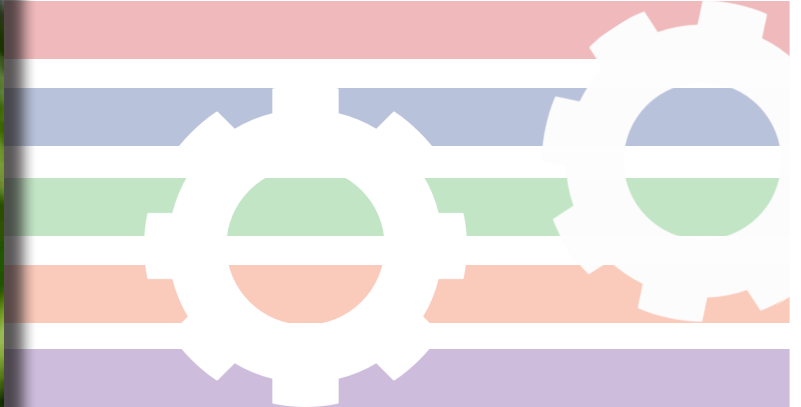
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Project	Changes
Flooding	
Promotion of the sale of flood insurance	Removed. Replace by actions that address NFIP.
Issue or deny floodplain development/building permits	Addition to address NFIP Compliance
Inspect all development to assure compliance with local ordinance	Addition to address NFIP Compliance
Maintain records of floodplain development	Addition to address NFIP Compliance
Assist in the preparation and revision of floodplain maps	Addition to address NFIP Compliance
Help residents obtain information on flood hazard, floodplain map data, flood insurance, and proper construction measures	Addition to address NFIP Compliance
Study effects of current and future development in the approximate floodplain and any other areas that have not yet been studied	Changed Estimated Cost of "\$40,000 - \$50,000" with "Costs to be determined." Changed Responsible Party to replace "County Emergency Management" with "GIS"
Review and update floodplain zoning ordinances as necessary	Changed Priority from "Medium" to "Low". Changed Project Timetable from "As Needed" to "Annually".
Stormwater protection planning	Changed Responsible Party to replace "County and Municipal Planning/Zoning" with "Wisconsin DNR and Public Works/Engineering"
Dam Failure Flooding	
Review and update evacuation procedures for persons located in affected area as needed	Moved to "Flooding"
Flooding (Stormwater)	
Stormwater Protection Planning	Moved to "Flooding"
Erosion Control Zoning	Moved to "Flooding"
Stormwater Retention/Detention Facilities	Moved to "Flooding"
Extreme Cold	
Continue to provide safety information to the public during periods of extreme temperature	Added "County Emergency Management, and County Health Dept" to Responsible Party
Extreme Heat	
Continue to provide safety information to the public during periods of extreme temperature	Added "County Emergency Management, and County Health Dept" to Responsible Party
Lightning	
Protection of structures through use of fire resistant materials	For Project, replaced "Protection of..." with "Provide information about protecting..." and added Fire Inspectors to Responsible Party
Disseminate severe weather safety information to the public	Removed as it's covered under "Inform public of severe weather" under Tornado and Strong Wind
Use of early warning system through pagers and NOAA weather radios	Moved to All Hazards. Removed "to first responders" in project
Drought	
Identification of areas with potential ground water level problems and inspection of shallow wells in those areas for adequate depth and construction	Changed Timetable from "2008-2012" to "2015-2020"

Attachment: manitowoc-county-hazard-mitigation-plan-2020-2025 (2861 : Manitowoc County Multi-Hazard Mitigation Plan 2020-2025)

Table 0.2: Mitigation Strategy Updates (cont'd)

Project	Changes
Dense Fog	
Upkeep existing signage in areas of high fog event incidence	Changed Responsible Party from "Manitowoc County Traffic Safety Commission" to "County Highway Dept and Local Jurisdictions"
Additional fog warning signs along Interstate State 43	Removed - Determined to be unnecessary.
Wildland Fires	
Coordinate public outreach efforts to promote such things as non-combustible roof covering, fire safe construction, safe burning, and the importance of clearing brush and grass away from buildings	Changed Priority from "Medium" to "Low". Removed "Local building inspectors" from Responsible Party
Coastal Hazards	
Continue to enforce greater setbacks for properties adjacent to Lake Michigan under the county shoreland zoning ordinance	Addition
Land Subsidence	
Provide information to residents as needed	Addition



Chapter 1 - Introduction

► PURPOSE OF THE PLAN

The primary focus of the Manitowoc County, Wisconsin Hazard Mitigation Plan is to evaluate the planning area's potential exposure to hazards and to identify appropriate mitigation strategies. Consistent with the Code of Federal Regulations (44 CFR Part 201.6), this plan conforms to Federal Emergency Management Agency (FEMA) requirements for local hazards mitigation planning.

This plan provides County-level information on areas of risk, magnitude of risk, and strategies for reducing this risk. Through the process of developing this plan, the County addressed issues related to the protection of lives and property from hazards, the protection of critical facilities, and the reduction of community and taxpayer costs associated with disaster relief and rescue efforts. Completion and approval of the plan makes Manitowoc County eligible to apply for future FEMA disaster relief and mitigation project funds, helping the County to implement their recommended mitigation strategies.

► DISASTER MITIGATION ACT OF 2000

The development and update of the Manitowoc County, Wisconsin Hazard Mitigation Plan is in response to passage of the Disaster Mitigation Act of 2000. This act was signed into law in October of 2000. The Act attempts to stem the losses from disasters, reduce future public and private expenditures, and speed up response and recovery from disasters. The Act (Public Law 106-390) was amended by the Robert T. Stafford Relief and Emergency Assistance Act. The following is a summary of the parts of the Disaster Mitigation Act of 2000 that pertain to local governments and tribal organizations:

- The Act establishes a new requirement for local governments and tribal organizations to prepare a hazard mitigation plan in order to be eligible for funding from FEMA through the Pre-Disaster Mitigation Assistance Program and the Hazard Mitigation Grant Program.
- The Act establishes a requirement that natural hazards need to be addressed in the risk assessment/vulnerability analysis part of a hazard mitigation plan. Man-made/technological hazards are encouraged, but not required to be addressed.

- The Act authorizes up to seven percent of Hazard Mitigation Grant Program funds available to a state after a federal disaster to be used for development of state, local and tribal organization hazard mitigation plans.
- The Act established November 1, 2004, as the date by which local governments and tribal organizations are to prepare and adopt their respective plans in order to be eligible for the FEMA Hazard Mitigation Grant Program; this deadline was November 1, 2003, for the Pre-Disaster Mitigation Program.
- If a plan is not prepared by November 1, 2004, and a major disaster is declared, in order for a local government or tribal organization to be eligible to receive funding through the Hazard Mitigation Grant Program, they must agree to prepare a hazard mitigation plan within one year.
- In addition, not having a current, FEMA-approved, and adopted hazard mitigation plan will prevent local and tribal governments from utilize funding through the Pre-Disaster Mitigation Grant Program. Such federal funding hinges on the community being covered by a hazard mitigation plan within one year.

► FUNDING OF THE HAZARD MITIGATION PLAN

In July 2018, Manitowoc County received a planning grant to develop an update to their hazard mitigation plan in the amount of \$33,308 from FEMA through the FFY17 Pre-Disaster Mitigation Program. Through the grant (Agreement #: EMC-2018-PC-0004), FEMA provided 75 percent of the funds (\$24,981), while the remaining 25 percent (\$8,327) was required by Manitowoc County to meet the local match.

Manitowoc County entered into a contract (#18010-05) with the Bay-Lake Regional Planning Commission to prepare the update to the hazard mitigation plan. Development of the plan began in February 2019.

► FIVE PARTS OF THIS NATURAL HAZARDS MITIGATION PLAN

The Manitowoc County, Wisconsin Hazard Mitigation Plan is divided into five chapters in order to address FEMA's local mitigation plan requirements. The five chapters are as follows:

Chapter 1 - Introduction and Planning Process



Chapter 2 - Community Profile



Chapter 3 - Risk Assessment



Chapter 4 - Mitigation Strategy



Chapter 5 - Plan Adoption and Maintenance

► PLANNING PROCESS

Development of the Manitowoc County, Wisconsin Hazard Mitigation Plan was based on the planning requirements and guidance provided by FEMA and WEM. Following these requirements and guidance, the plan meets the requirements of the Disaster Mitigation Act of 2000. Since the WEM guidance for hazard mitigation plans recommended that planning areas "be consistent with a community's comprehensive planning boundary," the planning area for this plan includes all of Manitowoc County with its three cities (Manitowoc, Two Rivers, and Kiel), nine villages (Cleveland, Francis Creek, Kellnersville, Maribel, Mishicot, Reedsville, St. Nazianz, Valders, and Whitelaw), and eighteen towns (Table 2.1).

The steering committee, comprised of county, city, and village representatives, emergency management personnel, and businesses, guided the plan development process over an 18-month time-frame beginning in February 2019. Professional planning support and facilitation was provided by the Bay-Lake Regional Planning Commission. Public review and input was encouraged at all meetings and through a public informational meeting to present the plan goals, mitigation actions plan, and mapped hazard areas.



Development of the plan was structured along a five-phase planning process:

Phase 1: Pre-planning and review of steering committee appointments

Phase 2: Reassessing risks and critical factors

Phase 3: Updating the mitigation action plan

Phase 4: Reviewing the policies and procedures for plan implementation

Phase 5: Documenting the planning process and plan action

Phase 1 involved initial conversations and meetings aimed at reviewing the previous steering committee appointments, reconvening the steering committee, and outlining the planning process and responsibilities of the steering committee.

Phase 2 was comprised of meetings with the steering committee to reassess natural hazards and potential risks to the County, and reassessing identified critical facilities.

Phase 3 involved updating the mitigation strategy to address identified risks including removing completed task and adding new mitigation actions to address risks.

Phase 4 involved reviewing the policies that affect plan implementation and the procedures that would be followed to implement the plan.

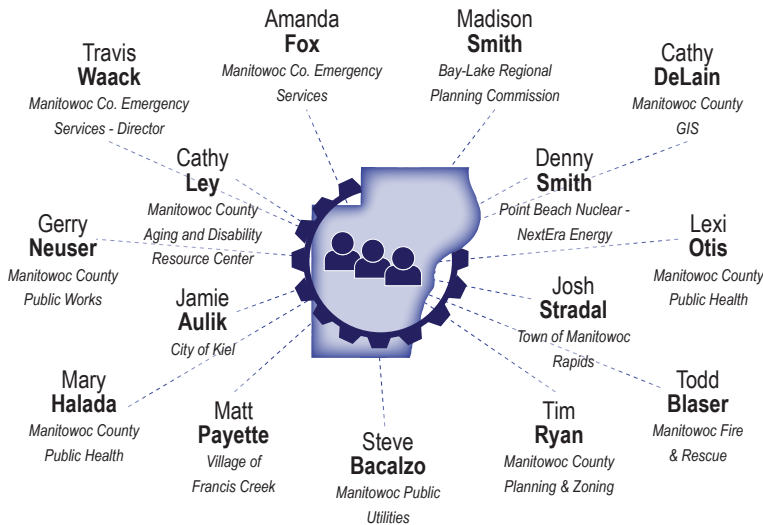
Phase 5 involved documenting the planning process, developing a complete draft of the plan, and plan adoption.

Plan development was completed with the adoption of the plan by resolution at the Manitowoc County Board. The maps in the Planning Area and Risk Assessment chapters of the plan were completed using the Bay-Lake Regional Planning Commission's Geographic Information System (GIS), allowing spatial analysis and a consistent base map. The FEMA HAZUS software was not utilized due to the availability of current local data and numerous differences between census boundaries and locally available map features. Maps included in this plan are for general planning purposes only, and are not for legal or formal survey purposes.

►HAZARD MITIGATION PLAN STEERING COMMITTEE

Manitowoc County established a steering committee for the plan development (Table 1.1). The steering committee was responsible for providing input, helping to guide the planning process, and reviewing draft chapters of the plan.

Table 1.1: Manitowoc County, Hazard Mitigation Plan Steering Committee



Other contributors: Angela Kowalzek-Adrians

During the assessment of natural hazard conditions, the plan steering committee reviewed the prioritization of the various potential natural hazards facing the planning area. The hazards addressed in this plan are listed below in order of priority.

1. Tornado and Strong Wind
2. Winter Storm
3. Hail
4. Flooding
5. Extreme Cold
6. Excessive Heat
7. Drought
8. Lightning
9. Coastal Hazards
10. Dense Fog
11. Land Subsidence
12. Wildland Fires



The steering committee reviewed and analyzed each section of the plan, and subsequently Table 0.1 was developed to document the sections of the plan that were revised as part of the update process. The steering committee held six meetings to update the plan: February 11, 2019, May 16, 2019, July 17, 2019, and October 3, 2019. Copies of the sign-in sheets are included in Appendix A.

Public Involvement

Steering Committee Meetings

Opportunities for public comment during the drafting stage of the plan were held at all meetings of the steering committee, which were open to the public. No comments were provided by the public at the meetings.

Public Informational Meeting

An informational meeting was held for the public on November 2019, 5:30 p.m. at the Manitowoc County Emergency Operations Center (EOC) at 1024 S 9th Street in Manitowoc. This meeting was held to provide additional opportunity for the public to review and comment on the draft plan and maps. No comments were provided by the public at this meeting. Both the steering committee meetings and the public informational meeting were open to the public and notices were posted at County EOC.

County Board Meeting

On January 21, 2020 the Manitowoc County Board adopted the hazard mitigation plan at a public meeting. A copy of the resolution of adoption can be found at the front of this plan on page I and II.

Neighboring Jurisdictions

A copy of the Manitowoc County, Wisconsin Hazard Mitigation Plan and an invitation to the public informational meeting was sent to emergency management directors in counties adjacent to Manitowoc County including Sheboygan, Kewaunee, Calumet, and Brown counties for their review and comment. No comments were received.

Critical Facilities Online Maps

Throughout the development of the Manitowoc County Hazard Mitigation Plan Update, an online ArcGIS platform to view and filter critical facilities was created. The link to this tool is <https://baylakerpc.maps.arcgis.com/apps/webappviewer/index.html?id=bd4968b7ed394fc4b071a9559af0c708>



Chapter 2 - Community Profile

General Geography

The planning area for the Manitowoc County, Wisconsin Hazard Mitigation Plan covers Manitowoc County and all of the municipalities within the county. The County has twelve incorporated communities (three cities and nine villages).

Map 2.1 illustrates the location of Manitowoc County and its municipalities. Table 2.1 indicates the geographical size of the County as well as the size of each municipality within the County.

Table 2.1: Manitowoc County Planning Area

Municipality	Total Planning Area (Sq. Miles)
C. Kiel	2.1
C. Manitowoc	18.1
C. Two Rivers	6.5
V. Cleveland	2.0
V. Francis Creek	1.2
V. Kellnersville	0.5
V. Maribel	1.1
V. Mishicot	2.5
V. Reedsville	1.2
V. St. Nazianz	0.8
V. Valders	1.4
V. Whitelaw	0.5
T. Cato	34.9
T. Centerville	23.8
T. Cooperstown	35.1
T. Eaton	35.5
T. Franklin	36.2
T. Gibson	35.3
T. Kossuth	38.6
T. Liberty	35.5
T. Manitowoc	6.1
T. Manitowoc Rapids	27.3
T. Maple Grove	35.4
T. Meeme	36.3
T. Mishicot	27.6
T. Newton	34.4
T. Rockland	35.3
T. Schleswig	33.8
T. Two Creeks	14.9
T. Two Rivers	31.7
County Total	595.9

Source: U.S. Bureau of the Census, 2010, and Bay-Lake Regional Planning Commission, 2019.

Historical County Description

Manitowoc was officially founded in 1836. In 1839, the county government was formed and the first courthouse followed a year later. Early county commissioners authorized the first roads to connect the farms and settlements of the area. Manitowoc County is located along Lake Michigan in east central Wisconsin encompassing an area of approximately 380,000 acres. Manitowoc County is bordered by Brown and Kewaunee counties to the north; Calumet County to the west; Sheboygan County to the south; and Lake Michigan to the east. Map 2.1 provides a general location of Manitowoc County in Wisconsin.

Development Pattern

A field inventory of land use of the county was conducted in 2010 by the Bay-Lake Regional Planning Commission, with updates completed in 2015 (Map 2.2). Using GIS, land use types were tabulated to calculate the total area of Manitowoc County a 381,453 acres (Table 2.2).

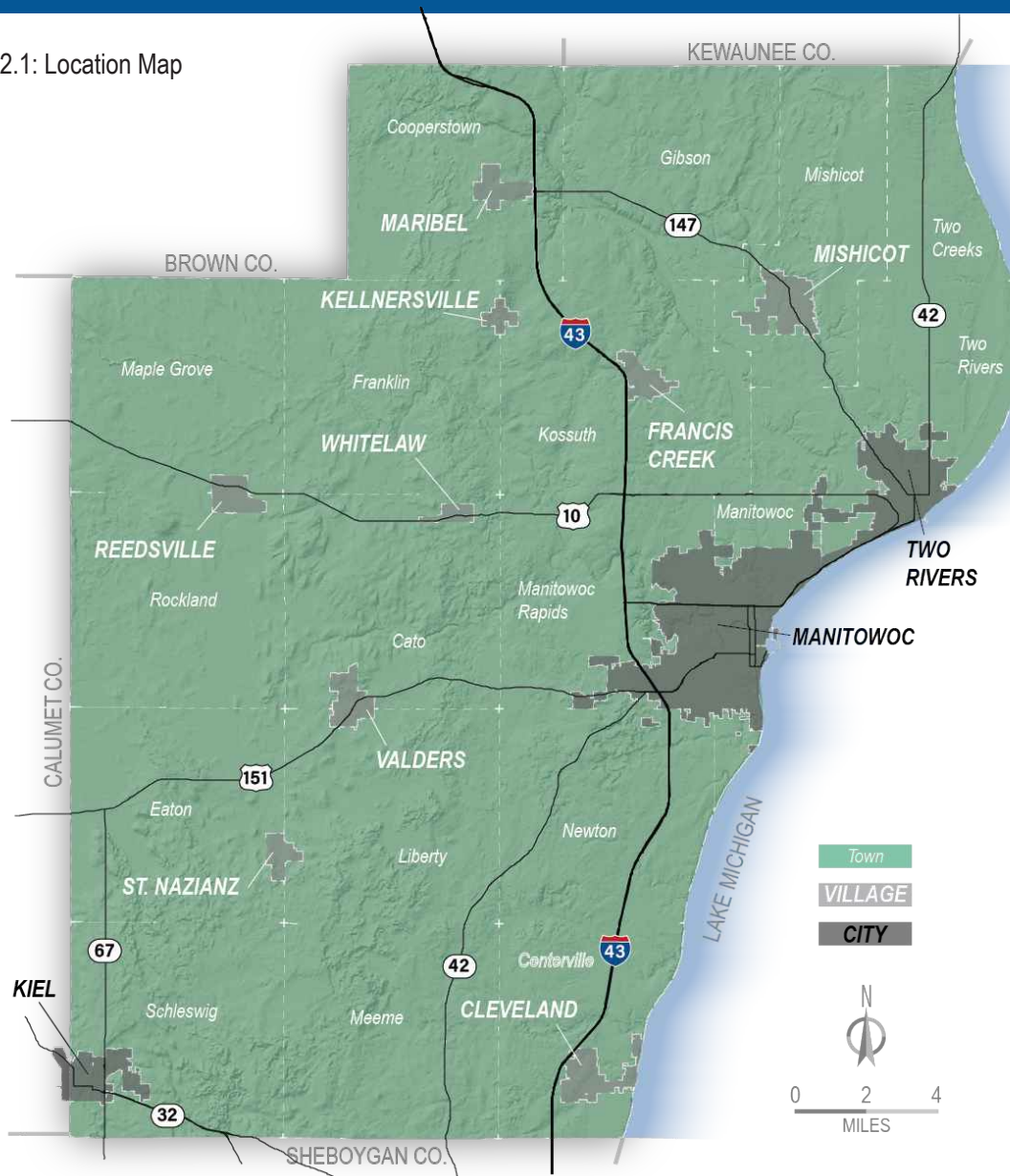
The vast majority of the county is comprised of agricultural land (specifically croplands) with 219,368 acres or 57.5 percent of the land. Woodlands and natural areas comprise 106,890 acres or 28 percent. Approximately 48,129 acres or about 13 percent of Manitowoc County is developed. Developed land is comprised of residential, commercial, industrial, transportation, communications utilities, governmental/institutional, and parks and recreation.

Table 2.2: Manitowoc County Land Use, 2015

Land Use Type	Acreage	Percent
Communication/Utilities	831.7	0.2%
Governmental/Institutional	1,598.6	0.4%
Commercial	1,877.7	0.5%
Industrial	3,569.2	0.9%
Parks and Recreation	5,565.4	1.5%
Wetland/Water Features	7,066.3	1.9%
Transportation	17,005.3	4.5%
Residential	17,680.6	4.6%
Woodland/Natural Areas	106,890.3	28.0%
Agricultural	219,368.0	57.5%
Total	381,453.1	100.0%

Source: Bay-Lake Regional Planning Commission, 2010 and 2015 land use data; 2019.

Map 2.1: Location Map



Manitowoc County is located in northeast Wisconsin and has a total of 381,637 acres. The County is surrounded by Brown and Kewaunee Counties to the north, Calumet County to the west, and Sheboygan County to the south. Lake Michigan borders the County to the east and provides over 35 miles of lakeshore coastline.



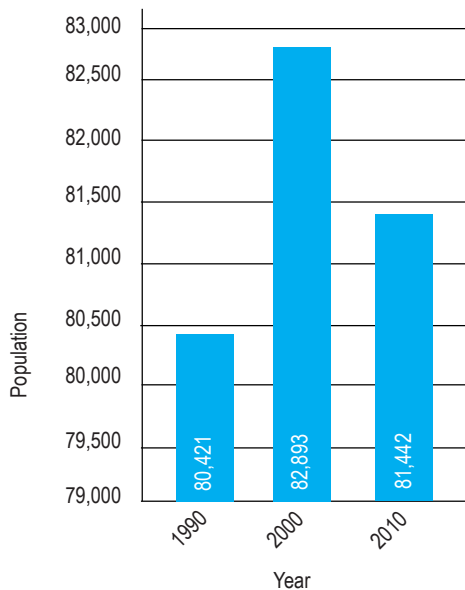
Community Profile

Demographic Trends

Population

Over the past 110 years, Manitowoc County's population increased by 93 percent or 39,181 persons. The county's population increased every decade with the exception of a slight decline between 1980 and 1990, and again between 2000 and 2010. The largest period of population increase in the county occurred between 1910 and 1920 with an increase of 14.8 percent.

Figure 1: Population Trends, Manitowoc County 1990 - 2010



Manitowoc County is projected to see a slow, but steady growth in its population from 2010 to 2030 and is projected to have a population of 82,230 by 2030, according to the Wisconsin Department of Administration (WDOA).

Figure 2: Population Projections, 1990 - 2040

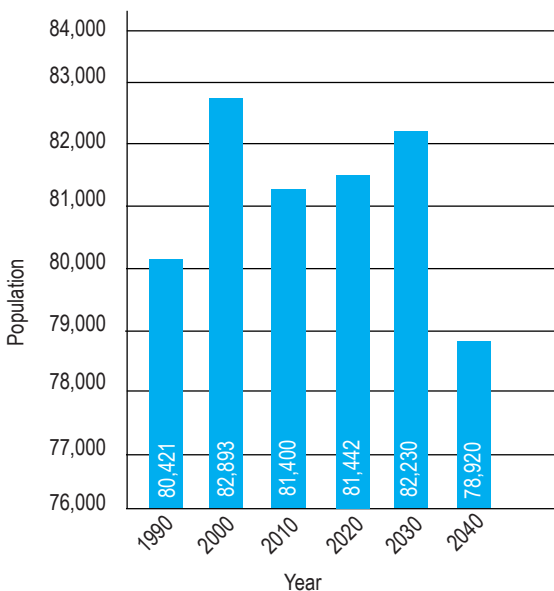
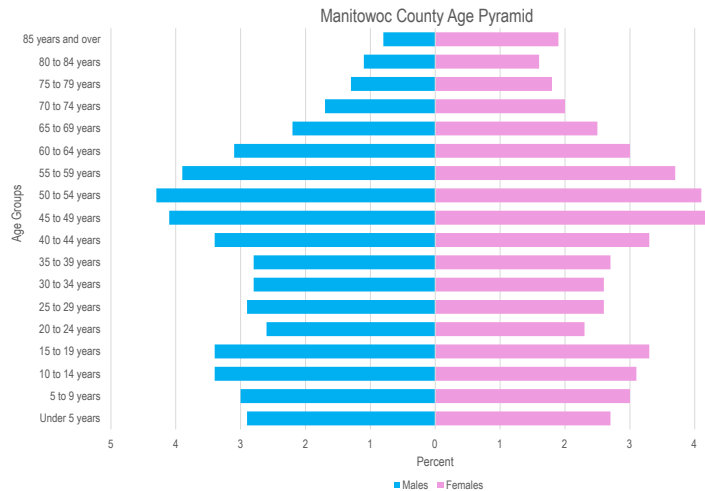


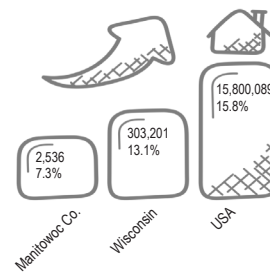
Figure 3: Age Pyramid



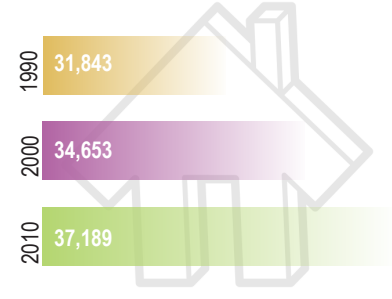
Housing

From 1970 to 2010, Manitowoc County has had steady growth in the number of housing units and gained 2,536 housing units during this time. The market is diverse, 48.1% own their house with a mortgage or loan, 27.3% own without a mortgage and 24.6% rent.

Change of Housing Units, 2000 - 2010

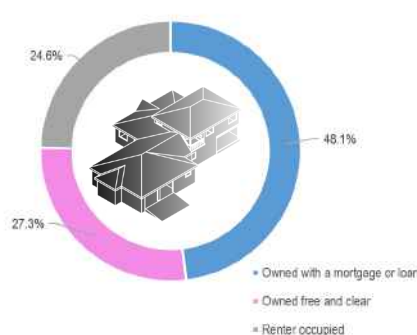


Housing Units

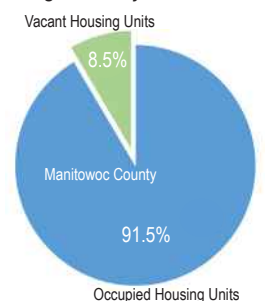


There were approximately 37,356 housing units in Manitowoc County in 2017. Over 30% of homes were built in 1939 or earlier. Between 1980 and 2009, Manitowoc County averaged slightly over 3,300 new housing units every 10 years. However, only 340 new housing units have been built since 2010 with the majority (312) being built in the cities. Just over 75% of housing units in Manitowoc County are single family housing units while 21% of housing units are multifamily. The total housing unit vacancy rate was 8.5% in 2010.

Housing Tenure, 2010



Housing Vacancy, 2010



Community Profile

Economy

As a result of the recession that affected the entire country, there was a significant jump in the county's unemployed in 2009 causing the unemployment rate to reach its highest level, 10.1 percent. It took the county 5 years to recover from this impact.

The civilian labor force is comprised of employed persons and those seeking employment, and excludes persons in the armed forces and those under age 16. Variations in the number of persons in the labor force are the result of many factors. Shifts in the age and gender characteristics of the population, changes in the number of residents aged 16 and over, and the proportion of this group working or seeking employment are all factors affecting the size of the labor force.

The majority of employed county residents worked in manufacturing (30%) followed by healthcare and social assistance. The median household income has increase at a county, state, and national level. Manitowoc County's median household income has increased from 2010 - 2017 by approximately \$1,699 according to the American Community Survey (ACS).

According the 2010 U.S. Census, the poverty rate of Manitowoc County was 9.2%, residing less than the state and national percentages. The County's total percent of population over 16 years old in the labor force is 65.4%, which is less than the state (66.8%), but greater than the national percentage (63.0%).

Industry and employment projections have been developed from the year 2010 to 2020 for the 11 county Bay Area Workforce Development district which consists of Brown, Door, Florence, Kewaunee, Manitowoc, Marinette, Menominee, Oconto, Outagamie, Shawano, and Sheboygan counties. Illustrated in the table above, it is projected that there will be an overall 12 percent increase in full and part-time non-farm employment from 2010 to 2020. The Professional and Business Services industries are expected to add 8,750 jobs for a 23 percent increase, followed by Leisure and Hospitality with 8,091 new jobs reflecting a 21 percent gain.

Figure 4: Median Household Income
Inflation-Adjusted

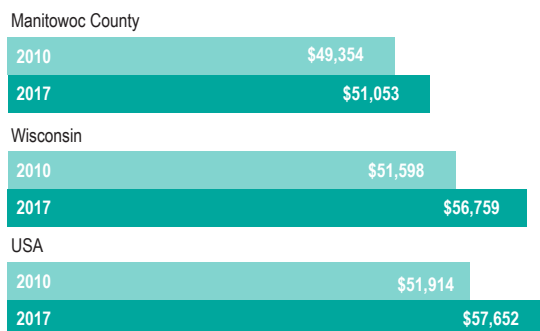
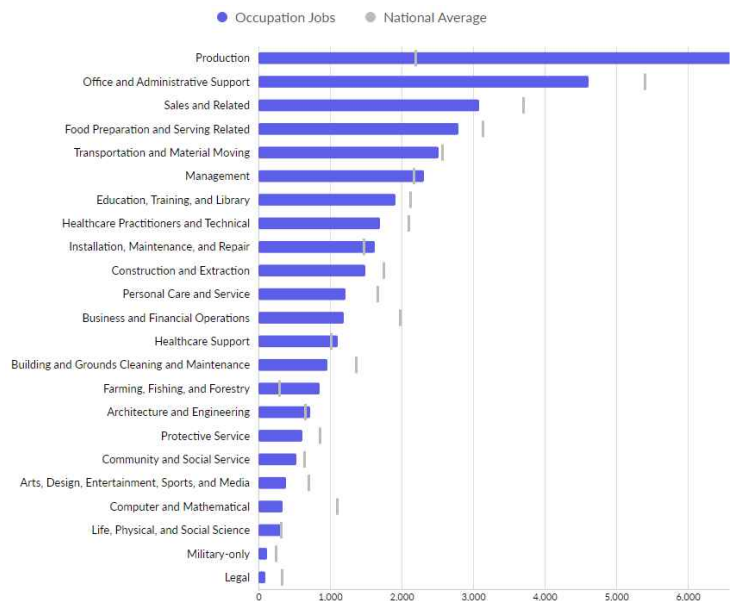


Figure 5: Largest Occupation Jobs, Manitowoc County

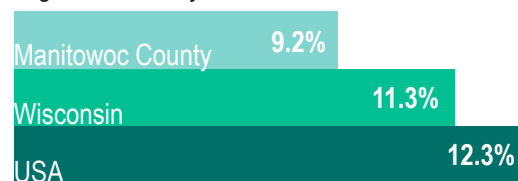


Agriculture remains as a key economic component in Manitowoc County. It includes hundreds of family-owned farms, agriculture related businesses and industries that provide equipment services, and other products farmers need to process, market, and deliver food to consumers. The generating, sales, and processing of these farm products create momentous employment and revenue opportunities for residents.

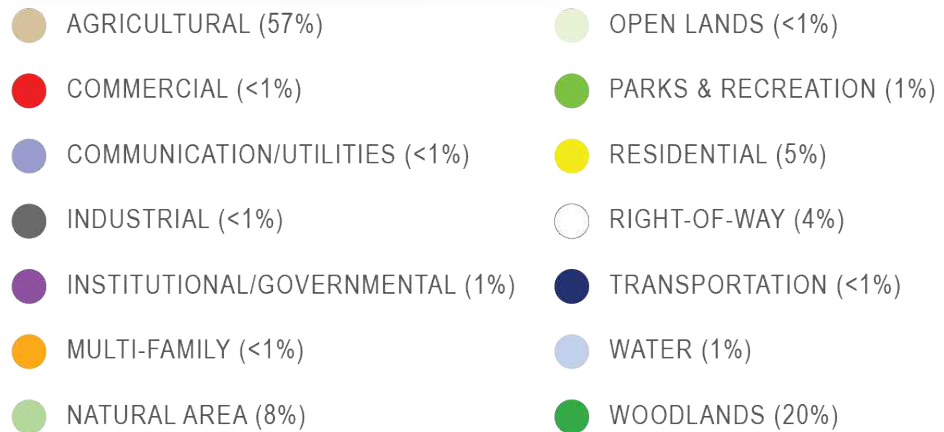
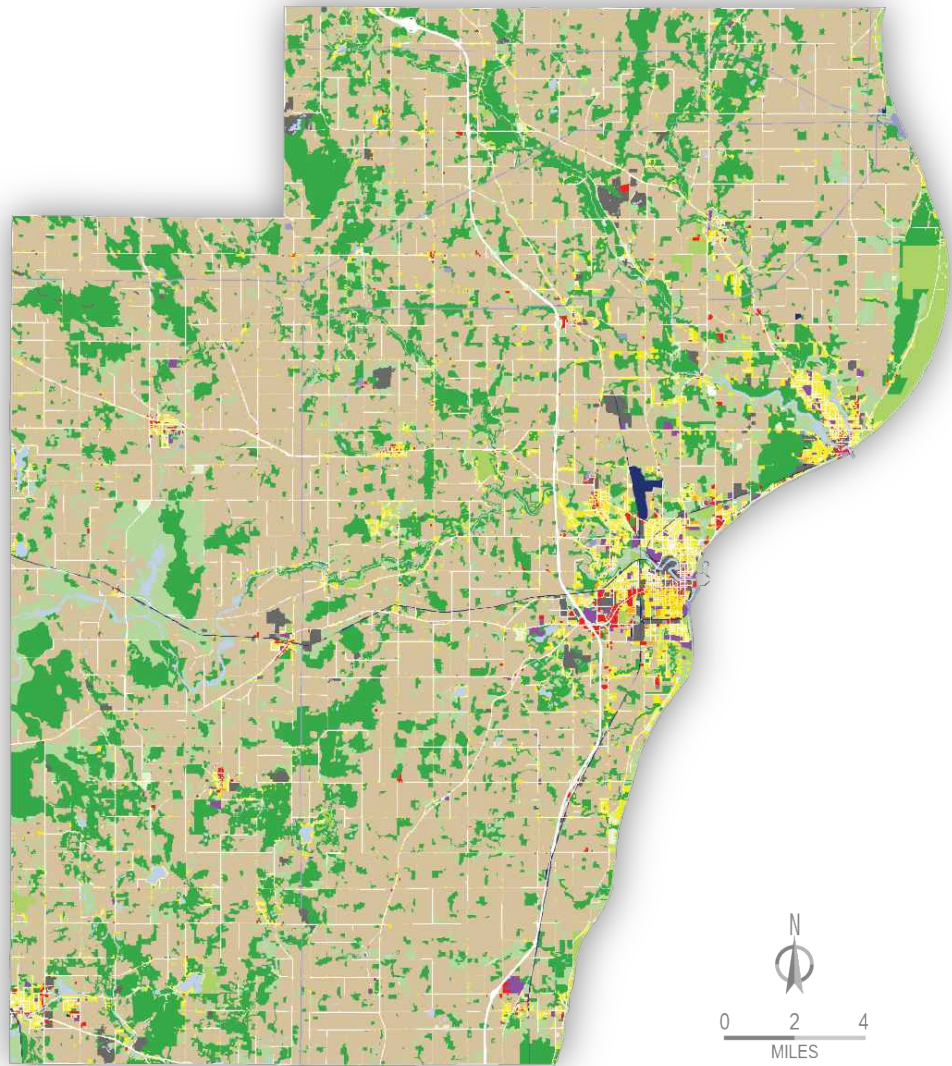
The 2014 UW-Extension Agricultural report, *Manitowoc County Agriculture: Value & Economic Impact*, characterizes the impact of agriculture the County:

- Provides jobs for 5,105 county residents, or 11.5 percent of the county's total employment. Jobs include farm owners and managers, farm employees, veterinarians, crop and livestock consultants, feed, fuel and other crop input suppliers, farm machinery dealers, etc.
- Generates \$1.5 billion in economic activity and contributes \$360 million to the county's total income.
- Pays over \$16 million in taxes (not including all property taxes paid to local schools).

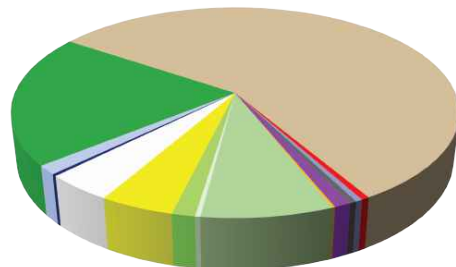
Figure 6: Poverty Rate



Map 2.2: Land Use Map



FAST FACT:
Manitowoc County is
over 50% agricultural
and 20% woodlands.



Chapter 3 - Risk Assessment

In order to more effectively evaluate potential hazard mitigation measures and develop useful strategies to address the risks associated with the identified natural hazards, a risk assessment has been prepared for Manitowoc County. The risk assessment identifies the natural hazards thought to pose the greatest risk to residents of the county, to profile the extent and severity of past natural hazard events that have affected the county, and to assess the vulnerability of the county to the risk of future natural hazard events.

Hazard Identification

Although the county could potentially be at risk from several distinct hazards, this plan focuses on addressing the natural hazards that pose the greatest risk to people and property in the county. Identification of the natural hazards to be addressed was based on a priority rank ordering of the many different natural hazards identified in the Resource Guide to All Hazards Mitigation Planning in Wisconsin (prepared by the Association of Wisconsin Regional Planning Commissions through funding provided by the State of Wisconsin Department of Military Affairs, Wisconsin Emergency Management, and the Federal Emergency Management Agency).

Natural Hazards Prioritization

The plan steering committee identified the following ranked natural hazards to be the focus of the plan assessment and mitigation action strategies. Ranking the potential risks associated with each natural hazard helped the steering committee prioritize the mitigation action strategies that are addressed later in the plan. The following natural hazards combined more than one listing from the NCDC data for consistency (the additional listings are provided in parenthesis). The hazards are listed in order of their prioritized ranking.

1. Tornado and Strong Wind

2. Winter Storm

3. Hail

4. Flooding

5. Extreme Cold

6. Excessive Heat

7. Drought

8. Lightning

9. Coastal Hazards

10. Dense Fog

11. Land Subsidence

12. Wildland Fires



Natural Hazard Events Historical Summary

The National Oceanic and Atmospheric Administration (NOAA) National Climatic Data Center (NCDC) publishes National Weather Service (NWS) data describing past weather events and the resulting deaths, injuries, and damages associated with each of these events. Event occurrence information is available at a local, county, or regional level – dependent on the area covered by the hazard event. Historical hazard events were available from January 1, 2000 through October 1, 2018. The query for that time period resulted in 246 events recorded (Table 3.1).

The data from the NCDC shows that of the 246 events, the natural hazards occurring most frequently in Manitowoc County between January 2000 and October 2018 include: tornado and strong wind (4 events), winter storms (66 events), hail (46 events), and flooding (10 events). Other events occurring less than ten times in the county since 2000 include extreme cold (6 events), extreme heat (4 events), lightning (3 events), drought (3 events), and dense fog (2 events). Some of the recorded hazard events may not have been specific to the Manitowoc County, as they may have been recorded for a larger regional area statewide. Additionally, some of the common hazard events, such as lightning or dense fog, may only get reported to the NCDC if they are extreme events that cause property damage, injury, or death.

Two deaths (from extreme heat) and thirty injuries (from two-inch hail combined with near 100 mph wind) have been reported in Manitowoc County from hazard events since 2000. The most costly hazard event in terms of property damage since 2000 has been flooding (\$20,000,000), followed by hail (\$5,190,000), and tornadoes and strong winds (\$20,500). The reported costs of crop damage and property damage can be found on the next page in Table 3.1.



Risk Assessment

Table 3.1: Manitowoc County Hazard Events (2000-2018)

Natural Hazard	# Of Events ¹	Avg #/ Year	Risk ²	Deaths	Injuries	Reported Crop Damage	Property Damage ³
Tornado and Strong Wind	100	5	High	0	0	\$1,977,000	\$20,500
Winter Storms	66	4	High	0	0	\$0	\$0
Hail	46	2	Moderate	0	30	\$53,515,000	\$5,190,000
Flooding	15	1	Moderate	0	0	\$452,000	\$20,000,000
Extreme Cold	6	0	Low	0	0	\$0	\$0
Extreme Heat	4	0	Low	2	0	\$0	\$0
Drought	3	0	Low	0	0	\$0	\$0
Lightning	3	0	Low	0	0	\$3,010	\$0
Coastal Hazards	1	0	Moderate ⁴	0	0	\$50,000	\$0
Dense Fog	2	0	Low	0	0	\$0	\$0
Land Subsidence	ND	ND	Low	ND	ND	ND	ND
Wildland Fires	ND	ND	Low	ND	ND	ND	ND
Total Events	246	--	--	2	30	\$55,997,010	\$25,210,500

ND = No data

1. January 1, 2000 to October 1, 2018 (18.75 years)

2. Risk based on occurrences per year: High>3; Medium 1-3; and Low <1

3. Does not factor in private losses for most occurrences

4. Based on information provided by *Resource Guide for Great Lakes Coastal Hazards in Wisconsin* (coastal.lic.wisc.edu/urpl999.htm#Section_4)

Source: NOAA-NCDC, 2018; and Bay-Lake Regional Planning Commission, 2018.

Disaster Declaration History

There have been 20 major (federal) disaster declarations issued for Wisconsin since 2000. Manitowoc County was included in one of the declarations.

On June 14, 2008, Manitowoc County was included in a major disaster declaration that was issued because of property damage resulting from severe storms, tornadoes, and flooding that occurred over a period from June 5 to July 25, 2008 and affected 30 counties across the southern half of Wisconsin (DR-1768).

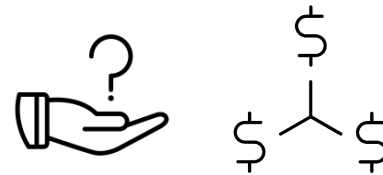


Table 3.2: Manitowoc County Hazard Events (1/1/2000 to 10/1/2018)

Hazard	# Of Events	2019 Rank
Tornado and Strong Wind	100	1
Winter Storm	66	2
Hail	46	3
Flooding	15	4
Extreme Cold	6	5
Excessive Heat	4	6
Drought	3	7
Lightning	3	8
Coastal Hazards	1	9
Dense Fog	2	10
Land Subsidence	ND	11
Wildland Fires	ND	12

Natural Hazards Determined Not to Pose a Significant Risk

The following natural hazards were determined to have a minimal chance of occurring or pose minimal risk to the safety of residents or property in Manitowoc County. These natural hazards are excluded from the full assessment, but are briefly discussed here to meet the comprehensive requirements for developing a natural hazards mitigation plan under Federal law.

Earthquakes

According to the U.S. Geological Survey (USGS), there have been 19 earthquake events in Wisconsin. The closest of these to Manitowoc County occurred in northern Ozaukee County (Lake Church) in 1956, as well as in Fond du Lac County in 1922. Where readings were available, these events were relatively small, most being 3.0 to 4.2 on the Richter Scale in intensity, and the largest being an intensity of 5.3 (Beloit, 1909), which may be strong enough to crack some plaster, but typically does not cause serious damage. Due to the lack of recent events, some geologists question whether many of these events were true earthquakes, but rather were quarry collapses, blasts, etc.

The nearest active earthquake fault outside of Wisconsin is the New Madrid Fault, which stretches from northeast Arkansas to southern Illinois. Manitowoc County falls within the lowest earthquake hazard shaking area, which represents the levels of horizontal shaking which have a 1-in-50 chance of being exceeded in a 50 year period. Similarly, Manitowoc County falls within a 0%g to 1%g peak ground acceleration (PGA) zone as shown on the USGS PGA values map with a 10 percent chance of being exceeded over 50 years. Therefore, the county is considered unlikely to be substantially affected by earthquakes in the long-term future. The earthquake threat to the county is considered very low.

Landslides

The term "landslide" includes a wide range of ground movement, including rock falls, deep failure of slopes and shallow debris flows. Although gravity acting on an overly steep slope is the primary reason for a landslide, there can be other contributing factors, such as erosion by rivers, excess weight from the accumulation of rain or snow, or man-made and other structures stressing weak slopes to the point of failure. In addition, slope material that becomes saturated with water may develop a debris flow or mudflow. The U.S. Geological Survey Landslide Overview Map of the Conterminous United States identifies low landslide risks for all of Manitowoc County. The majority of the land within Manitowoc County does not involve steep slopes and does not pose a landslide risk.

While there are steeper portions of the county, the soils involved pose more of a gradual erosion risk, as opposed to the sudden, large-scale movement of ground associated with landslide hazards. Hillside erosion (minor landslides) within the county is very uncommon, and is the result of man-made impacts, such as the removal of vegetation. Hillside erosion has not posed substantial risk to life or property, and has been largely mitigated through subdivision law, site plan review and erosion control plans for construction sites.

There are no records of substantial damage or injury from large landslides within Manitowoc County, and these hazard threats are considered low.

Risk and Vulnerability Assessment

The risk and vulnerability assessment is intended to describe the frequency, severity, and probability of future occurrence of natural hazards that could impact the planning area. The following hazard profiles attempt to historically describe the characteristics of each natural hazard and how they have affected the population, infrastructure, and environment of the planning area, and the potential risk to the population and property that could occur because of each of these natural hazards.

Critical Facilities

Although the risk assessment focuses on the risk potential to the overall planning area, critical facilities are of particular concern. Critical facilities are necessary to preserve health, welfare, and quality of life in the county, and fulfill important public safety, emergency response, and disaster recovery functions, or they house vulnerable populations (such as schools, childcare, and mobile home parks).

Critical facilities in the planning area have been identified and mapped and are illustrated in Map 3.1. Table 3.3 lists the types and number of critical facilities within the county. Table 3.4 lists the critical facilities by municipality.

Table 3.3: Number of Critical Facilities by Type

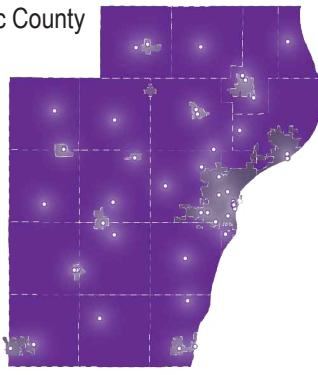
Type	# Of Critical Facilities
Administrative Building	54
Bridge	290
Communication Facility	140
Dam	10
Fire and Safety	79
Licensed Childcare Facility	47
Licensed Healthcare Facility	69
Manufactured Housing	13
Military Installation	3
Post-Disaster Recovery Site	51
Power Facility/Bulk Fuel Storage	33
School	51
Transportation Facility	3
Wastewater Treatment Facility	59
Water Supply	38
Total	940

Source: Bay-Lake Regional Planning Commission, 2019.

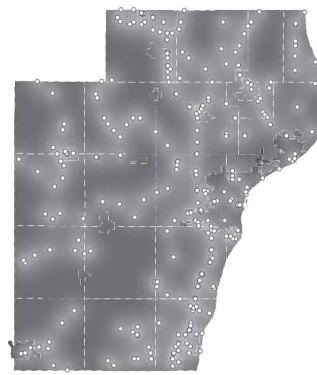


Critical Facilities Map by Type

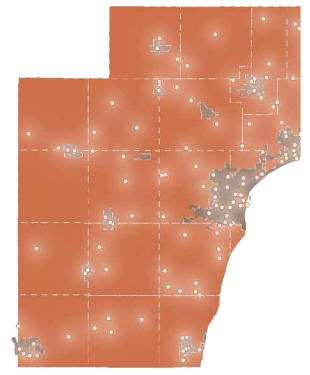
Map 3.1 Critical Facilities by Type, Manitowoc County



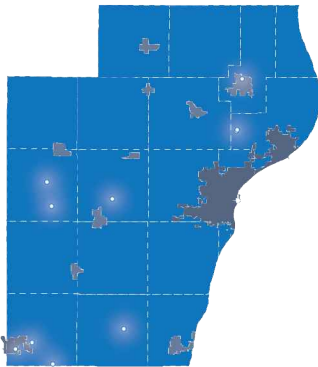
ADMINISTRATIVE
BUILDING



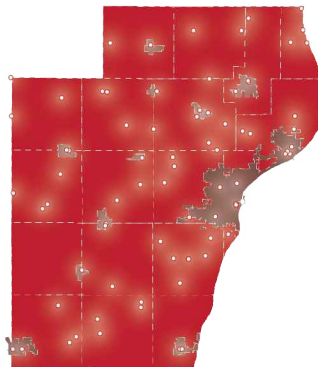
BRIDGE



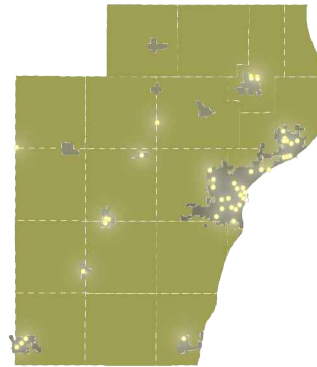
COMMUNICATION
FACILITY



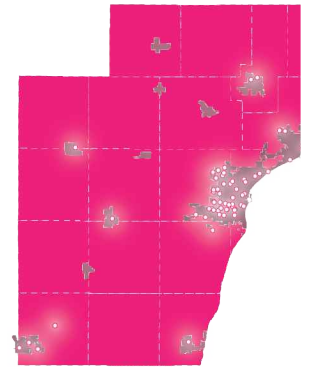
DAM



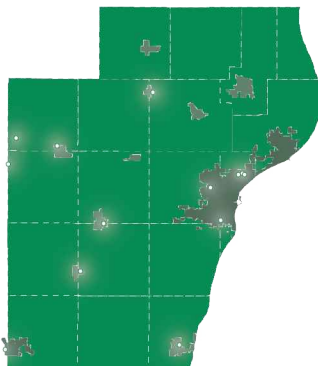
FIRE & SAFETY



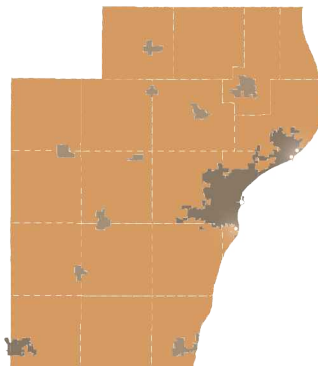
LICENSED CHILDCARE
FACILITY



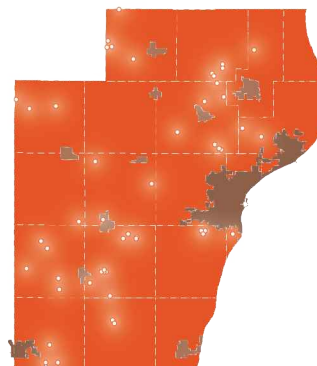
LICENSED HEALTHCARE
FACILITY



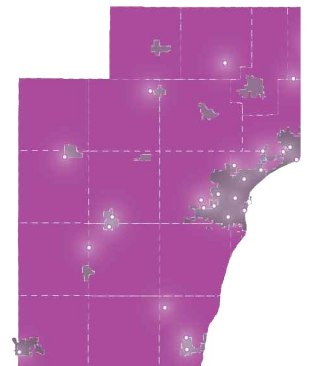
MANUFACTURED
HOUSING



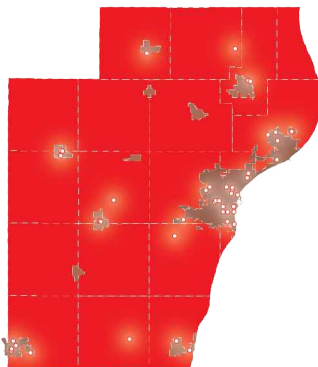
MILITARY
INSTALLATION



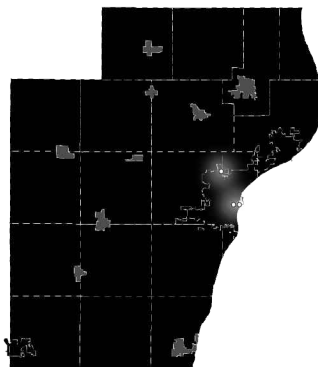
POST DISASTER
RECOVERY SITE



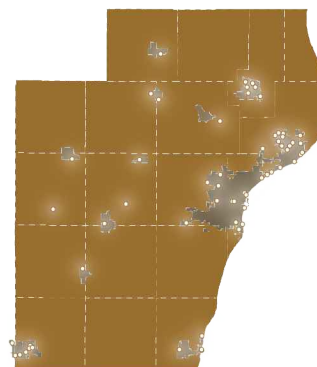
POWER FACILITY/
BULK FUEL STORAGE



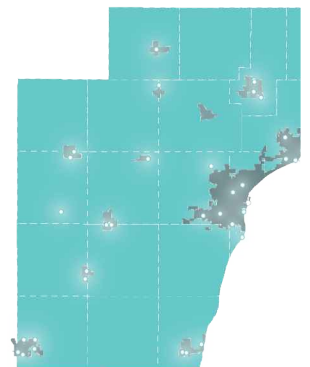
SCHOOL



TRANSPORTATION
FACILITY



WASTEWATER
TREATMENT FACILITY



WATER
SUPPLY



Tornado and Strong Wind

Table 3.4: Number of Critical Facilities by Municipality, Manitowoc County

Municipality	# Of Critical Facilities
City of Kiel	38
City of Manitowoc	204
City of Two Rivers	82
Town of Cato	20
Town of Centerville	33
Town of Cooperstown	42
Town of Eaton	12
Town of Franklin	20
Town of Gibson	27
Town of Kossuth	45
Town of Liberty	18
Town of Manitowoc	14
Town of Manitowoc Rapids	38
Town of Maple Grove	15
Town of Meeme	25
Town of Mishicot	18
Town of Newton	50
Town of Rockland	23
Town of Schleswig	24
Town of Two Creeks	23
Town of Two Rivers	25
Village of Cleveland	28
Village of Francis Creek	6
Village of Kellnersville	4
Village of Maribel	6
Village of Mishicot	36
Village of Reedsville	23
Village of St. Nazianz	12
Village of Valders	21
Village of Whitelaw	6
Total	938

Source: Bay-Lake Regional Planning Commission, 2019.

Hazard Profiles

Hazard profiles are intended to describe the frequency, severity, and probability of future natural hazards that could have an impact on Manitowoc County. These hazard profiles attempt to historically describe the cause and characteristics of each natural hazard and how they have impacted the population, infrastructure, and environment of the county. These potential risks are evaluated to determine their likelihood of re-occurrence and to gauge the impacts to the existing (or planned) population and property that could occur as a result of these hazards.

Hazard probabilities are represented as high, medium, and low. High probability hazards are defined as hazards that occur an average of more than once per year; medium probability hazards are those that occur an average of more than once every two years, but not more than once per year; and low probability hazards occur less frequently than once every two years.

Tornado and Strong Wind

Description of Hazard

A tornado is a violently rotating column of air (vortex) extends from the base of a convective cloud (usually cumulonimbus) to ground. Tornadoes form in many parts of the world under many types of conditions; however, the most common conditions in Wisconsin are intense squall lines and supercell thunderstorms. Tornadoes can be classified as supercell or nonsupercell. Supercell tornadoes are derived from supercell thunderstorms of which a key component is a rotating updraft. These tornadoes can be devastating. Nonsupercell tornadoes are formed by a spinning column of air near the ground and tend to be short-lived and weaker than supercell tornadoes. Nonsupercell tornadoes include gustnadoes, land spouts, and waterspouts.

The destructive power of the tornado results primarily from strong wind velocities and sudden changes in pressure. Wind and pressure differentials probably account for 90 percent of the damage caused by tornadoes. Since tornadoes are generally associated with severe storm systems, they are usually accompanied by hail, torrential rain, and intense lightning. Depending on their intensity, tornadoes can uproot trees, down power lines and destroy buildings. Flying debris can cause serious injury and death.

Wisconsin lies along the northern edge of the nation's maximum frequency belt for tornadoes (commonly known as "tornado alley" which extends northeastward from Oklahoma into Iowa and then across to Michigan and Ohio. Generally, the southern and western portions of Wisconsin have a higher frequency of tornadoes; however, every county in Wisconsin has had tornadoes and is considered to be susceptible to a tornado disaster. Tornadoes have occurred in Wisconsin in every month except February.

Wisconsin's tornado season runs from the beginning of April through September. The most severe tornadoes statewide typically occur during the months of April, May, and June. Many tornadoes strike in the late afternoon or early evening. However, tornadoes have occurred during other times of the day. Personal property damage, deaths, and injuries have and will continue to occur due to tornado events in Wisconsin. The table on the following page (Table 3.5, page 18) shows the Enhanced Fujita Scale (EF Scale), which is recognized as the tornado magnitude measurement rating.



Table 3.5: Enhanced Fujita Scale (EF Scale)

EF Rating	Wind Speeds	Expected Damage
EF-0	65-85 mph	'Minor' damage: shingles blown off or parts of a roof peeled off, damage to gutters/siding, branches broken off trees, shallow rooted trees toppled.
EF-1	86-110 mph	'Moderate' damage: more significant roof damage, windows broken, exterior doors damaged or lost, mobile homes overturned or badly damaged.
EF-2	111-135 mph	'Considerable' damage: roofs torn off well constructed homes, homes shifted off their foundation, mobile homes completely destroyed, large trees snapped or uprooted, cars can be tossed.
EF-3	136-165 mph	'Severe' damage: entire stories of well constructed homes destroyed, significant damage done to large buildings, homes with weak foundations can be blown away, trees begin to lose their bark.
EF-4	166-200 mph	'Extreme' damage: Well constructed homes are leveled, cars are thrown significant distances, top story exterior walls of masonry buildings would likely collapse.
EF-5	> 200 mph	'Massive/incredible' damage: Well constructed homes are swept away, steel-reinforced concrete structures are critically damaged, high-rise buildings sustain severe structural damage, trees are usually completely debarked, stripped of branches and snapped.

Source: NOAA National Weather Service, 2018.

Strong winds, including thunderstorm winds and high winds can often be just as damaging as a tornado. Strong winds are most likely to happen in the spring and summer months and during the afternoon and evening hours, but can occur throughout the year and at all hours.

Strong winds include downburst winds and high winds. Downburst winds are strong, concentrated, straight-line winds created by falling rain and sinking air that can reach speeds of 125 miles per hour. High winds are high speeds winds that can be as damaging as a tornado, but remaining nearly straight line and are not the rotating column of air that is characteristic of a tornado.

The National Weather Service classifies a thunderstorm as severe if its winds reach or exceed 58 miles per hour, produces a tornado, or drops surface hail at least 0.75 inch in diameter. Compared with other atmospheric hazards (such as tropical cyclones and winter low pressure systems), individual thunderstorms affect relatively small geographic areas. The average thunderstorm system is approximately 15 miles in diameter, covers 75 square miles, and lasts less than 30 minutes at a single location. However, weather monitoring reports indicate that coherent thunderstorm systems can travel intact for distances in excess of 600 miles.



Previous Significant Hazard Occurrences

According to National Climatic Data Center (NCDC), Manitowoc County has experienced 100 significant tornado and strong wind events (including funnel clouds, strong wind, high wind, and thunderstorm wind) over the last 18 years from January 1, 2000 to October 1, 2018.

One significant tornado of note was an EF-1 in the Town of Cato that occurred on July 13, 2004 causing \$1.6 million in damage.

Hazard Frequency

Based on previous hazard occurrences as reported by the NCDC, Manitowoc County experiences approximately five significant tornado/strong wind events per year.

Probability of Hazard Occurring in the Future

Based on the hazard frequency, Manitowoc County is considered to have a high probability of experiencing a tornado/strong wind event in any given year.

Areas at Greatest Risk

Tornadoes have no defined hazard area within the county. Past events have been relatively uniform across the planning area; however, mobile home residents are often most vulnerable to death, injury, and property damage from tornadoes. Therefore, mobile home parks in the planning area are the areas of greatest risk from this hazard.

Impacts from Hazard

Death and Injury

No deaths or injuries have been reported from tornado/strong wind events for Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018, according to NCDC data.

Structures at Risk

Although tornadoes strike at random, making all buildings vulnerable, there are three types of structures that are most likely to sustain damage. These structure types include mobile homes, homes on crawlspaces, and buildings with vast spans.

Similar to severe thunderstorms, street signs often face disrepair after tornadoes, and debris often litter streets and highways following a tornado, requiring clean-up. Downed trees caused by tornadoes can be problematic in terms of impacting infrastructure (transportation, sewer, water, etc.) as well as critical facilities.



Tornado and Strong Wind

Critical Facilities

Hospitals can see increases in patient load following tornadoes. Schools can sustain damage, and if they do not sustain damage, they often function as temporary shelters in the aftermath of tornadoes. Police and fire departments often see an increased workload during and after tornadoes. Powerlines and communication towers are at risk of being blown down. Any critical facility in the planning area is capable of being hit. However, schools are a prominent concern because of the number of people present, either during school sessions or as a storm shelter; and secondly, they have large span areas, such as gyms and theaters.

Economic Impacts

A tornado can have a significant economic impact to a local economy due to irrecoverable businesses and infrastructure damages. A heavily damaged business, especially one that was struggling to make a profit, often never reopens after the hazard event.

Infrastructure damage is usually limited to above ground utilities, such as power lines. Damage to utility lines can usually be repaired or replaced relatively quickly. Damage to roads and to railroads is also localized; if these facilities cannot be repaired promptly, alternate transportation routes are usually available.

Public expenditures include search and rescue, shelters, and emergency protection measures. The greatest public expenditures for a community result from repairs to public facilities, and clean up and disposal of debris. Most public facilities are insured, so the economic impact on the local treasury is likely to be small. Clean up and disposal can be a larger problem, especially if there is limited landfill capacity near the damage site.

Property Damage

Reported property damage from significant tornadoes/strong winds for Manitowoc County has totaled approximately \$1.9 million in public property and crop damages over the last 18 years from January 1, 2000 to October 1, 2018 according to NCDC data.

Estimate of Potential Dollar Losses

Since mobile homes are especially vulnerable to tornadoes, a "worst case scenario" for this hazard would involve the total destruction of all mobile homes in the county. In such a "worst case scenario," the total destruction of all buildings and facilities in the 14 mobile home parks in the County would result in estimated dollar losses of approximately \$6.1 million plus with an additional estimated value of building contents of \$3.0 million (calculated as 50 percent of the building value), for total estimate of potential dollar losses of \$9.1 million.



Hail

Description of Hazard

A severe thunderstorm can produce frozen precipitation, or hail. Hailstones are ice crystals that form within a low-pressure front due to warm air rising rapidly into the upper atmosphere and the subsequent cooling of the air mass. Frozen droplets gradually accumulate on the ice crystals until they develop sufficient weight and fall as precipitation. The size of hailstones is a direct function of the severity and size of the storm. Significant damage does not result until the hailstones reach 1.5 inches in diameter, which occurs in less than half of all hailstorms. Hail in Wisconsin ranges from pea-sized to golf ball-sized. Area coverage of individual hailstorms is highly variable and spotty because of the unstable nature of cumulonimbus clouds.

Previous Significant Hazard Occurrences

According to National Climatic Data Center (NCDC), Manitowoc County has experienced 46 significant hail storm events over the last 18 years from January 1, 2000 to October 1, 2018. Some of these reported occurrences may not have been specific to Manitowoc County, and may have been recorded for a larger regional area.

Hazard Frequency

Based on previous hazard occurrences as reported by the NCDC, Manitowoc County experiences approximately two significant hail storm events per year.

Probability of Hazard Occurring in the Future

Based on the hazard frequency, Manitowoc County is considered to have a high probability of experiencing a significant hail storm event in any given year.

Areas at Greatest Risk

Hail storms have no defined hazard area within the planning area. Past events have been relatively uniform across the planning area or the larger regional area.

Impacts from Hazard

Death and Injury

No death, but 30 injuries have been reported from hail events in Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018, according to NCDC data. All 30 injuries occurred during one hail event in St. Nazianz on May 12, 2000 as a result of two-inch hail combined with near 100 mph wind.

Structures at Risk

Hail can inflict severe damage to roofs, windows, and siding, depending on hailstone size and winds.

Critical Facilities

Hail can inflict severe damage to roofs, windows, and siding of critical facilities, depending on hailstone size and winds.

Economic Impacts

Hail can damage or destroy crops. Taller crops, such as corn, are particularly vulnerable to hail. Costly damage can occur to roofs, windows, and siding, as well as automobiles, RVs, and boats (including the body, paint and windshields and other windows).

Property Damage

Reported property damage from significant hail events in Manitowoc County has totaled over \$58 million in property and crop damages over the last 18 years from January 1, 2000 to October 1, 2018 according to NCDC data.

\$50 million in property and crop damages occurred during one hail event in St. Nazianz on May 12, 2000 as a result of two-inch hail combined with near 100 mph wind.

Estimate of Potential Dollar Losses

An estimate of potential dollar losses cannot be calculated for hail storm events, since no vulnerable structures have been identified.



Winter Storm

Winter Storm

Description of Hazard

Winter storms vary in size and strength and include heavy snowstorms, blizzards, freezing rain, sleet, ice storms, and considerable blowing and drifting snow conditions that can close roads. Additionally, the combination of extremely cold temperatures and strong winds can result in dangerous wind chills that cause bodily injury like frostbite or even death due to exposure (hypothermia). Severe winter storms can cause unusually heavy rain or snowfall, high winds, extreme cold, and ice storms throughout the continental US. Winter storms can be very disruptive to transportation and commerce. Trees, cars, roads, and other surfaces can develop a glaze of ice making conditions extremely hazardous to motorists and pedestrians. The most prevalent impacts of heavy accumulations of ice and snow are slippery roads and walkways leading to vehicle and pedestrian accidents; collapsed roofs from fallen trees and limbs and heavy ice and snow loads; and felled trees, telephone poles and lines, electrical wires, and communications towers. As a result of severe winter storms, power and telecommunications can be disrupted for days.

A variety of weather phenomena and conditions can occur during winter storms. The following are National Weather Service (NWS) approved descriptions of winter storm elements:

- **Heavy snowfall:** accumulation of four or more inches of snow in a 12-hour period or six or more inches in a 24-hour period.
- **Blizzard:** sustained wind or frequent wind gusts of at least 35 mph accompanied by considerable falling and/or blowing snow.
- **Ice storm:** freezing rain produces significant or damaging accumulations of ice, usually ¼" or thicker.
- **Freezing drizzle/freezing rain:** drizzle or rain that falls as a liquid but freezes into glaze upon contact with the ground or objects with a temperature of 32°F or below.
- **Sleet:** pellets of ice composed of frozen or mostly frozen raindrops or refrozen partially melted snowflakes.
- **Wind chill:** measure of accelerated heat loss from exposed skin due to increased wind speeds.



Source: The Value of Snow and Snow Information Services, Report prepared for NOAA's National Operational Hydrological Remote Sensing Center, 2018.

Much of the snowfall in Wisconsin occurs in small amounts of between one and three inches per occurrence. Heavy snowfalls (producing at least eight to ten inches of accumulation) happen on the average about five times per season. True blizzards are rare in Wisconsin, are more likely to occur in northwestern Wisconsin than in southern portions of the state, even though heavy snowfalls are more frequent in southeastern Wisconsin. However, blizzard-like conditions often occur during heavy snow storms when gusty winds cause the severe blowing and drifting of snow.

Previous Significant Hazard Occurrences

According to National Climatic Data Center (NCDC), Manitowoc County has experienced 66 significant winter storm events over the 18 years from January 1, 2000 to October 1, 2018 (including blizzards, heavy snow, and lake-effect snow). Many of these hazard events have not been specific to Manitowoc County, and may have been recorded for a larger regional area.

Hazard Frequency

Based on previous hazard occurrences as reported by the NCDC, Manitowoc County experiences approximately four significant winter storm events per year.

Probability of Hazards Occurring in the Future

Based on the hazard frequency, Manitowoc County is considered to have a high probability of experiencing a winter storm event in any given year. Winter storms tend to be a regional phenomenon in that they affect much of northeastern Wisconsin on nearly all of the occasions in which they affect Manitowoc County.

Areas at Greatest Risk

Winter storms have no defined hazard area within the planning area. Past events have been relatively uniform across the planning area and the larger regional area.

Death and Injury

No deaths or injuries have been reported from significant winter storm events for Manitowoc County over the last 18 years from January 2000 to October 1, 2018 according to NCDC data.





Structures at Risk

Occasionally, heavy snow or accumulated ice will cause structural collapse of buildings (particularly roofs), but most buildings are now constructed with low temperatures, snow loads and ice storms in mind. In addition, with the modern focus on energy conservation, buildings are much better insulated than they were in the past. Therefore, for the most part, winter storms do not have a major impact on buildings in the planning area. The major impacts of winter storms on infrastructure are to utilities and roads. Power lines and tree limbs can be coated with heavy ice in some winter storms, resulting in disrupted power and telephone service, often for days. Cable and satellite television services can also be negatively impacted in certain winter storm events. In the case of transportation, even small accumulations of ice can be extremely dangerous to motorists and pedestrians. Bridges and overpasses are particularly dangerous because they freeze before other surfaces.

Critical Facilities

Street and road crews have an increased burden of snow removal (and salting in the case of ice storms) during and after winter storms. In some cases, winter storms can be so severe that these crews have to be called off the road for a period of time. Hospitals and clinics can treat additional patients for frostbite, pedestrian and vehicular accident injuries, and conditions resulting from the shoveling of heavy snow during and following winter storms. Sometimes, these very hospitals and clinics have difficulty getting their own staff to report to work because of the storm, which increases the work load for the staff who is already there (double shifts, etc.). Police department staff needs to respond to more accidents. Utility and telephone companies need to respond to downed electrical and telephone lines, especially in the case of ice storms. Rescue services can receive more calls because of accidents or health related circumstances. Schools may need to have early dismissal or cancel classes altogether. Shelters may take in additional homeless persons during winter storm events as well, although this has been less of an issue in Manitowoc than it has been in larger cities.

Economic Impacts

Loss of power often means that businesses and manufacturing concerns must close down. Loss of access due to snow or ice covered roads can have a similar effect, especially when trucks cannot travel on major thoroughfares to make "just in time" deliveries to business and industry in the planning area. The effects are particularly difficult when the storm is widespread. Additional economic costs of winter storms include snow removal (exceeds \$2 billion/yr for U.S.), road closures that cause lost retail trade wages, and tax revenue (exceeds \$10 billion/day for closures eastern U.S.), flight delays (\$3.2 billion annually for U.S. carrier damage to utilities (up to \$2 billion per event), flooding from snowmelt (\$4.3 billion for 1997 floods), and cost to agriculture and timber from frost and ice (up to \$1.6 billion per ice storm).

Estimate of Potential Dollar Losses

An estimate of potential dollar losses cannot be calculated for winter storm events, since no vulnerable structures have been identified. Based on previous damages reported by the NCEC, property damages from winter storms has been minimal over the past 18 years.



Flooding

Flooding

Description of Hazard

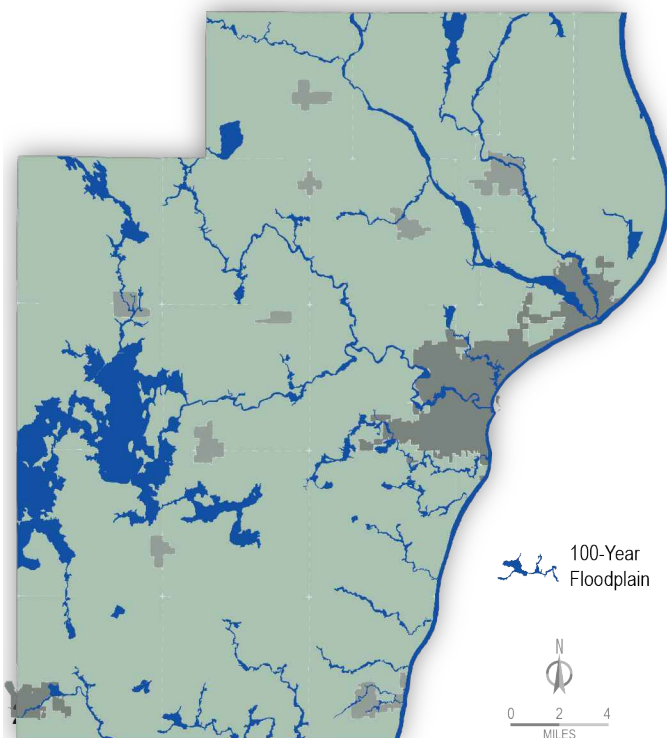
Floods happen when the water draining from a watershed, whether from rainfall or melting snow, exceeds the capacity of the river or stream channel to hold it. Water overflows onto the nearby low-lying lands (floodplains). In hilly and mountainous areas flooding is likely to be rapid, deep, and dangerous. In relatively flat floodplains, land may stay covered with shallow, slow moving water for days or even weeks.

Stormwater Flooding

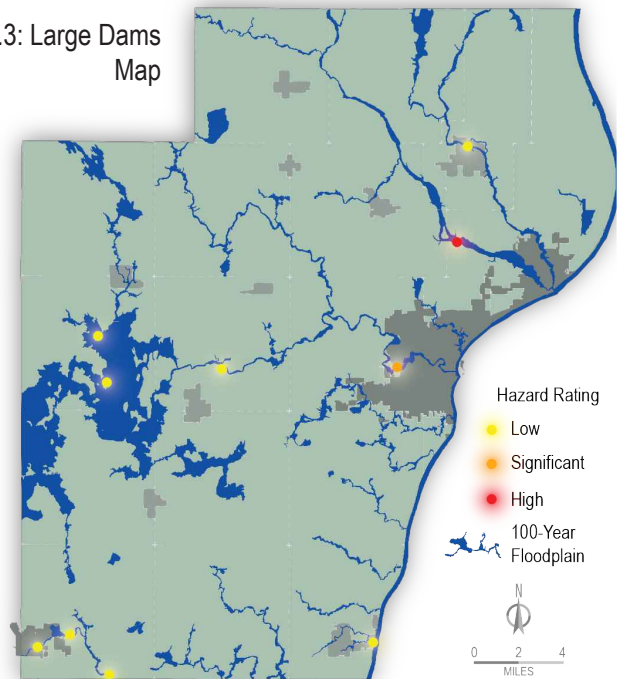
Flooding often occurs in urban areas due to stormwater management issues. Stormwater drainage systems have been designed to manage most storms. However, occasionally larger storms that occur in a short time period, such as flash floods, are of such intensity that the drains cannot handle all the stormwater and flooding occurs. Such intense storms are generally beyond the capacity of any drain, and it would not be economically feasible to design drains to cater for these very large, but infrequent storms. Localized stormwater flooding can also occur if drains in the area are blocked. It is important to keep the drainage system clear of litter and debris to avoid blocked drains. This is also necessary to protect and improve the health of waterways.

Today, new developments and redevelopments incorporate stormwater management measures such as stormwater detention and retention basins that provide greater flood protection. Detention basins slow the flow of stormwater being carried in the drainage system by storing it for a time, while retention basins (i.e. ponds) hold water during most of the year. Detention basins often double as parks and playing fields.

Map 3.2: 100-Year Floodplain Map



Map 3.3: Large Dams Map



Dam Failure Flooding

Flooding can also result from dam failure. A “dam” is an artificial barrier together with its appurtenant works, constructed in or across a water for the primary purpose of impounding or diverting water. Dam failure can occur for a number of reasons, including overtopping caused by floods that exceed the capacity of the dam, deliberate acts of sabotage, structural failure of materials used in dam construction, movement or failure of the foundation supporting the dam, settlement and cracking of concrete or embankment dams, piping and internal erosion of soil embankment dams, or inadequate maintenance and upkeep. In extreme cases, dam failure can occur with little warning and can result in the loss of life and significant property damage in areas downstream of the dam.

As identified by the WDNR, there are a total of 24 dams in Manitowoc County. Of these, nine are classified as large dams. A large dam has a structural height of over 6 feet and impounding 50 acre-feet or more. A dam having a structural height of 25 feet or more and impounding more than 15 acre-feet is classified as a large dam. The rest of the dams located in the county are regarded as small dams. Map 3.3 displays the large dams in the county. The areas of greatest risk from dam failure are those areas within the hydraulic shadow of a dam of these two high and significant dams. The hydraulic shadow of the dam is the area of land downstream from a dam that would be inundated by water upon failure of the dam during the regional flood (100-year flood).

Previous Significant Hazard Occurrences

According to National Climatic Data Center (NCDC), Manitowoc County has experienced 15 significant flooding events (including flash floods and dam failure flooding) over the last 18 years from January 1, 2000 to October 1, 2018. Some of these reported occurrences may not have been specific to Manitowoc County, and may have been recorded for a larger regional area.

Hazard Frequency

Based on previous hazard occurrences as reported by the NCDC, Manitowoc County experiences approximately one significant flooding event every year.

Probability of Hazard Occurring in the Future

FEMA uses the “base” flood as the basis for its regulatory requirements and flood insurance ratings. The hazards mitigation plan also uses the base flood for planning purposes. The base flood is the one percent chance flood, or the flood that has a one percent (one out of 100) chance of occurring in any given year. The one percent chance flood is commonly referred to as the “100-year flood.” Based on the hazard frequency, Manitowoc County is considered to have a medium probability of sustaining a 100-year flood in any given year.

Areas at Greatest Risk

The areas at greatest risk from flooding include the “100-year floodplain” areas of Manitowoc County. FEMA Flood Insurance Rate Maps also call this the Special Flood Hazard Area, or “A Zone.” The base floodplains for the planning area are shown in Map 3.2. Properties that potentially lie within the floodplain and would be affected by the 100-year flood are shown in Map 3.4.

Impacts from Hazard

Death and Injury

No death or injuries from flooding has been reported for Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018, according to NCDC data.

Structures at Risk

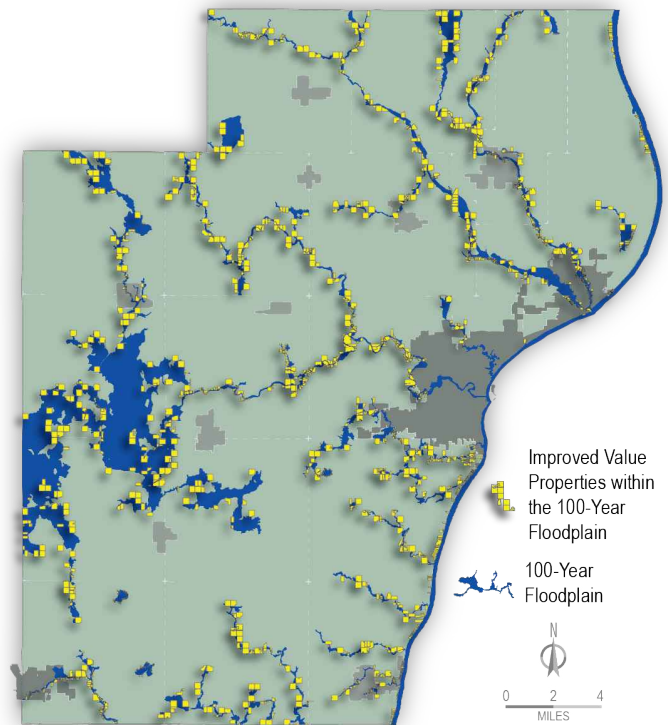
Analysis of the data used to produce Map 3.2 indicates that 2,788 buildings could potentially be impacted by the base flood in the planning area.

A review of FEMA flood loss statistics from January 1, 1978 through September 30, 2018, indicates that there were six paid claims in Manitowoc County in the amount of \$37,766.97 (FEMA National Flood Insurance Program, W2RC1040).

Repetitive Loss Properties

Repetitive loss structure describes a structure, covered by a contract of flood insurance under the NFIP, that has suffered flood damage on two or more occasions over a 10-year period ending on the date when a second claim is made, in which the cost to repair the flood damage, on average, equals or exceeds 25 percent of the market-value of the structure at the time of each flood loss event. For the Community Rating System (CRS) of the NFIP, a repetitive loss property is any property, which the NFIP has paid two or more flood claims of \$1,000 or more in any, given 10-year period since 1978. A repetitive loss structure is important to the NFIP, since structures that flood frequently put a strain on the flood insurance fund. According to FEMA, there are no repetitive loss properties in Manitowoc County.

Map 3.4: Improved Properties within the 100-Year Floodplain M



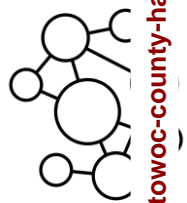
Critical Facilities

Analysis of the GIS data used to produce Map 3.3, indicates that there are 199 critical facilities located within 100-year floodplains in Manitowoc County. Table 3.6 lists the critical facility types of those facilities potentially within the 100-year floodplains.

Table 3.6: Critical Facilities within Floodplain Breakdown by Type

Type	# Of Critical Facilities
Administrative Building	1
Bridge	167
Communication Facility	1
Dam	9
Fire and Safety	14
Licensed Childcare Facility	0
Licensed Healthcare Facility	0
Manufactured Housing	0
Military Installation	0
Post-Disaster Recovery Site	1
Power Facility/Bulk Fuel Storage	0
School	0
Transportation Facility	0
Wastewater Treatment Facility	6
Water Supply	0
Total	199

Source: Bay-Lake Regional Planning Commission, 2019.



Flooding

Critical Facilities

Table 3.7: Number of Critical Facilities by Municipality, Manitowoc County

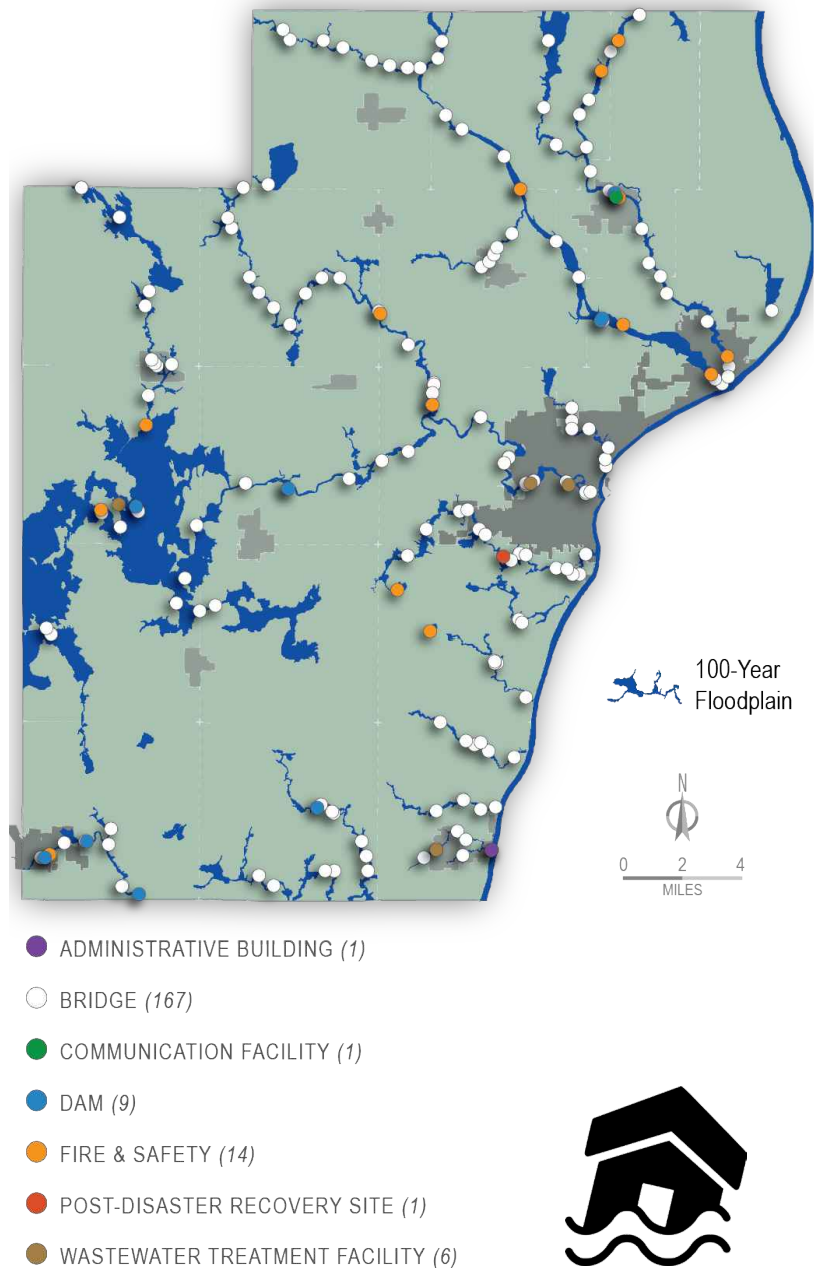
Municipality	# Of Critical Facilities
City of Kiel	6
City of Manitowoc	16
City of Two Rivers	7
Town of Cato	4
Town of Centerville	15
Town of Cooperstown	10
Town of Eaton	4
Town of Franklin	11
Town of Gibson	14
Town of Kossuth	9
Town of Liberty	2
Town of Manitowoc	7
Town of Manitowoc Rapids	16
Town of Maple Grove	5
Town of Meeme	11
Town of Mishicot	6
Town of Newton	14
Town of Rockland	9
Town of Schleswig	7
Town of Two Creeks	0
Town of Two Rivers	7
Village of Cleveland	7
Village of Francis Creek	2
Village of Kellnersville	0
Village of Maribel	0
Village of Mishicot	6
Village of Reedsville	4
Village of St. Nazianz	0
Village of Valders	0
Village of Whitelaw	0
Total	199

Source: Bay-Lake Regional Planning Commission, 2019.

Economic Impacts Property Damage

Reported significant public property and crop damage from flooding in Manitowoc County has totaled \$20,452,000 over the last 18 years from January 1, 2000 to October 1, 2018 according to NCDC data. Most of the damage cost (\$20 million) was to crops on June 12, 2008 when torrential rain, including over five inches in Valders, caused the Manitowoc River to rise three feet in four hours.

Map 3.5: Critical Facilities within the 100-Year Floodplain Map



Value of Structures at Risk

The value of all at-risk structures is estimated at \$394.6 million. This information was obtained from Manitowoc County database on improved values of real property. The parcel map and the 100-year floodplains were merged to determine at-risk structures in the planning area.



Transportation Route Interruptions

Loss of road access is a major flood impact that affects all residents and businesses, not just those who own property in the floodplain. Sometimes, the loss is temporary, such as during a flood. However, on some occasions, the loss of transportation lasts well after the disaster. When roads, bridges, or railroads are washed out by a flood, it can be weeks or months before they are repaired and reusable. A key evacuation and safety concern is when roads and bridges go under water. Generally, the larger the road, the more likely it will not flood, but this is not always the case. Analysis of the GIS data used to produce Map 3.5, indicates that there are 167 bridges that could potentially be underwater during a base flood. In addition to the sites shown on the map, there may be a number of additional bridges in areas that are not included in the mapped 100-year flood zones, such as areas located along small tributary streams.

Estimate of Potential Dollar Losses

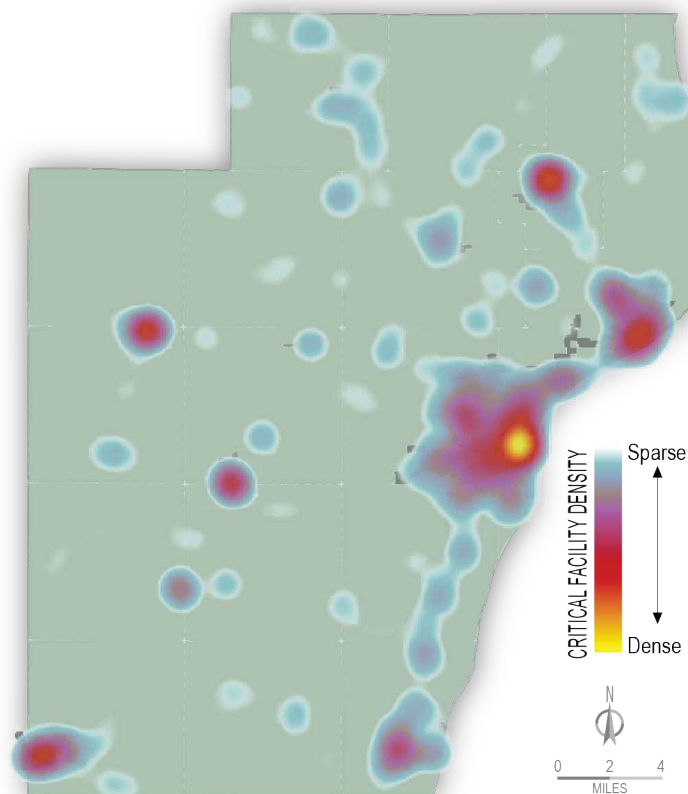
“Vulnerable structures” are those structures located in the 100-year flood hazard area identified in Map 3.5. Since there is no reliable building height data for buildings in these flood hazard areas, a “worst case scenario” of total structural damage for buildings in all of the flood zones of the planning area was assumed in estimating potential dollar losses to vulnerable structures. Building height/elevation data should be collected in the future in order to better assess the risks of damage to structures because of the flood hazard.

It is estimated that over \$394.6 million in losses would occur with the 100-year flood in zones projected to be impacted by the 100-year flood in a “worst case scenario” of total structural damage for all buildings in the county flood zones. This information was obtained from a Manitowoc County database on assessed values of real property. This only involves damage to structures themselves, and may not account for damage to personal property inside or adjacent to vulnerable structures. In addition, there may be areas outside the 100-year flood zones that will flood during an event of that magnitude (or even of lesser magnitude); this planning process has no way of knowing the susceptibility of flooding outside of flood events that have been previously mapped by other governmental agencies.

Development in Areas Subject to Flooding

Development in floodplains, watersheds, and natural resource areas are kept to a minimum through zoning. Manitowoc County has shoreland and floodplain zoning. This ordinance is a useful tool in keeping inappropriate development out of flood hazard zones in the county.

Map 3.6: Critical Facilities Heat Map



NFIP Participation

Manitowoc County has participated in the FEMA National Floodplain Insurance Program (NFIP) since September 1978 by adopting and enforcing flood management ordinances to reduce future flood damage. In exchange NFIP makes federally backed flood insurance available to homeowners, renters, and business owners in the county.

Additionally, the following incorporated communities are also participating in the NFIP:

- City of Manitowoc since April 1977
- City of Two Rivers since April 1978
- City of Kiel since January 1985
- Village of Cleveland since May 1978
- Village of Francis Creek since August 2011
- Village of Kellnersville since August 2011
- Village of Mishicot since May 1972
- Village of Reedsville since September 1988

Not Participating in NFIP

The villages of Maribel, St. Nazianz, Valders and Whitelaw are not participating in NFIP. Since there are no special flood hazard areas (SFHAs) within municipal boundaries, these communities were not provided a floodplain and have not been asked to participate in the NFIP.

Previous Significant Hazard Occurrences

According to National Climatic Data Center (NCDC), Manitowoc County has experienced three significant extreme cold events over the last 13 years from January 1, 2000 to October 1, 2018.

Hazard Frequency

Based on previous hazard occurrences as reported by the NCDC, Manitowoc County has experienced 6 significant extreme cold events in the last 18 years.

Probability of Hazard Occurring in the Future

Based on the hazard frequency, Manitowoc County is considered to have a low probability of experiencing an extreme cold event in any given year.

Areas at Greatest Risk

Extreme cold events have no defined hazard area within the planning area. Past events have been relatively uniform across the planning area.

Impacts from Hazard

Death and Injury

No deaths or injuries have been reported from significant extreme cold events for Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018 according to NCDC data.

Structures at Risk

Extreme cold conditions can result in burst water pipes. In addition, it is more expensive to heat homes and other buildings during extreme cold events. Sometimes, residents of the planning area might consider use of space heaters during an extreme cold event. However, use of space heaters comes with its own risks, including a higher probability of fire to a structure if used improperly.

Public domain water pipes can burst in extreme cold conditions, which can also ruin the street above the water pipes. In addition, damage to fiber optic cables can occur during extreme cold episodes, which can negatively affect commerce and hospitals in the planning area.

Critical Facilities

All buildings involving critical facilities will have greater heating expenses during an extreme cold event. Increased demand will also affect electric and natural gas utilities. Hospitals and clinics may be asked to treat patients exposed to the extreme cold conditions. Emergency shelters may take in additional individuals during the extreme cold event. Area schools may cancel classes or call for early dismissal in extreme cold events. Water utilities may need to repair damaged water mains caused by the extreme cold. Local fire departments and rescue services may also deal with direct or indirect consequences of the extreme cold event.

Economic Impacts

Economic impacts of extreme cold events can include lack of motivation to participate in the local economy unless absolutely necessary during the event. Utility bills following the event may be higher, which will give the consumer less ability to purchase discretionary goods about a month after the event (unless the consumer is on a monthly even payment plan with the local utility). If area school districts need to call off school early on extremely cold days, there may be expenses involved with early busing and with paying staff for a full day while only having the benefit of a partial day of instruction. Non-profit organizations will incur expenses in the provision of emergency shelters. The private sector incurs economic losses and production decreases during an extreme cold event.

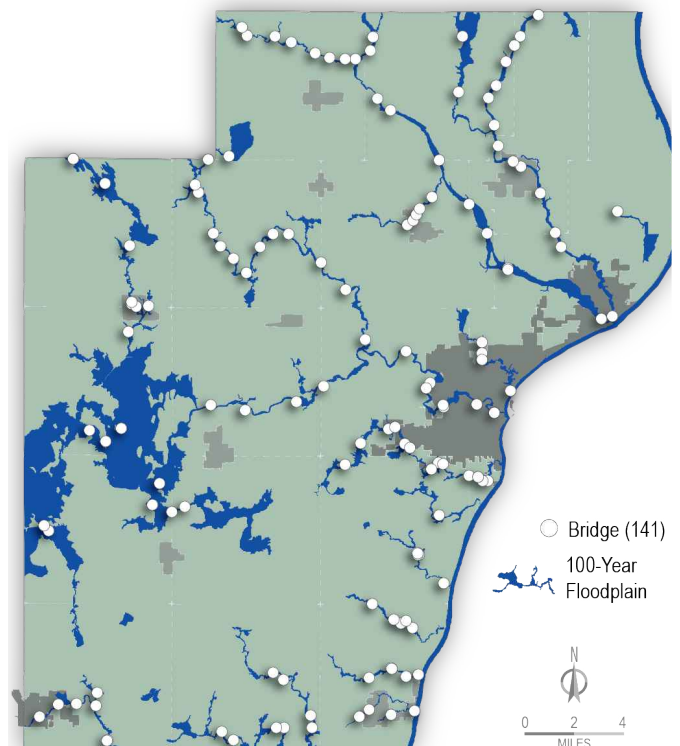
Property Damage

No significant public property damages have been reported from extreme cold events for Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018 according to NCDC data.

Estimate of Potential Dollar Losses

An estimate of potential dollar losses cannot be calculated from extreme cold events, since no vulnerable structures have been identified. Based on previous damages reported by the NCDC, property damages from extreme cold have been minimal over the past 18 years.

Map 3.7: Bridges within the Floodplain Map





Extreme Cold

Description of Hazard

Dangerously cold conditions can be the result of extremely cold temperatures, or the combination of cold temperatures and high winds. The combination of cold temperatures and wind creates a perceived temperature known as “wind chill.” Whenever temperatures drop well below normal and as wind speed increases, heat can leave your body more rapidly. As winds increase, heat is carried away from the body at a faster rate, driving down both the skin temperature and eventually the internal body temperature. This weather related condition may lead to serious health problems. Extreme cold is a dangerous situation that can cause health emergencies for susceptible people, such as those without shelter, those who are stranded outdoors or in a disabled car, or those who live in a home that is poorly insulated or without heat.

Previous Significant Hazard Occurrences

According to National Climatic Data Center (NCDC), Manitowoc County has experienced three significant extreme cold events over the last 13 years from January 1, 2000 to January 31, 2013.

Hazard Frequency

Based on previous hazard occurrences as reported by the NCDC, Manitowoc County experiences approximately one significant extreme cold event every five years.

Probability of Hazard Occurring in the Future

Based on the hazard frequency, Manitowoc County is considered to have a low probability of experiencing an extreme cold event in any given year.

Areas at Greatest Risk

Extreme cold events have no defined hazard area within the planning area. Past events have been relatively uniform across the planning area.

Impacts from Hazard

Death and Injury

No deaths or injuries have been reported from significant extreme cold events for Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018 according to NCDC data.

Structures at Risk

Extreme cold conditions can result in burst water pipes. In addition, it is more expensive to heat homes and other buildings during extreme cold events. Sometimes, residents of the planning area might consider use of space heaters during an extreme cold event. However, use of space heaters comes with its own risks, including a higher probability of fire at a structure if used improperly. Public domain water pipes can burst during extreme cold conditions, which can also ruin the street above the water pipes. In addition, damage to fiber optic cables can occur during extreme cold episodes, which can negatively affect commerce and hospitals in the planning area.

Critical Facilities

All buildings involving critical facilities will have greater heating expenses during an extreme cold event. Increased demand will also affect electric and natural gas utilities. Hospitals and clinics may be asked to treat patients exposed to the extreme cold conditions. Emergency shelters may take in additional individuals during the extreme cold event. A schools may cancel classes or call for early dismissal in extreme cold events. Water utilities may need to repair damaged water mains caused by the extreme cold. Local fire departments and rescue services may also deal with direct or indirect consequences of the extreme cold event.

Economic Impacts

Economic impacts of extreme cold events can include lack of motivation to participate in the local economy unless absolutely necessary during the event. Utility bills following the event will be higher, which will give the consumer less ability to purchase discretionary goods about a month after the event (unless that consumer is on a monthly even payment plan with the local utility). If area school districts need to call off school early on extremely cold days, there may be expenses involved with extra busing and with paying staff for a full day while only having the benefit of a partial day of instruction. Non-profit organizations will incur expenses for the provision of emergency shelters. The private sector incurs economic losses and production decreases during an extreme cold event.

Property Damage

No significant public property damages have been reported from extreme cold events for Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018 according to NCDC data.

Estimate of Potential Dollar Losses

An estimate of potential dollar losses cannot be calculated for extreme cold events, since no vulnerable structures have been identified. Based on previous damages reported by the NCDC, property damages from extreme cold has been minimal over the past 18 years.

Extreme Heat



Extreme Heat Description of Hazard

Extreme heat (often referred to as a heat wave) is primarily a public health concern. During extended periods of very high temperatures or high temperatures with high humidity, individuals can suffer from several ailments, including heat exhaustion and heat stroke. Heat stroke is a particularly life-threatening condition that requires immediate medical attention. In addition to posing a public health hazard, periods of excessive heat usually result in high electrical consumption, which can cause power outages and brown outs. A by-product of this hazard in Manitowoc County often involves periods of high heat with loss of power. The elderly, disabled, and other vulnerable populations are especially susceptible to extreme heat.

Previous Significant Hazard Occurrences

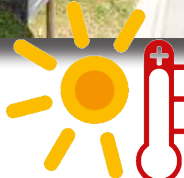
According to National Climatic Data Center (NCDC), Manitowoc County has experienced 4 significant extreme heat events over the last 18 years from January 1, 2000 to October 1, 2018.

Hazard Frequency

Based on previous hazard occurrences as reported by the NCDC, Manitowoc County experiences approximately one significant extreme cold event every five years.

Probability of Hazard Occurring in the Future

Based on the hazard frequency, Manitowoc County is considered to have a *low* probability of experiencing an extreme heat event in any given year.



Areas at Greatest Risk

Extreme heat events have no defined hazard area within the plan area. Past events have been relatively uniform across the plan area.

Impacts from Hazard

Death and Injury

One death (of an elderly lady), and no injuries, has been reported from significant extreme heat events for Manitowoc County over last 18 years from January 1, 2000 to October 1, 2018 according to NCDC data.

Structures at Risk

While there are no direct impacts on buildings, periods of excessive heat can impact the ability of buildings to be comfortable and safe human habitation. Periods of excessive heat usually result in increased electrical consumption for air conditioning, which can cause power outages and brown outs. There are few impacts of extreme heat on publicly owned infrastructure. One impact that extreme heat has on publicly owned infrastructure involves the buckling of city streets and highways, which need to be repaired immediately.

Critical Facilities

Utilities may see peak demand for electricity during extreme heat episodes. There have been fears that an extreme heat episode could cause the power grid to collapse. Hospitals and clinics like experience an increased demand due to heat related illnesses during an extreme heat episode. In some cases, rescue services experience an increased demand due to these same heat related illnesses. If school is in session during the extreme heat episode, area school districts may dismiss classes early in the day, at least in older schools without air conditioning. Emergency shelters experience higher demand during the extreme heat episode, some emergency shelters being set up specifically in response to the episode. Finally, there is likely to be increased water demand during the episode, both for human consumption as well as for lawn watering in the event that the extreme heat episode includes a drought.

Economic Impacts

Economic impacts of an extreme heat episode which can affect private businesses and consumers include higher electrical consumption, increased demands for medical treatment. Local governments may need to incur expenses when repairing streets and highways in the plan area that have been damaged due to buckling. If area school districts need to call off school early on extreme heat days, there will be expenses involved with early busing and with paying staff for a partial day while only having the benefit of a partial day of instruction. Non-profit organizations will incur expenses in the provision of emergency shelters. Water utilities will incur the expenses involved with additional demand for water during extreme heat episodes, and these expenses will be passed on to area consumers.

(Cont'd Extreme Heat Economic Impacts)

Property Damage

No significant public property damages have been reported from extreme heat events for Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018 according to NCDC data.

Estimate of Potential Dollar Losses

An estimate of potential dollar losses cannot be calculated for extreme heat events, since no vulnerable structures have been identified. Based on previous damages reported by the NCDC, property damages from extreme heat has been minimal over the past 18 years.

Lightning

Description of Hazard

Lightning, which occurs during all thunderstorms, can strike anywhere. Generated by the buildup of charged ions in a thundercloud, the discharge of a lightning bolt interacts with the best conducting object or surface on the ground. The air in the channel of a lightning strike reaches temperatures higher than 50,000 degrees Fahrenheit. The rapid heating and cooling of the air near the channel causes a shock wave which produces thunder. Lightning primarily occurs when warm air is mixed with colder air masses resulting in atmospheric disturbances necessary for polarizing the atmosphere. However, it can also occur during dust storms, forest fires, tornadoes, volcanic eruptions, and even in the cold of winter, where the lightning is known as thundersnow.

Previous Significant Hazard Occurrences

According to National Climatic Data Center (NCDC), Manitowoc County has experienced 3 significant lightning events over the last 18 years from January 1, 2000 to October 1, 2018.

Hazard Frequency

Based on previous hazard occurrences as reported by the NCDC, Manitowoc County experiences approximately one significant lightning event every five years.

Probability of Hazard Occurring in the Future

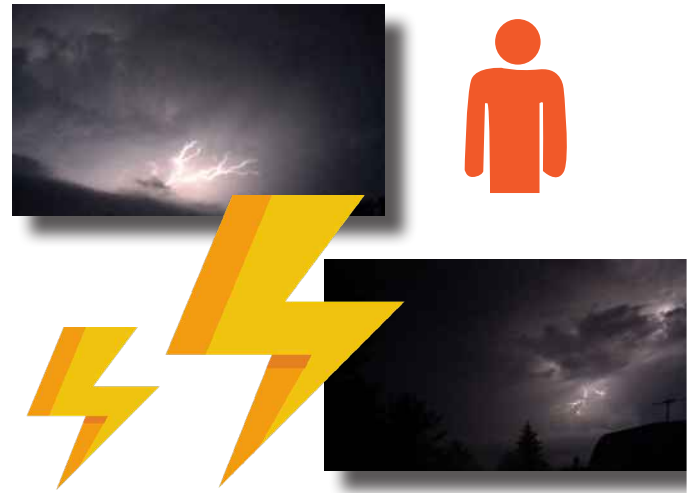
Based on the hazard frequency, Manitowoc County is considered to have a low probability of experiencing a lightning storm and/or thunderstorm event in any given year.

Areas at Greatest Risk

Based on review of the historic patterns of lightning event occurrences, there are no specific areas that are a higher than average risk. The events are relatively uniform throughout Manitowoc County.

Structures at Risk

Lightning can cause direct damage to structures, especially those without lightning protection systems.



Buildings or tall structures hit by lightning may be damaged as lightning seeks unintended paths to ground. By safely conducting lightning strike to ground, a lightning protection system can greatly reduce the probability of severe property damage. Lightning strikes result in fires that damage structures, property, and land.

Critical Facilities

Hospitals can see increases in patient load with sufficiently severe lightning events. Schools can sustain damage, and if they do not sustain damage. Police and fire departments often see an increased workload during and after lightning events. Emergency operations can be disrupted as lightning events affect radio and cellular communications as antennas are a prime target for lightning.

Economic Impacts

Nationwide, lightning causes \$4 to 5 billion in losses each year (Source: Kithil, R., 21st Century Lightning Safety for Facilities & Structures, 2002) and about \$2 billion annually in airline operating costs from passenger delays (Source: Northeast States Emergency Consortium, Wakefield, Mass., 2002).

Property Damage

Reported property damage from significant lightning for Manitowoc County has totaled approximately \$3,010 over the last 18 years from January 1, 2000 to October 1, 2018 according to NCDC data.

Estimate of Potential Dollar Losses

An estimate of potential dollar losses cannot be calculated for lightning events, since no vulnerable structures have been identified. Based on previous damages reported by the NCDC, property damages from extreme heat has been minimal over the past 18 years.

Drought

Drought

Description of Hazard

A drought is an extended period of unusually dry weather, which may be accompanied by extreme heat. There are basically two types of drought in Wisconsin: agricultural drought and hydrologic drought. Agricultural drought is a dry period of sufficient length and intensity that markedly reduces crop yields. Hydrologic drought is a dry period of sufficient length and intensity to affect lake and stream levels as well as the height of the groundwater table. These two types of drought may, but do not necessarily, occur at the same time. The severity of a drought depends on a number of factors including duration, intensity, geographic extent, and regional water supply demands by humans and vegetation.

In general, droughts have the greatest impact on agriculture. Small droughts of limited duration can significantly reduce crop growth and yields. More substantial drought events can decimate croplands and can result in a total loss. Droughts can also greatly increase the risk of forest fires and wildfires because of extreme dryness. In addition, the loss of vegetation in the absence of sufficient water can result in flooding, even from average rainfall, following drought conditions.

Previous Significant Hazard Occurrences

According to National Climatic Data Center (NCDC), Manitowoc County has experienced three significant drought events over the last 18 years from January 1, 2000 to October 1, 2018.

Hazard Frequency

Based on previous hazard occurrences as reported by the NCDC, Manitowoc County experiences approximately one significant drought event every five years.

Probability of Hazards Occurring in the Future

The future incidence of drought is highly unpredictable, as its occurrence is based on weather patterns, making it difficult to determine probability with any accuracy. Droughts tend to be a regional phenomenon in that it affects much of eastern Wisconsin on nearly all of the occasions in which it affects Manitowoc County. However, based strictly on the hazard frequency, Manitowoc County is considered to have a low probability of experiencing a drought event in any given year.

Areas at Greatest Risk

Droughts have no defined hazard area within the planning area. Past events have been relatively uniform across the planning area. However, agricultural croplands are most vulnerable to losses from drought events. Manitowoc County contains 220,393 acres of agricultural lands (based on land use data shown in Table 2.2).



Impacts from Hazard

Death and Injury

No deaths or injuries have been reported from significant drought events for Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018, according to NCDC data.

Structures at Risk

There are no direct impacts to structures from a drought even in terms of infrastructure, droughts have the most impact on municipal water supplies. Droughts will likely cause a shortage of water for human, industrial, and agricultural consumption, as wells and water reserves may dry up. Also, water quality is often an issue before and after a drought event, which may place an additional burden on wastewater treatment facilities.

Critical Facilities

In drought conditions, water shortages may occur and affect the availability of water available for human consumption. Hospitals may be called upon to treat individuals suffering from dehydration as a result. Parks and recreational water facilities are likely to experience increased usage during times of drought as well.

Economic Impacts

Wisconsin is most susceptible to agricultural drought. Even small droughts of limited duration can significantly reduce crop growth and yields, which adversely affects farm income. Substantial drought events can lead to complete crop decimation, resulting in total loss. During severe drought periods farmers are often forced to seek financial assistance from the government to supplement lost income. No significant public property damages have been reported from drought events for Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018, according to NCDC data.

Estimate of Potential Dollar Losses

Agricultural croplands are most vulnerable to losses from drought events. A "worst case scenario" would involve the total destruction of all 219,368 acres of agricultural lands in the county (based on land use data shown in Table 2.2). The USDA conducts a Census of Agriculture every 5 years based on a sample of farms to estimate the market value of agricultural land and buildings. It can be estimated that if this "worst case scenario" were to occur, the total destruction of all agricultural land in Manitowoc County would cause a loss of \$769,832,749.

Dense Fog

Description of Hazard

Fog is a collection of liquid water droplets or ice crystals suspended in the air at or near the ground. While fog is a type of stratus cloud, the term "fog" is typically distinguished from the more generic term "cloud" in that fog is low-lying, and the moisture in the fog is often generated locally (such as from a nearby body of water, like a lake or stream, or from nearby moist ground or marshes). Fog is distinguished from mist because it has greater density and lower visibility than mist.

Fog is a hazard mainly because of reduced visibility. Airport delays, automobile accidents, ship wrecks, plane crashes, and many other problems are frequently caused by fog. The National Weather Service forecasts fog and issues dense fog advisories when visibility is decreased to less than one quarter of a mile. These advisories alert travelers to potentially dangerous conditions. Traveling in fog requires reduced speed and careful navigation. At night, traveling in fog is especially dangerous because darkness combines with fog to reduce visibility even more. In addition, light from automobile headlights and other navigational lights is scattered off the water droplets of the fog, limiting sight to only a short distance. In response to this problem, automobiles are often equipped with specially designed lights that illuminate a usually dry (and therefore clear) area just above the roadway surface.

Previous Significant Hazard Occurrences

According to National Climatic Data Center (NCDC), Manitowoc County has experienced two significant dense fog events over the last 18 years from January 1, 2000 to October 1, 2018.

Hazard Frequency

Based on previous hazard occurrences as reported by the NCDC, Manitowoc County experiences approximately one significant dense fog event every five years.

Probability of Hazard Occurring in the Future

Based on the hazard frequency, Manitowoc County is considered to have a low probability of experiencing a significant dense fog event in any given year.

Areas at Greatest Risk

Portions of the planning area along waterways, wetlands, and low lying areas can be at greater risk for fog under certain meteorological conditions. However, no portion of the planning area is free of the possibility of experiencing fog events. Fog events can often be a regional phenomenon in that they affect much of the eastern Wisconsin on many of the occasions in which they affect Manitowoc County, especially near Lake Michigan.

Structures at Risk

There are no direct impacts to buildings from a fog event. The main structures impacted are those associated with infrastructure during a fog event including vehicle accidents. This can result in rescue services helping injured drivers and passengers, clean-up of the affected portions of the street and high network, and temporary rerouting of motorists after some incidents. In addition, motorists often must travel at slower speeds when fog is in an area, which adds travel time and can lead to vehicular congestion in cases where it would normally not occur. In fog events during the winter, icing can sometimes be a problem. Power lines and tree limbs can be covered with heavy ice in some winter fog events, resulting in disrupted power and telephone service. In addition, in fog events during the winter, even small accumulations of ice can be extremely dangerous to motorists, pedestrians. Bridges and overpasses are particularly dangerous because they freeze before other surfaces.

Critical Facilities

Law enforcement will be asked to respond to an increased number of accidents during many fog events. Hospitals and clinics may be asked to treat individuals injured in accidents that likely would have not occurred in the absence of the fog event. Rescue services may be called to respond to accidents that resulted from the fog event. The starting time for school may be delayed by the fog event for the safety of students and all involved. Courtrooms may see increased adjudication of traffic law violations resulting from accidents occurring during the fog event. Municipal public works and county highway departments may need to perform emergency repair of streets and highways in worst-case scenario accidents resulting from fog event. Airports can experience flight delays and cancellations during certain fog events.

Economic Impacts

There are economic costs in the accidents caused by fog events. Vehicular accidents almost always involve property damage, and some vehicular accidents during fog events involve injuries and/or fatalities. All of the consequences to vehicular accidents have costs both to the individuals involved and to society. Airline delays due to fog have economic impacts on travelers as well as for commerce. There are additional economic impacts if the fog event occurs in conjunction with the icing of power lines in cases where the power lines are damaged and residents lose power.

Property Damage

No significant public property damages have been reported from dense fog events for Manitowoc County over the last 18 years from January 1, 2000 to January 31, 2013 according to NCDC data.

Estimate of Potential Dollar Losses

An estimate of potential dollar losses cannot be calculated for dense fog events, since no vulnerable structures have been identified. Based on previous damages reported by the NCDC, property damages from fog events have been minimal over the past 18 years.

Wildland Fires

Wildland Fires

Description of Hazard

A wildland fire is any instance of unplanned burning in brush, marshes, grasslands, or field lands. Typical causes of these fires are lightning, human carelessness, or arson. The county has large expanses of forested areas that could be susceptible to wildland fires. Wildland fires can occur at any time of the year and during any time of the day. The primary factors that can contribute to the start of a wildland fire are land use, vegetation, amount of combustible materials present, and weather conditions such as wind, low humidity, and lack of precipitation. Generally, fires are more likely when vegetation is dry from a winter with little snow or a spring and summer with sparse rainfall. As fires remain a possibility, fire stations in the county are prepared to respond in accordance with established response procedures, while local zoning setback controls and building codes provide additional mitigation measures.

Previous Significant Hazard Occurrences

There have been no significant wildland fires in Manitowoc County since 1995.

Hazard Frequency

No adequate records are available at this time in order to determine a hazard frequency.

Probability of Hazard Occurring in the Future

According to the U.S. Forest Service Wildland Fire Assessment System, Manitowoc County regularly falls within a low to moderate fire danger class. A low rating indicates that fuels do not ignite readily from small firebrands, while a moderate rating means that fires will likely start from most accidental causes. With the exception of lightning fires in some areas, the number of starts is generally low. Additionally, because Manitowoc County is not extensively forested and does not contain the hazards and risks necessary to warrant intensive or extensive fire protection, it is designated as a Cooperative Fire Protection Area. Therefore, there are no Wisconsin DNR ranger stations or suppression resources located in the county. Additionally, the Forestry Division of the Wisconsin DNR has determined that there are no "Communities-at-Risk" and no "Communities-of-Concern" within Manitowoc County. The likelihood that any wildland fire in Manitowoc County would be catastrophic is low as most susceptible areas lack enough acreage to allow for continuous burning. Invasive Species such as Phragmites should be monitored as the dry stalks can often cause fire to spread similar to other dry plants and debris burning.

Areas at Greatest Risk

Manitowoc County contains approximately 77,314 acres of woodland (based on current land use). Of these, few contain timbers that are very susceptible to burning. Therefore, lands covered in grass fuels pose the highest risk for the planning area. Furthermore, grasslands that abut heavy residential development present an even greater danger, especially where residents practice unapproved outdoor burning of leaves, garbage, and other items which they wish to dispose of by incineration. Point Beach State Forest, the county's largest area of contiguous woodlands with more than 2,500 acres of forestlands, poses some risk for wildland fire.

Impacts from Hazard

Death and Injury

No data on deaths or injuries is available for significant wildland fire event for Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018.

Structures at Risk

Homes and other structures located within the Wildland Urban Interface (WUI) are at high risk to damage from wildland fires. The WUI refers to the zone of transition between forestland/wildland and human development. The wildland fire risk increases in the WUI because buildings are typically surrounded by fuel sources such as unmowed grass, unraked leaves, flammable vegetation, and dead branches. Structures constructed from materials that may melt or ignite when exposed to a fire present a high risk. In general, the potential for property damage from wildland fires increases as more development occurs on wooded lands.

Residential housing is typically the most dominant type of structure found within the WUI. Though many parts of a home can be affected by wildfire damage, the roof is the most exposed portion of the building and is more at risk from flying embers. Attics may also be affected by airborne embers that enter through open eaves and vents. Structures attached to homes, such as decks, garages, and fences, can also carry a fire into a home.



Photo by the Wisconsin DNR, 2016.

Critical Facilities

Police, fire, and emergency response personnel are greatly affected by wildland fires – suffering increased workloads during and after events. Hospitals can see increases in patient load resulting from burn related injuries and individuals suffering from the effects of smoke inhalation. Schools, if not affected by a fire, could potentially be used as temporary shelter for individuals that can not return to their homes. All critical facilities located in the path of a wildland fire can be affected structurally and functionally if evacuation is deemed necessary.

Economic Impacts

Fires can have an extensive impact on the economy of an affected area by causing thousands of dollars in damages to citizens through loss of private property. Major direct costs associated with wildland fires are incurred by the salvage and removal of downed timber and debris; restoration of the burned area; and reconstruction. Wildland fires can also have a significant impact on local agriculture. Fires will strip the land of vegetation as well as harm the soil, waterways, and the land itself. Soil exposed to intense heat may lose its capability to absorb moisture and support life.

Property Damage

No property damage data is available for wildland fire events for Manitowoc County over the last 18 years from January 1, 2000 to October 1, 2018.

Estimate of Potential Dollar Losses

An estimate of potential dollar losses is not needed for the wildland fire hazard as no specific vulnerable structures or geographic areas have been identified.



Coastal Hazards

Description of Hazard

In northeastern Wisconsin, coastal hazards can be described as natural hazards occurring along the shores of Lake Michigan. The coastal hazards of concern in Wisconsin include:

- Erosion of coastal bluffs, banks, beaches and near shore lake beds (including erosion from freezing and thawing of lake ice);
- Flooding from upland runoff, high lake levels and storm-induced surge (temporary water level changes); and
- Damage to shorelines and shoreline structures from storm waves and ice shoves and dams.

Previous Significant Hazard Occurrences

There is no record of significant coastal hazards for Manitowoc County and sources for past coastal hazard occurrences could not be found. However, Manitowoc County has experienced occurrences of ice shoves along Lake Michigan.

Hazard Frequency

There is no record of significant coastal hazards for Manitowoc County in order to develop a hazard frequency. It is important to note the fluctuating water levels and impact in 2018 and 2019. These levels should be monitored annually.

Probability of Hazard Occurring in the Future

According to the Resource Guide for Great Lakes Coastal Hazards in Wisconsin website (<http://coastal.lic.wisc.edu/urpl999.htm>) Manitowoc County is most at risk for coastal erosion. Overall, the probability of coastal hazards is medium for the planning area.

Areas at Greatest Risk

Portions of the county situated along Lake Michigan are at risk for coastal hazards.

Impacts from Hazard

Death and Injury

No data on deaths or injuries is available for significant coastal hazard events for Manitowoc County over the last 18 years from January 2000 to October 1, 2018.

Structures at Risk

Homes and other structures located along Lake Michigan are at risk for damage from coastal hazards. This risk increases where structures are closer to the shoreline, especially over high bluffs. There are 213 improved privately-owned structures directly adjacent to Lake Michigan in Manitowoc County.

Land Subsidence

Critical Facilities

There are 18 critical facilities located along Lake Michigan at risk of damage from coastal hazards. Most of these facilities are intentionally located adjacent to Lake Michigan; however, there are three critical facilities that are not dependent on a location with proximity to the lake. Two of the critical facilities are administrative buildings in the City of Two Rivers, including a public works facility and a maintenance shop. The third is a childcare facility in the City of Manitowoc, the YMCA Child Development Center Daycare.

Economic Impacts

Coastal hazards can have an extensive impact on the economy of an affected area by causing thousands of dollars in damages to public property and structures, as well a private property and houses.

Property Damage

No significant public property damages have been reported from coastal hazard events for Manitowoc County over the last 13 years from January 1, 2000 to January 31, 2013 according to NCDC data.

Estimate of Potential Dollar Losses

A “worst case scenario” for potential dollar losses from coastal hazards in Manitowoc County would involve the total destruction of all private structures along Lake Michigan, which would cause a loss of \$46.4 in private damages. There are no assessed values available for public properties. This information was obtained from the Manitowoc County database on assessed values of real property (structures and land). This only involves damage to structures themselves, and may not account for damage to personal property inside or adjacent to vulnerable structures.

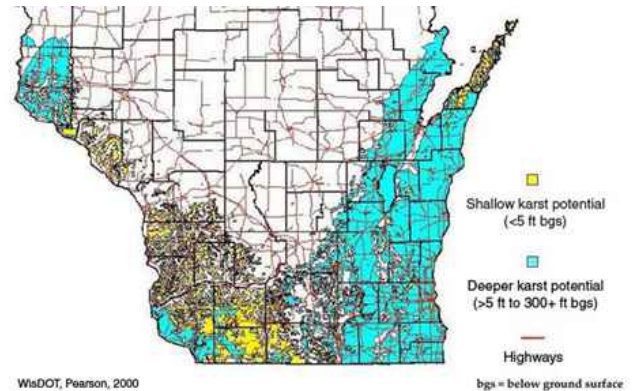
Land Subsidence

Description of Hazard

Land subsidence is an event in which a portion of the land surface collapses or settles. Subsidence or sinkholes in Wisconsin typically occurs in areas of karst terrain (dolomite and limestone bedrock areas). Subsidence in karst terrains occurs where dissolution of bedrock by groundwater flow causes the creation of voids (i.e. caves). The land above these underground voids often appears normal until a critical amount below has been washed away and the soil surface can no longer support the weight and collapses, causing subsidence at the surface (i.e. sinkholes).

Manitowoc County lies within the area of risk in Wisconsin that has been identified by the Wisconsin Geologic and Natural History Survey. This area is delineated as a V-shaped swath across Wisconsin that extends southeast from St. Croix County along the Mississippi River, across the bottom two tiers of counties, and northeast along Lake Michigan up to Marinette County (Figure 1).

Wisconsin subsidence occurrences are unlikely to be significant events. Sinkholes in Wisconsin are relatively small – they tend to be smaller than 10 feet across. The depth of sinkholes can be highly variable, although most are about as deep as they are wide.



Previous Significant Hazard Occurrences

There is no record of significant subsidence occurrences for Manitowoc County and sources for past subsidence occurrences could not be found.

Hazard Frequency

There is no record of significant subsidence occurrences for Manitowoc County in order to develop a hazard frequency.

Probability of Hazard Occurring in the Future

Although Manitowoc County is within the area of risk for subsidence in Wisconsin as identified by the Wisconsin Geologic and Natural History Survey (Figure 1), being in an area of deeper karst potential (instead of the shallow karst areas) with dolomite bedrock reduces the risk of subsidence in the county. Overall, the probability of a significant subsidence occurrence is low for the planning area.

Areas at Greatest Risk

The deeper karst potential is mostly uniform throughout Manitowoc County; therefore, the risk for subsidence is uniform throughout the county.

Impacts from Hazard

Death and Injury

No data on deaths or injuries is available for significant subsidence occurrences for Manitowoc County over the last 138 years from January 1, 2000 to October 1, 2018.

Structures at Risk

Although subsidence occurrences in other parts of the world can be large enough to swallow structures, in Wisconsin subsidence sinkholes are relatively small due to the differences in geology. In Wisconsin, the karst bedrock forms in dolomite. Dolomite is much less easily dissolved than the limestone that forms large subsidence occurrences in other areas. As a result, Wisconsin has fewer and smaller subsidence occurrences and there is minimal risk to structures.

However, the cracks and crevasses in karst act as direct conduits for pollutants to enter groundwater, wells, springs, and streams. Therefore, mindfulness of what is being spread or put on the ground in these areas is warranted to prevent groundwater contamination.

Critical Facilities

There are no critical facilities at a greater risk for damage from subsidence than any other structures in the county.

Economic Impacts

Subsidence can have an impact on the economy of an affected area by causing groundwater contamination that can be costly to treat and clean up. A large area of groundwater dependent businesses and residents.

Estimate of Potential Dollar Losses

An estimate of potential dollar losses cannot be calculated for subsidence, since no vulnerable structures have been identified.

Information on Karst below:

Karst

What is it?

Karst refers to an area where bedrock such as limestone is easily dissolved by water. Karst regions are generally characterized by connecting cracks and layers between rocks that easily transport water and pollutants to the groundwater. Sinkholes, shallow soils, sinking streams and springs are found in areas of karst bedrock.



Bentonite being used to seal an unused well.

The water along this ditch disappears into a sinkhole, carrying with it oils, lead, salt and other chemicals from roadways.

In karst areas, groundwater is threatened by:

Contaminated water from

- ✓ Barnyards and other areas where manure accumulates.
- ✓ Cropland where chemicals and manure are applied.
- ✓ Septic systems and household waste disposal.
- ✓ Roads and other paved areas.

This is a typical karst spring, but not all springs bubble out of karst areas. Many springs in Wisconsin flow out of deep gravel and sand deposited by the glaciers.

The fractures in the bedrock under shallow soil can be seen during a drought. The alfalfa was able to send deep roots down into the moist soil that had accumulated through the cracks.

Sinkholes like the one above are often used to dispose of unwanted junk. Sometimes this junk can contaminate a well miles away.

Caves such as this one can be an important home for bats and hibernating animals.

Groundwater

If you dig a hole and water begins to seep in, you have hit groundwater. It is simply the area beneath the land's surface where all the spaces between soil particles, or in rocks, are filled with water.

Deep soils help filter out sediment and pollutants as water from rain and melting snow percolates downward. Shallow soils are not as effective and, in karst areas, surface water may flow into the groundwater with little or no soil filtration.

In karst areas, groundwater can move 100 feet or more per day (in other areas, groundwater typically moves less than 1 foot per day). The water follows cracks in the limestone, moving deep and spreading out under the ground.

Eventually this water returns to the surface at a spring, river or lake. It can also be held deep underground for thousands of years, only reaching the surface again when pumped out of wells.

Karst:

Why be concerned?

Where soils are shallow, karst conditions make it easier for groundwater to be contaminated with bacteria, nitrate and pesticides.

Even wells that are hundreds of feet deep can be contaminated.



Take action to prevent groundwater contamination in karst areas

In the community

- Use care when planning and constructing roads and ditches to avoid runoff draining into cracks in the bedrock.
- Provide "clean sweep" programs to properly dispose of home, business and farm chemicals.
- Consider geology and groundwater in land use planning.

On the farm

- Grow a grass buffer 10-200 feet wide, depending on site conditions, around sinkholes and crevices.
- Do not apply manure, fertilizers, pesticides or other agricultural chemicals near sinkholes.
- Any manure applied near sinkholes should be incorporated into the soil as soon as possible. See your NRCS or LCD office for site-specific guidelines.
- Divert water away from sinkholes and crevices.
- Do not dispose of chemical containers, dead animals, or anything else in sinkholes.

Around the home

- Properly seal unused wells.
- Test wells annually for nitrate and bacteria.
- Pump your septic system at least every three years.

A sinkhole without a protective berm before and during flooding. A berm would have prevented runoff containing fertilizers and pesticides from draining into the sinkhole.

Help is available

For more information about bedrock concerns, drinking water or cost-share programs, contact:

County Land and Water Conservation Department
Public Health Department
University of Wisconsin - Extension
USDA Natural Resources Conservation Department
Wis. Dept. of Natural Resources Service Centers
Wis. Dept. of Agriculture, Trade and Consumer Protection

Or web sites:
cleanwater.uwex.edu/rockriver/groundwater
www.uwex.edu/wghs/karst.htm

Produced by the Rock River Coalition, Inc. and the University of Wisconsin-Extension, with funds through the Environmental Incentives Program Educational Assistance funds of the Graphics design by Brooke Wentland, UW-Extension Environmental Program

The NRCS and USACE prohibit discrimination in their programs and activities on the basis of race, gender, religion, age, disability, political beliefs, sexual orientation and marital status.

Chapter 4 - Mitigation Strategy

Introduction

As defined by the Disaster Mitigation Act of 2000, mitigation is a "sustained action that reduces or eliminates long-term risk to people and property from natural hazards and their effects." Mitigation planning is the systematic process of learning about the hazards that can affect the planning area, setting clear goals, identifying appropriate actions, and following through with an effective mitigation strategy. Mitigation encourages long-term reduction of hazard vulnerability and can reduce the enormous cost of disasters to the government and property owners. Mitigation can also protect critical community facilities and infrastructure; reduce exposure to liability; and minimize community disruption.

The mitigation strategy outlines the general goals to be achieved through the implementation of the Manitowoc County, Wisconsin Hazard Mitigation Plan. From the identified hazard mitigation goals, a mitigation strategy was developed to identify specific projects and activities that could help achieve the County's hazard mitigation goals to make them safer and better prepared for disasters.

This chapter includes a discussion of the mitigation efforts that are currently underway, the County's plan to implement the mitigation actions, an assessment of the County's pre- and post-disaster hazard management policies, programs, and capability to mitigate hazards, and an evaluation of the current and potential sources of federal, state, or private funding to implement mitigation activities.



Mitigation Goals

The following mitigation goals are intended to be used by public officials and emergency management personnel as general guidelines to mitigate natural hazards in Manitowoc County. The goals are broad in order to apply to all of the hazards addressed in the plan.

Goal #1: Implement policies and programs that are designed to reduce or eliminate the impacts of hazards on people and property.

Goal #2: Collect and utilize data needed to improve policymaking and the identification of appropriate mitigation projects.

Goal #3: Build and support local capacity and commitment to continuously lessen the impacts of hazards on people and property.

Goal #4: Promote enforcement measures to reduce the impact of hazards on people and property.

Goal #5: Promote the use of natural resource protection measures as a means to reduce the impacts of hazards on people and property.

Goal #6: Obtain and maximize additional resources that are necessary to reduce the impact of hazards on people and property.

Goal #7: Enhance training, education and outreach efforts to describe potential effects of hazards and ways to reduce their impact.

Goal #8: Promote intergovernmental coordination and cooperation in planning for and implementing hazard mitigation strategies.

Mitigation Action Plan

Mitigation actions form the core of the mitigation plan. Table 4.1 lists the mitigation action plan developed for Manitowoc County. The table lists the hazard type, associated mitigation actions, the estimated costs of each project (where known), responsible agencies, the project timetable, and potential funding sources available for each mitigation action identified. The identified actions and projects address reducing the effects of hazards on the population, services, and existing and new buildings and infrastructure.

The County Emergency Management Department will track the implementation of mitigation actions over time. Information on completed or revised actions will be documented in future five-year updates of the County hazard mitigation plan.

Prioritization Process

In developing this mitigation strategy, members of the plan steering committee considered, from their perspective, the various proposed action items and came to consensus on how each would be ranked, "high," "medium" or "low," based on need, funding, cost-benefit, and anticipated political support.

Cost-Benefit Review

In developing this mitigation strategy, members of the plan steering committee considered, from their perspective, the costs and benefits of the various proposed action items. The cost-benefit review was a factor of the prioritization process. Full-blown cost-benefit calculations were not prepared for each action item included in the plan. The cost effectiveness of each action item will be addressed and completed through the project development process.

Completed Mitigation Actions

Since the preparation of the 2009 hazard mitigation plan for Manitowoc County, some of mitigation actions identified in the action plan have been completed. The following lists those actions that have been completed in Manitowoc County.

- Mutual Aid Agreements have been established for communications systems.
- Building footprints have been collected for all structures in the City of Manitowoc (plus three miles) to allow for analysis of facility/structure locations.
- LIDAR data was acquired and should be updated in 2023
- Code Red was replaced with RAVE
- Building footprints were collected in 2015 from LIDAR for buildings in the towns.
- Weather radios removed
- Individual sirens are tested and repaired manually
- Added capability for the Dispatch Center to accept text messages
- Updated 20-Year County Comprehensive Plan



Mitigation Strategy

Table 4.1 Manitowoc County Hazard Mitigation Action Plan 2020-2025

All Hazards					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Update air photos and LIDAR data	High	2023	Covered by existing budgets	Land Information Officer	Change Acquire to update. Cost covered by existing budgets.
Outage management software to help triage outage repairs	High	2020-2025	Costs to be determined	Manitowoc, Two Rivers, and Kiel public utilities	
Maintain RAVE (i.e. Reverse 911) capability	High	Ongoing	\$20,000/year	Joint Dispatch Center	
Work with County, State, and Federal agencies to maintain a consistent critical facility database	High	Ongoing	Costs to be determined	Manitowoc County Hazard Mitigation Plan Steering Committee	
Promote use of NOAA weather radios which continually broadcast National Weather Service forecasts, warnings, and other crucial weather information as well as warnings regarding natural, man-made, or technological hazards	High	Ongoing	No cost; radios are purchased and sold at cost	County Emergency Services and American Red Cross	Still promote, but no longer have them for sale at the County Emergency Services
Develop a central data collection process to report hazard incidences and resulting deaths, injuries, and property or crop damages	Medium	2020-2025	Covered by existing budgets	County Emergency Management	
Develop comprehensive safety plan for all municipal-owned buildings	Medium	2020-2025	Covered by existing budgets	Local jurisdictions	
Encourage residents to prepare themselves by stocking up with necessary items and planning for how family members should respond if any emergency or disaster events strike	Medium	Ongoing	Covered by existing budgets	County Emergency Services, American Red Cross, and County Health Department	
Collect remaining building footprints for all structures in the villages and cities to allow for analysis of where facilities/structures are located	Low	2020-2025	Costs to be determined	County Planning and Park Commission	Complete collection by focusing on villages and cities
Collect building height data for all structures in the County	Low	2020-2025	Costs to be determined	County Planning and Park Commission	
Use of early warning system through pagers and NOAA weather radios	Medium	As needed	Covered by existing budgets	County Emergency Services, Joint Dispatch Center, fire depts, EMS, and law enforcement	



Table 4.1 Manitowoc County Hazard Mitigation Action Plan 2020-2025

Tornado and Strong Wind					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Continued investment and use of early warning system through pagers, NOAA weather radios, sirens, social media, and Code Red	Medium	Ongoing	Covered by existing budgets	County Emergency Services, Joint Dispatch Center, local fire depts and EMTs, and County Sheriff's Dept	
Assist personnel in schools and businesses, public facility managers, mobile home park managers, and citizens in determining "best available" tornado safety areas or need to construct safe rooms	Medium	As needed	Covered by existing budgets	County Emergency Services and American Red Cross	A plan is in place for the fairgrounds as of 2011
Review and update Comprehensive Safety Plan for all county-owned buildings	Medium	Annually	Covered by existing budgets	County Emergency Services	Last updated in 2019-2020
Consider adoption of ordinances requiring construction of safe shelters for mobile home parks, fairgrounds, or other vulnerable public places	Low	2020-2025	Covered by existing budgets	County Planning and Park Commission and local zoning officials	

Winter Storm					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Ensure that plow and sanding equipment is operational and available	High	Ongoing	Covered by existing budgets	County Highway Dept and local public works departments	
Utilization of the media to disseminate emergency information	High	As needed	Covered by existing budgets	National Weather Service, Joint Dispatch Center, highway depts, and all participating jurisdictions	
Provide educational materials to the public regarding safety during winter storm events	Medium	Ongoing	Covered by existing budgets	County Emergency Services and State EM (readywisconsin.wi.gov)	

Hail					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Animal protection	High	Ongoing	Costs to be determined	County UW-Extension and Farm Service Agency	
Provide information about hail crop insurance	Medium	Ongoing	Covered by existing budgets	County UW-Extension and Farm Service Agency	

Mitigation Strategy

Table 4.1 Manitowoc County Hazard Mitigation Action Plan 2020-2025

Flooding					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Land use planning	Low	2018 - 2020	Covered by existing budgets	All participating jurisdictions with assistance (when feasible) from County Planning and Resources Department	Will update with Comprehensive Pla
Study effects of current and future development in the approximate floodplain and any other areas that have not yet been studied	High	As funding is available	Costs to be determined	County Planning and Park Commission and GIS	Updated, but still unstudied areas. Need LIDAR and 2' contours.
Maintain information regarding, and coordination of, congregate care facilities	High	Ongoing	Covered by existing budgets	County Emergency Services and American Red Cross	
Continue to issue early warnings through flood advisory bulletins	High	Ongoing	Covered by existing budgets	Wisconsin DNR and public works/engineering	
Stormwater retention/detention facilities	High	Ongoing	Costs to be determined based on specific project	Wisconsin DNR and public works/engineering	
Erosion control zoning	High	Ongoing	Covered by existing budgets	Wisconsin DNR	
Dissemination of instructions to the public through the media	High	As needed	Covered by existing budgets	National Weather Service, Joint Dispatch Center, and local jurisdictions	
Handle the evacuation of people and property in the case of a severe flood event	High	As needed	Covered by existing budgets	Local law enforcement, fire depts, County Emergency Services, County Highway Dept, County Aging Dept, and County Health Dept	
Review and update floodplain zoning ordinances as necessary	Medium	As needed	Covered by existing budgets	County Planning and Park Commission	Updated in 2010; approved by FEMA and WDNR
Sand-bagging when necessary	Medium	As needed	Covered by existing budgets	County Highway Dept, County Emergency Services, local public works depts	
Protection of new buildings and other structures through floodplain zoning	Medium	As needed	Costs to be determined based on specific project	County Planning and Park Commission	
Review and update evacuation procedures for persons located in affected area as needed	Low	Annually	Covered by existing budgets	County Emergency Services	
Issue or deny floodplain development/building permits	Medium	Ongoing	Covered by existing budgets	County Planning and Park Commission, and cities and villages	Addresses NFIP Compliance
Inspect all development to assure compliance with local ordinance	Medium	Ongoing	Covered by existing budgets	County Planning and Park Commission, and cities and villages	Addresses NFIP Compliance

Table 4.1 Manitowoc County Hazard Mitigation Action Plan 2020-2025

Flooding (cont'd)					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Maintain records of floodplain development	Medium	Ongoing	Covered by existing budgets	County Planning and Park Commission, and cities and villages	Addresses NFIP Compliance
Assist in the preparation and revision of floodplain maps	Medium	Ongoing	Covered by existing budgets	County Planning and Park Commission, and cities and villages	Addresses NFIP Compliance
Help residents obtain information on flood hazard, floodplain map data, flood insurance, and proper construction measures	Medium	Ongoing	Covered by existing budgets	County Planning and Park Commission, and cities and villages	Addresses NFIP Compliance

Extreme Cold					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Continue to provide safety information to the public during periods of extreme temperature	Medium	Ongoing	Covered by existing budgets	American Red Cross, County Emergency Services, and County Health Dept	
Organize outreach to vulnerable populations during periods of extreme temperature, including the establishment and promotion of accessible heating or cooling centers in the community	Medium	As needed	Covered by existing budgets	County Health Dept, American Red Cross, and local jurisdictions	

Extreme Heat					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Continue to provide safety information to the public during periods of extreme temperature	Medium	Ongoing	Covered by existing budgets	American Red Cross, County Emergency Services, and County Health Dept	
Organize outreach to vulnerable populations during periods of extreme temperature, including the establishment and promotion of accessible heating or cooling centers in the community	Medium	As needed	Covered by existing budgets	County Health Dept, American Red Cross, and local jurisdictions	

Lightning					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Continue to distribute awareness/educational materials to inform public of safety procedures to follow in a lightning storm	Medium	Ongoing	Covered by existing budgets	County Emergency Services and American Red Cross	
Provide information about protecting structures through use of fire resistant materials	Low	Ongoing	Costs to be determined based on project and jurisdiction	Local Building and Fire Inspectors	

Mitigation Strategy

Table 4.1 Manitowoc County Hazard Mitigation Action Plan 2020-2025

Drought					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Identification of areas with potential ground water level problems and inspection of shallow wells in those areas for adequate depth and construction	Low	2020-2025	Costs to be determined based on pending studies	WDNR, UW-Extension, County Land and Water Conservation Dept	
Development of water usage regulations during periods of drought by local communities	Low	As needed	Covered by existing budgets	All participating jurisdictions	
Encourage citizens to take water-saving measures during periods of drought where regulations are not in place	Low	As needed	Covered by existing budgets	All participating jurisdictions	

Dense Fog					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Dissemination of fog advisories	High	As needed	Covered by existing budgets	National Weather Service	
Upkeep existing signage in areas of high fog event incidence	Medium	As needed	Covered by existing budgets	County Traffic Safety Commission	

Wildland Fires					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Encourage citizens to install and maintain smoke detectors and fire extinguishers on each floor of their homes or other buildings	High	Ongoing	Covered by existing budgets	Local fire depts, all participating jurisdictions, and building inspectors	
Schedule regular training and exercise sessions for response personnel	High	Ongoing	Covered by existing budgets	All participating jurisdictions and WDNR	
Develop local ordinances to require burn permits and restriction of campfires and outdoor burning	Medium	2020-2025	Costs to be determined based on needs of jurisdiction	All participating jurisdictions and WDNR	
Coordinate public outreach efforts to promote such things as non-combustible roof covering, fire safe construction, safe burning, and the importance of clearing brush and grass away from buildings	Low	As needed	Covered by existing budgets	Local fire depts, and all participating jurisdictions	

Coastal Hazards					
Project	Priority	Project Timetable	Estimated Cost	Responsible Party	Notes
Continue to enforce greater setbacks for properties adjacent to Lake Michigan under the county shoreland zoning ordinance	Medium	As needed	Covered by existing budgets	County Planning Department	

Land Subsidence				
Project	Priority	Project Timetable	Estimated Cost	Responsible Party
Provide information to residents as needed	Low	Ongoing	Covered by existing budgets	Dependent on assistance needed

Table 4.2 Mitigation Strategies for Communities in Manitowoc County 2020-2025

Hazard Type	Mitigation Measures	Costs of Project	Responsible Parties	Project Timetable	Priority
City of Manitowoc					
All Hazards	Acquire, promote and make available 10-year smoke detectors and 7-year CO detectors to in-need residents	\$10,000 initial startup, \$3,000/year then	Manitowoc City Fire Department	Ongoing	Medium
All Hazards	Standby power generation for drinking water facilities	\$3,000,000	Manitowoc Public Utilities	2023	Medium
Extreme Cold	Add protection against frazil ice and water intake freezing	\$2,500,000	Manitowoc Public Utilities	2023	Medium
City of Two Rivers					
All Hazards	Increase the number of warming shelters with working kitchens and sufficient restrooms and showers	\$46,771	City of Two Rivers and Two Rivers Water & Light	Completed	High
City of Kiel					
All Hazards	Severe weather education; promote planning by residents on how to respond, protect and endure emergency weather events	Covered by existing budgets	City of Kiel Emergency Management, Fire Department, and Police Department	Ongoing	High
Village of Cleveland					
All Hazards	Install motion sensors at wells No. 1 and 2 and the water tower	To be determined	Village of Cleveland Public Works	2020	Medium
Village of Francis Creek					
All Hazards	Utilize media for emergency information	Covered by existing budgets	Village President/Clerk	Ongoing	Low
Village of Kellnersville					
All Hazards	Expand and harden fire station to be used as emergency shelter/center	To be determined	Village of Kellnersville, Kellnersville Fire Department, and EMS Volunteer Responder	2020	High
Village of Maribel					
All Hazards	Promote the use of NOAA weather radios	\$1,000	Village of Maribel and Manitowoc County Emergency Management	Ongoing	High
Village of Mishicot					
Extreme Heat/ Cold	Organize outreach to vulnerable populations during periods of extreme temperature, including the establishment and promotion of accessible heating or cooling centers in the community	Covered by existing budgets	Village of Mishicot and Mishicot Police Department	As needed	Medium
Village of Reedsville					
Tornado and Strong Wind	Continue to hold tornado safety drills, with siren testing, and schools practicing tornado safety	Covered by existing budgets	County Emergency Management, Reedsville Fire and Police Departments, and First Responders	Annually in Spring	High
Village of St. Nazianz					
All Hazards	Install a second storm siren (received from closed Kewaunee Nuclear plant)	Covered by existing budgets	Village of St. Nazianz and St. Nazianz Fire Department	Completed	Medium
Village of Valders					
Flooding	Dredge creek along Eisenhower Street to remove debris	\$250,000	Valders Police Department	2020-2025	Medium
Flooding	Create stormwater runoff waterway along field north of Kennedy Street	\$50,000	Valders Police Department	2020-2025	Medium
Village of Whitelaw					
All Hazards	Continued investment in state of the art early warning system	\$3,000	Village of Whitelaw and Whitelaw Fire Department	2020-2025	Medium

Attachment: manitowoc-county-hazard-mitigation-plan-2020-2025 (2861 : Manitowoc County Multi-Hazard Mitigation Plan 2020-2025)

Mitigation Strategy

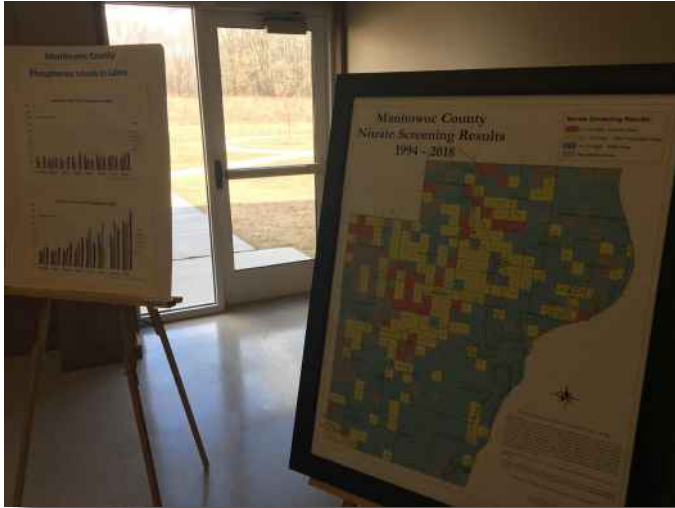
Table 4.3 Manitowoc Public Utilities Mitigation Recommendations & Strategy

Action Description	Hazards/Threats	Preliminary Cost	Timeframe	Priori
Develop unified signage that orientation tools so that employees have clear navigation and direction before, during and after hazard/threats	All Hazards	\$2,000	2019-2024	Low
Purchase NOAA All-Hazard Radios to notify employees of emergency alerts and hazardous conditions	All Hazards	\$500	2019-2024	Low
Develop unified signage and materials promoting health and safety of employees; ensure seasonal hazards (such as influenza) are addressed	Emerging Infectious Diseases	\$2,000	2019-2024	Low
Participate in community, county, regional, and other exercises and training for all hazards and threats as available but at a minimum annually, including storm scenarios and threat exercises	All Hazards	To be determined	Ongoing	Medium
Engage outage management software to help triage outage repairs	All Hazards	\$200,000	2019-2021	Medium
Purchase and install standby power generation equipment for drinking water facilities (including plants), such as a blackstart generator	All Hazards	\$3,000,000	2019-2024	High
Study Feasibility	Winter Storm & Extreme Cold	\$25,000	2019-2024	Low
Purchase and install emergency steam production for heating jail (life safety for custodial care facility) and sheriff's office and city/county EOC	All Hazards	\$100,000	Ongoing	To be determined
Purchase and install emergency steam production for heating Lincoln High School	Winter Storm & Extreme Cold	\$100,000	2019-2024	Low
Study feasibility of boiler operation during limestone shortage	All Hazards	To be determined	2019-2024	Medium
Install backup power to entire main office building so that all equipment will be backed up by standby power to ensure network, phone system, business services, and engineering, and GM availability during an outage	All Hazards	\$300,000	2019-2024	High
Identify facilities or spaces in need of portable chiller connections, such as equipment and server rooms: purchase portable chiller units and install connections	Drought & Extreme Heat	To be determined	2019-2024	Medium
Purchase internal alternate communications equipment in the event phone lines and cell towers are down; train staff on operation and use	All Hazards	\$5,000	2019-2024	Low
Investigate protection against frazil ice and water intake freezing	Winter Storm & Extreme Cold	\$2,500,000	2019-2024	Medium
Bank stabilization for Collector well station	Coastal Erosion & Bluff Failure	\$250,000	2019-2024	Medium
Safe room (new construction or retrofit) for control room at power plant	All Hazards & Threats	\$300,000+	2019-2024	Medium
Install new backup targets to accommodate the additional data storage requirements for backing up all the essential programs	Cyber Incident; Severe Weather	\$50,000	2019-2024	High
Install lightning protection on MPU assets, including, stacks and other high points	Severe Weather	\$250,000	2019-2024	Medium
Study feasibility	Solar Flares	\$20,000	2019-2024	Low
Harden/protect sensitive electrical and communications equipment from the effects of solar storms and other geomagnetic interference	All Hazards	\$500,000	Ongoing	To be determined
Harden/Protect buildings from hazards and threats, to ensure operational capability and structural integrity during and after occurrences	All Hazards & Threats	\$300,000	2019-2024	Medium
Develop/maintain a hazard and risk data repository, which details all MPU assets including location and replacement cost for both asset and contents	All Hazards	\$5,000+	In-progress	Medium
Fireproof Main Office to protect files, paper archives, and data	Wildfire	\$40,000+	2019-2024	Low
Develop and exercise a business continuity plan for all departments and activities	All Hazards	\$50,000+	2019-2024	High

Attachment: manitowoc-county-hazard-mitigation-plan-2020-2025 (2861 : Manitowoc County Multi-Hazard Mitigation Plan 2020-2025)

Table 4.3 Manitowoc Public Utilities Mitigation Recommendations & Strategy (Cont'd)

Action Description	Hazards/Threats	Preliminary Cost	Timeframe	Priori
Study feasibility for installation of standby generation equipment and procedures to ensure that its power plant and distribution system can function independently of the electrical grid and transmission network during severe storm, winter storm, and excessive heat hazards. This would ensure a power source remains available for electrical distribution, water plant, and district heating	Severe Storms, Winter Weather & Extreme Cold, and Drought & Extreme Heat	To be determined	2019-2024	High
Install standby generation	Severe Storms, Winter Weather & Extreme Cold, and Drought & Extreme Heat	\$10,000,000	2019-2024	High
Install security cameras at critical locations which do not have coverage following 2017 upgrades	All Hazards	To be determined	2019-2024	Low



Hazard Plan



Policies, Programs, and Resources for Mitigation

Manitowoc County has a number of authorities that enforce policies, execute programs, and provide resources that support the mitigation action plan for reducing potential losses identified in the risk assessment. These authorities have been identified under the responsible parties (where applicable) in the mitigation action plan (Table 4.1), and include the following;

- **Manitowoc County Planning and Park Commission**

Policies and programs include planning and zoning (including enforcement of county shoreland and floodplain management regulations).

- **Manitowoc County Emergency Services**

Policies and programs include coordinating effective disaster response and recovery efforts in the county through response, recovery, planning, training, and exercises, and mitigation.

- **Fire Departments and Emergency Medical Services**

Policies and programs include coordinating emergency preparedness, mitigation, response, and recovery efforts.

- **Law Enforcement**

Policies and programs include coordinating emergency preparedness, mitigation, response, and recovery efforts.

- **Manitowoc County Joint Dispatch Center**

Policies and programs include coordinating emergency response and recovery efforts with regard to communication between the public and police, fire, and EMS.

- **Manitowoc County Highway Department**

Policies and programs include road maintenance, stormwater management, and management of salt storage for winter storms.

- **Manitowoc County Health Department**

Policies and programs focus on protecting and promoting the health and safety of the people in the county in cooperation with community partners (includes assisting citizens with emergency preparedness).

- **Wisconsin Emergency Management**

Policies and programs include supporting effective disaster response and recovery efforts in support of local government through planning, training, and exercises.

- **Wisconsin Department of Natural Resources**

Relevant policies and programs include regulation enforcement of state shoreland and floodplain management rules, and wildland fire response and education.

- **Power Utilities (Manitowoc Public Utilities, Kiel Utilities, Two Rivers Water & Light, Wisconsin Public Service, W Energies)**

Policies and programs include maintaining electrical power and transmission facilities.

- **American Red Cross**

Policies and programs include disaster relief and educational programs that promote health and safety.

- **National Weather Service (Green Bay Regional Office)**

Policies and programs include publicizing information, and providing outreach and education about hazardous weather.

These authorities have the ability to expand or modify their program when needed to improve existing tools to address mitigation. Manitowoc County has taxing authority through property taxes to raise funds for the purpose of hazard mitigation. Additional funding sources for hazard mitigation actions are available from a number of federal and state grant programs.

Potential Funding Sources for Mitigation Activities

Funding for hazard mitigation programs and projects can come from a number of sources both public and private. Non-local funding can come from a number of sources, either in the form of a grant or a loan. The following text provides a description of a number of potential grant programs available to Manitowoc County (or other entities seeking to carry out hazard mitigation actions) in funding future mitigation actions identified in this plan:

EDA Public Works and Development Facilities

These funds are available for local units of government to enhance regional competitiveness and promote long-term economic development in regions experiencing substantial economic distress. EDA provides Public Works investments to help distressed communities and regions revitalize, expand, and upgrade the physical infrastructure to attract new industry, encourage business expansion, diversify local economies, and generate or retain long-term private sector jobs and investment.



FEMA Assistance to Firefighters Grant

The primary goal of the Assistance to Firefighters Grants (AFG) is to meet the firefighting and emergency response needs of fire departments and non-affiliated emergency medical services organizations. The AFG program helps firefighters and other first responders to obtain critically needed equipment, protective gear, emergency vehicles, training, and other resources needed to protect the public and emergency personnel from fire and related hazards. The National Preparedness Directorate in the Federal Emergency Management Agency administers the grants in cooperation with the U.S. Fire Administration. The Fire Prevention and Safety Grants (FP&S) are part of the Assistance to Firefighters Grants (AFG) and are under the purview of the National Preparedness Directorate in the Federal Emergency Management Agency. FP&S grants support projects that enhance the safety of the public and firefighters from fire and related hazards. The primary goal is to target high-risk populations and mitigate high incidences of death and injury.

FEMA Flood Mitigation Assistance Program

The Flood Mitigation Assistance (FMA) program was created as part of the National Flood Insurance Reform Act (NFIRA) of 1994 with the goal of reducing or eliminating claims under the National Flood Insurance Program (NFIP). FEMA provides FMA funds to assist States and communities implement measures that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program. Eligible activities include: acquisition, relocation, elevation, and flood-proofing of flood-prone insured properties; flood mitigation planning; and technical assistance. In order to be eligible for funding through this program the local government must be in compliance with the National Flood Insurance Program.

FEMA Hazard Mitigation Grant Program

The Hazard Mitigation Grant Program (HMGP) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. Eligible activities include: flood proofing; acquisition and relocation of flood prone properties; elevation of flood prone properties; retrofitting properties to be wind resistant; stormwater improvements; and education and awareness. In order to be eligible for funding through this program, the local government must be in compliance with the National Flood Insurance Program. All projects must be cost-effective, environmentally sound, and solve a problem. Funds are available anytime after a Presidential Disaster Declaration has been made in the State of Wisconsin.

FEMA Pre-Disaster Mitigation Program

The Pre-Disaster Mitigation (PDM) program provides funds to states, territories, Indian tribal governments, communities, and universities for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event. Funding these plans and projects reduces overall risks to the population and structures while also reducing reliance on funding from actual disaster declarations. PDM grants are to be awarded on a competitive basis and without reference to state allocations, quotas, or other formula-based allocation of funds. Grant funds can be used to cover management costs, information dissemination, planning, technical assistance, and mitigation projects. In order to be eligible for funding through this program the local government must be in compliance with the National Flood Insurance Program. All projects must be cost-effective and environmentally sound.

Pipeline and Hazardous Materials Safety Administration Hazardous Materials Emergency Preparedness

The Hazardous Materials Emergency Preparedness (HMEP) grant program is intended to provide financial and technical assistance as well as national direction and guidance to enhance State, Territorial, Tribal, and local hazardous materials emergency planning and training. The HMEP Grant Program distributes fees collected from shippers and carriers of hazardous materials to emergency responders for hazmat training and to Local Emergency Planning Committees (LEPCs) for hazmat planning.

U.S. Department of Education School Emergency Response and Crisis Management Plan Discretionary Grant Program

This grant program is designed to provide funds to Local Education Agencies (LEA) to strengthen and improve their emergency response and crisis plans, at the district and school-building level. Grantees are required to address all four phases of crisis planning: prevention and mitigation, preparedness, response, and recovery. In addition, LEAs are required to form partnerships and collaborate with community organizations, local law enforcement agencies, heads of local governments, and offices of public safety, health, and mental health as they review and revise school crisis plans. Plans must be coordinated with state or local homeland security plans and support implementation of the National Incident Management System (NIMS). Grant funds may be used for the following activities: training school safety teams and students; conducting building and facilities audits; communicating emergency response policies to parents and guardians; implementing an Incident Command System (ICS); purchasing school safety equipment (to a limited extent); conducting drills and tabletop simulation exercises; and preparing and distributing copies of crisis plans.

State of Wisconsin Programs

WDNR Lake Planning Grant Program

Counties, towns, cities, villages, tribes, qualified non-profit conservation organizations, qualified lake associations, school districts (in partnership with another eligible party), public inland lake protection and rehabilitation districts, town sanitary districts, and other local governmental units that are established for the purpose of lake management, are eligible to apply for funding to collect and analyze information needed to protect and restore lakes and their watersheds.

Eligible activities include: gathering and analysis of physical, chemical, and biological information on lakes; describing present and potential land uses within lake watersheds and on shorelines; reviewing jurisdictional boundaries and evaluating ordinances that relate to zoning, sanitation, or pollution control or surface use; assessments of fish, aquatic life, wildlife, and their habitats; and developing, evaluating, publishing, and distributing alternative courses of action and recommendations in a lake management plan.

WDNR Municipal Flood Control Grant Program

The Wisconsin Department of Natural Resources, Bureau of Community Financial Assistance and Bureau of Watershed Management, offers this grant assistance package to all cities, villages, towns, Indian Tribes, and metropolitan sewerage districts concerned with municipal flood control management in the State of Wisconsin. Assistance is provided with the availability of Acquisition and Development grants to purchase property or vacant land, structure removal, construction or other development costs and with Local Assistance Grants for providing administrative support activities.

WDNR River Planning Grant Program

Under this grant program, counties, cities, towns, villages, tribes, other local governmental units, qualified river management organizations, and qualified nonprofit conservation organizations are eligible to apply for funding under this program. Projects funded by this program must be designed to collect, assess and disseminate information on riverine ecosystems; assist in developing organizations to help manage rivers; assist the public in understanding riverine ecosystems; and/or create management plans for the long term protection and improvement of riverine ecosystems. Eligible activities include: organizational development for existing river protection/improvement organizations; assistance with the formation of a qualified river management organization; public education projects; and planning and assessment projects. Capital improvement projects are not eligible for funding under this grant.

WDNR Volunteer Fire Assistance Grant

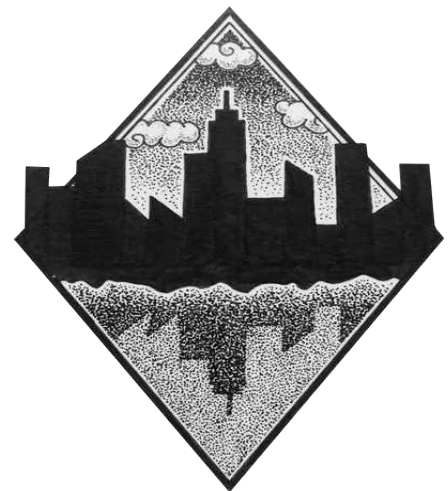
Volunteer Fire Assistance (VFA) grants are available to Wisconsin county/area fire associations statewide. Grant funding is intended to support wildland fire suppression capabilities in an area through broad-ranging projects of benefit to all of the local fire departments. Successful applications will have a positive impact on the prevention, detection, and suppression of wildland fires in all of the communities served by a county/area fire association. Grant funds can be used for: fire fighter safety; fire fighter training; fire prevention (particularly in the Wildland Urban Interface); dry hydrants and other water resources; mapping; enhanced communications; wildland fire suppression equipment; and the organization of a new fire department.

WDOA Comprehensive Planning Grant Program

The Division of Intergovernmental Relations administers the Wisconsin Comprehensive Planning Grant Program to assist local governments in the development and adoption of comprehensive plans. The Comprehensive Planning Grant Program has established a framework that promotes cooperation, collaboration and the exchange of ideas relating to planning and land use issues.

WDOA, Division of Housing and Intergovernmental Relations Emergency Housing Grant Program

This program makes available funds for acquisition, rehabilitation and/or demolition projects after a disaster event has occurred. These funds can be used as a local match to receive FEMA mitigation funds. The project must be used to benefit low and moderate income individuals.



Chapter 5 - Plan Adoption and Maintenance

Plan Adoption Process

The Manitowoc County, Wisconsin Hazard Mitigation Plan development process was guided by the County Hazard Mitigation Plan Steering Committee over an 18-month time-frame, with professional planning support from the Bay-Lake Regional Planning Commission. A list of Steering Committee members is located in Chapter 1 - Introduction of this document, page 9.

WEM reviewed a final draft of the County's hazard mitigation plan prior to adoption by the Manitowoc County Board. Comments received from WEM and no changes were required.

The plan was adopted by resolution by the Manitowoc County Board on January 21, 2020. The resolution adopting the plan can be found on page (I) just before the Table of Contents. After the plan was adopted by the Manitowoc County Board, it was approved by WEM and FEMA. Approval letters from WEM and FEMA can be found on pages (II, III, IV).

Plan Maintenance

Planning is an ongoing process, and this plan should grow and adapt in order to keep pace with growth and change in the planning area and its local jurisdictions. The Disaster Mitigation Act of 2000 requires that local plans be evaluated and updated at least every five years in order to remain eligible for assistance.

Plan Monitoring, Evaluation, and Updating

This Manitowoc County, Wisconsin Hazard Mitigation Plan is an update to the 2014 plan, and will continue to be monitored, evaluated, and updated by Manitowoc County. Every five years, the plan will be comprehensively reviewed, and fully updated. The update shall involve the collection of the most current data to support the plan and the development of new mitigation strategies and an implementation plan. This planning effort will be comprehensive, and will incorporate opportunities for public involvement to meet all requirements of 44 CFR Part 201.6 and/or any applicable requirements or regulations developed over the next five years.

The five-year plan update will be coordinated by either the Manitowoc County Planning Department or the Emergency Management Director for County Board approval. All meetings to update the plan shall be subject to the Wisconsin Open Meeting Law, and shall be properly noticed to allow for public involvement and comment.

Additional Plan Review

Within three to six months following a significant natural hazard event, a special post-disaster review will occur. Information concerning the disaster shall be collected by the Manitowoc County Emergency Services from local law enforcement personnel, fire department personnel, disaster response personnel, Wisconsin Emergency Management staff, FEMA staff, affected citizens, and any other pertinent entities. This information shall be provided to the Steering Committee for its review.

At a public meeting, the Steering Committee will analyze the contributing factors to the impact(s) of the hazard event, the likelihood of the event recurring, and any strategies that should be implemented to mitigate the impact(s) in the future. The County Emergency Management Director will have primary responsibility for establishing post-disaster review meeting dates, distributing related materials, facilitating the meetings, and advertising these special meetings to affected county department heads and citizens and community groups, so that additional input and comment can be received. Special post-disaster review meetings shall be subject to the Wisconsin Open Meeting Law and shall be properly noticed to allow for public involvement and comment.

The Steering Committee may choose to revise or amend the existing County plan based on what is learned in the review process. Any recommended changes to the plan shall be forwarded to the Manitowoc County Board for its action and consideration.



Plan Coordination

The mitigation action plan (provided in Chapter 4) ties the mitigation strategies to related plans or policies. As the county and jurisdictions in the planning area develop or update their comprehensive plans, incorporation of this Hazard Mitigation Plan is highly recommended. The Wisconsin comprehensive planning law includes a detailed description of elements that need to be addressed in all comprehensive plans. The following items must be considered when incorporating this Hazard Mitigation Plan into the required elements of local comprehensive plans for jurisdictions in the planning area:

- **Issues and Opportunities Element**

A summary of major hazards that local governments are vulnerable to, and what is proposed to be done to mitigate future losses from the hazards.

- **Housing Element**

An inventory of the properties that are in the floodplain boundaries, the location of mobile homes, recommendations concerning building codes, shelter opportunities, and a survey of homeowners that may be interested in a voluntary buyout and relocation program.

- **Transportation Element**

Identify any transportation routes or facilities that are more at risk during flooding or winter storms.

- **Agricultural, and Natural and Cultural Resources Element**

Identify the floodplains and agricultural areas that are at risk during hazardous events. Incorporate recommendations on how to mitigate future losses to these areas.

- **Economic Development Element**

Describe the impacts that past hazards have had on area businesses.

- **Intergovernmental Cooperation Element**

Identify intergovernmental police, fire and rescue service sharing agreements that are in effect or which may merit further investigation, and consider cost sharing and resource pooling of government services and facilities.

- **Land Use Element**

Describe how flooding has impacted land uses and what is being done to mitigate negative land use impacts from flooding; map and identify natural hazard areas, such as floodplains and soils with limitations.

- **Implementation Element**

Recommended actions from this plan included in the implementation element of comprehensive plans of all jurisdictions in the planning area.

To maximize coordination with other related plans for Manitowoc County, mitigation strategies recommended in this plan have been and should continue to be considered when developing capital improvement plans, stormwater management plans, or flood mitigation plans.

A number of plans, reports, and technical data were referenced and incorporated into the Manitowoc County, Wisconsin Hazard Mitigation Plan. The following is a comprehensive list of the data and reports that were utilized in plan development:

- Population, housing, and employment data from the Bureau of the Census (2010), and American Community Survey Estimates
- Bay-Lake Regional Planning Commission land use inventory data (2015);
- State of Wisconsin Hazard Mitigation Plan (2016) was used to develop hazard descriptions for the risk assessment;
- FEMA Local Mitigation Plan Review Guide (2011) was used to ensure the plan contained all required information;
- Past hazard occurrences were obtained from National Oceanic and Atmospheric Administration (NOAA) – National Climatic Data Center – severe weather event data (January 2000 – October 2018);
- U.S. Geological Survey maps on landslides, land subsidence and earthquakes were used to describe those hazards;
- FEMA Flood Insurance Studies and FEMA Flood Insurance Rate Maps (FIRMs) were used to map floodplain areas;
- Parcel data from Manitowoc County was used to determine impacts of hazards with defined areas;
- Assessed valuation data from Manitowoc County was used to derive estimates of potential dollar losses;
- Manitowoc County Emergency Operations Plan contributed to the development of the mitigation action plan;
- Manitowoc County Comprehensive Plan was used to develop the community profile and contributed to the development of the mitigation action plan;
- Local municipal comprehensive plans contributed to the development of the mitigation action plan; and
- FEMA Mitigation Ideas: A Resource Risk to Natural Hazards (2013) contributed to the development of the mitigation action plan.

It is recommended that similar materials be referenced when completing any updates to the hazard mitigation plan.

APPENDIX A - Steering Committee Sign-in Sheets

Sign-In Sheet: PDM Kick-Off Meeting – February 11, 2019

[illegible]

Sign-In Sheet: Hazard Mitigation Steering Committee – 5/16/19

[illegible]

Sign-In Sheet: Hazard Mitigation Planning Committee – July 17, 2019

[illegible]

Sign-In Sheet: Hazard Mitigation Meeting – October 3, 2019

[illegible]

**Sign-In Sheet: Hazard Mitigation Plan Public Meeting
November 11th, 2019**

[illegible]

Agendas & Minutes



AGENDA

MANITOWOC COUNTY
HAZARD MITIGATION PLAN UPDATE
STEERING COMMITTEE MEETING

MONDAY, FEBRUARY 11, 2018
1:00 PM – 3:00 PM

MANITOWOC COUNTY EMERGENCY OPERATIONS CENTER (EOC)
1024 S 9th STREET, MANITOWOC, WI 54220

1. Introduction
2. Public comment
3. Project description - overview of planning process and plan content
4. Review project schedule/expectations of steering committee
5. Review/update the following elements from previous plan (2014)
 - a) goals
 - b) hazard risks and ratings
 - c) critical facilities categories
 - d) mitigation strategies
6. Discuss next steps
7. Schedule next meeting

Project Contacts:
Travis Waack, Emergency Management: traviswaack@co.manitowoc.wi.us 920-323-4207
Amanda Fox, Emergency Management: amandafox@co.manitowoc.wi.us 920-483-4360
Angela Kowalski-Adams, Bay-Lake Regional Planning Commission: akowalski@brpc.org 920-448-2820, Ext. 106

Any person wishing to attend this meeting who, because of a disability, requires special accommodations should contact County Emergency Management at (920) 459-3360 two working days prior to the meeting so that arrangements can be made.



AGENDA

MANITOWOC COUNTY HAZARD MITIGATION PLAN UPDATE
STEERING COMMITTEE MEETING

THURSDAY, MAY 16, 2019
2:00 PM – 4:00 PM

MANITOWOC COUNTY EMERGENCY OPERATIONS CENTER (EOC)
1024 S 9th STREET, MANITOWOC, WI 54220

1. Introduction
2. Public comment
3. Recap of previous meeting
4. Review goals and hazard risks and ratings
5. Discuss potential man-made/technological hazard additions
6. Review critical facilities
7. Review Draft Chapters 1-2 of the plan
8. Continue updating the mitigation strategies
9. Discuss next steps
10. Schedule next meeting

Project Contacts:
Travis Waack, Emergency Management: traviswaack@co.manitowoc.wi.us 920-323-4207
Amanda Fox, Emergency Management: amandafox@co.manitowoc.wi.us 920-483-4360
Madison Smith, Bay-Lake Regional Planning Commission: msmith@baylakebrpc.org 920-448-2820, Ext. 106

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AGENDA

MANITOWOC COUNTY HAZARD MITIGATION PLAN UPDATE
STEERING COMMITTEE MEETING

WEDNESDAY, JULY 17, 2019
2:00 PM – 4:00 PM

MANITOWOC COUNTY EMERGENCY OPERATIONS CENTER (EOC)
1024 S 9th STREET, MANITOWOC, WI 54220

1. Introduction
2. Public comment
3. Recap of previous meeting
 - Updated demographics
 - City of Kiel discussion
4. Review critical facilities
 - Discuss mobile homes
 - Discuss communication facilities
5. Review Chapter 3 and Maps
 - Modify prioritization of hazards from previous plan
 - Review historical summary of hazard events
 - Review villages not participating in the NFP
6. Review Chapter 4 and 5 next meeting
 - Goods
 - Mitigation action plan

Schedule next meeting

Project Contacts:
Travis Waack, Emergency Management: traviswaack@co.manitowoc.wi.us 920-323-4207
Amanda Fox, Emergency Management: amandafox@co.manitowoc.wi.us 920-483-4360
Madison Smith, Bay-Lake Regional Planning Commission: msmith@baylakebrpc.org 920-448-2820, Ext. 106

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AGENDA

MANITOWOC COUNTY HAZARD MITIGATION PLAN UPDATE
STEERING COMMITTEE MEETING

WEDNESDAY, OCTOBER 3, 2019
2:00 PM – 4:00 PM

MANITOWOC COUNTY EMERGENCY OPERATIONS CENTER (EOC)
1024 S 9th STREET, MANITOWOC, WI 54220

1. Introduction
2. Public comment
3. Recap of previous meeting
 - Minutes
 - Review updated critical facilities, number of events, cost of events
4. Review & approve Chapter 4
 - Follow up discussion with individual municipalities mitigation measures
 - Discuss additions to mitigation measures
5. Review Chapter 5
 - Review Chapter 5
 - Review plan entirely
 - Move to adopt plan as final draft (F)
6. Plan and Discuss Open House
 - Discuss Resolution & Adoption Process
 - Review press notice and open house

Project Contacts:
Travis Waack, Emergency Management: traviswaack@co.manitowoc.wi.us 920-323-4207
Amanda Fox, Emergency Management: amandafox@co.manitowoc.wi.us 920-483-4360
Madison Smith, Bay-Lake Regional Planning Commission: msmith@baylakebrpc.org 920-448-2820, Ext. 106

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Meeting Notes

Manitowoc County Hazard Mitigation Plan Steering Committee

February 11, 2019
1 – 3 pm

Steering Committee Members Present:

Amanda Fox – Manitowoc County Emergency Services
Angela Kowalski-Adams – Bay-Lake RPC
Cathy Delain – Manitowoc County GIS
Gerry Neuser – Manitowoc County Aging and Disability Resource Center
Denny Smith – Point Beach Nuclear – NextEra Energy
Gerry Neuser – Manitowoc County Public Works
Mary Halada – Manitowoc County Public Health
Lexi Otis – Manitowoc County Public Health
Matt Payette – Village of Francis Creek
Steve Bacatzo – Manitowoc County Utilities
Tim Ryan – Manitowoc County Planning & Zoning
Todd Blaser – Manitowoc Fire & Rescue

- Introductions were made.
- An overview of the hazard mitigation planning process and plan content was provided along with some informational handouts.
 - The current county hazard mitigation plan (2014) is available here: <https://baylakebrpc.org/documents/view/26/216>
- The project schedule and expectations of the steering committee was reviewed and discussed. There will be approximately 4-5 meetings of the steering committee and a public informational meeting. The steering committee will update the critical facilities list, the mitigation goals and action plan, and review the plan chapters.
- The plan goals and hazard risks and rankings from the previous plan were reviewed along with a handout providing NCEC (National Climatic Data Center) data on natural hazard events occurring in Manitowoc County between 2000 and 2018. The Steering Committee re-ranked the hazards based on consideration of past occurrences and their impacts.
- A hand-out listing the critical facilities identified in the previous plan was reviewed. Some changes were made to the naming of types. The Steering Committee will continue to work on the critical facilities list at the next meeting.
- A hand-out listing the mitigation strategies developed in the previous plan was reviewed and updates were made to some of the projects, target dates, costs, and responsible parties. The Steering Committee will continue to work on the mitigation action plan at the next meeting.

Meeting Notes

Manitowoc County Hazard Mitigation Plan Steering Committee

May 16, 2019
2 – 4 pm

Steering Committee Members Present:

Amanda Fox – Manitowoc County Emergency Services
Madison Smith – Bay-Lake RPC
Cathy Delain – Manitowoc County GIS
Gerry Neuser – Manitowoc County Public Works
Mary Halada – Manitowoc County Public Health
Lexi Otis – Manitowoc County Public Health
Matt Payette – Village of Francis Creek
Steve Bacatzo – Manitowoc County Utilities
Andrea Roymakers – Manitowoc County Planning & Zoning (in place of Tim Ryan)
Travis Waack – Manitowoc County Emergency Services

- Introductions were made.
- No public comment.
- Recap of previous meeting and minutes.
- The steering committee reviewed Chapters 1 and 2 of the plan. Bay-Lake RPC will research more recent demographic statistics to go with the 2010 Census data for population, projected population, and housing units. Bay-Lake RPC will add additional employment data pertaining to industries in Manitowoc County.
- Steering committee reviewed the location map, and land-use map. Questions about City of Kiel entirely added or partially. BLRPC will contact Jamie Aulik.
- The steering committee reviewed the critical facilities list. Discussed updating schools and daycares. Discussed cell towers, and any additional critical facilities that need to be included and mapped. Add the Manitowoc County Emergency Operations Center (EOC), and radio towers within communication towers. The Steering Committee decided to not add man-made/technological hazards. Discussed Climate Change impacts, decided against adding that this plan.
- The Steering Committee updated all mitigation strategies, and will work on the mitigation action plan at the next meeting.
- Chapter 3 will be reviewed at the next meeting.

Action Items:

- First week of December the public comment meeting will be held
- December 17, County Board Meeting

Meeting Notes

Manitowoc County Hazard Mitigation Plan Steering Committee

July 17, 2019
2 – 4 pm

Steering Committee Members Present:

Amanda Fox – Manitowoc County Emergency Services
Madison Smith – Bay-Lake RPC
Cathy Delain – Manitowoc County GIS
Gerry Neuser – Manitowoc County Public Works
Lexi Otis – Manitowoc County Public Health
Steve Bacatzo – Manitowoc County Utilities
Andrea Roymakers – Manitowoc County Planning & Zoning (in place of Tim Ryan)
Travis Waack – Manitowoc County Emergency Services

- Introductions were made.
- No public comment.
- Recap of previous meeting and minutes.
- Updated Demographics
- Madison will send the committee electronically to view
- Industry data was added.
- The committee has chosen to include the entirety of the City of Kiel in its Hazard Mitigation Plan rather than split the City between Manitowoc and Calumet Counties.
- City of Kiel Administrator Jamie Aulik was in attendance; he will notify Calumet County's Emergency Manager Bernie Sorenson.
- Review Critical Facilities
 - Used online web app created to view critical facilities
 - Reviewed list of mobile home parks in the County
 - Determined some mobile home parks may be missing or no longer active; Mary Halada will provide a current list of licensed mobile home parks in the County.
 - Cathy Delain will compare past comprehensive list of communications facilities to current list to determine if any changes should be made
 - The committee chose to label communications facilities generically and not label each individual tower's usages
 - Critical facilities and maps were approved.
- Review Chapter 3 and Maps
 - Review Historical Summary of Hazard Events
 - Review Villages Not Participating in the NFP
 - Determined that Maribel, St. Nazianz, Valders, and Whitelaw are not participating as they do not have special hazard areas for flooding

Meeting Notes

Manitowoc County Hazard Mitigation Plan Steering Committee

October 3, 2019
2 – 4 pm

Steering Committee Members Present:

Amanda Fox – Manitowoc County Emergency Services
Madison Smith – Bay-Lake RPC
Cathy Delain – Manitowoc County GIS
Gerry Neuser – Manitowoc County Public Works
Jamie Aulik – City of Kiel
Mary Halada – Manitowoc County Public Health
Lexi Otis – Manitowoc County Public Health
Tim Ryan – Manitowoc County Planning & Zoning
Travis Waack – Manitowoc County Emergency Services

- Introductions were made.
- No public comment.
- Recap of previous meeting and minutes.
 - Review Critical Facilities
 - Review historic events and cost of events
 - Include link to online critical facilities maps
 - Approved all updates and new maps for chapter 3
 - Revisions of Table, Map, and Figure headings to be made
- Review and approved Chapter 4
 - Discussed individual municipalities mitigation measure updates
 - Continued to update mitigation measures
 - Add City of Manitowoc's mitigation measures following other municipalities
 - Approved Chapter 4
- Review Chapter 5
 - No changes made, move to approve with small grammar changes
- Discussions about next steps
 - Open House – circulate invite; public notice, social media.
 - 30 day public review prior to open house, plan will be available online.

Action Items:

- Draft Plan approved by the steering committee
- Public Open House on November 11, 2019
- December 17, County Board Meeting?

APPENDIX B - Multi-Jurisdictional Cooperation

As a way to ensure accurate data and multi-jurisdictional cooperation in the update of the county's hazard mitigation plan, the steering committee and Bay-Lake Regional Planning Commission engaged the local communities in a cooperation exercise to review and provide input on plan materials.

Communities were provided a listing of their critical facilities, goals identified in the plan, and hazards mitigation actions, and were asked to review and comment on the materials. Additionally, they were asked to identify mitigation actions specific to their community. The following is the letter that was sent to the municipalities in Manitowoc County.

December 20, 2018

RE: Request for Review of Hazard Mitigation Materials

(Please forward to the Plan Commission or Council/Board)

The Manitowoc County Emergency Management and the Bay-Lake Regional Planning Commission have been working with a local steering committee to update the Hazard Mitigation Plan for Marinette County and the municipalities.

The Federal Disaster Mitigation Act of 2000 established a requirement for local governments to prepare a hazard mitigation plan to be eligible for funding from FEMA through the Pre-Disaster Mitigation Grant Program, the Flood Mitigation Assistance Program, the Hazard Mitigation Grant Program, and disaster assistance.

The hazard mitigation planning process is being conducted at the county level. In order to be covered by the plan, cities and villages will need to provide input on the plan, and adopt it once complete. The following materials have been enclosed to facilitate this participation in development of the plan, and ensure that the plan contains accurate municipal information:

EXERCISE #1: Using the current inventory of the critical facilities found in your municipality, plus a list of the critical facility types/categories that are to be included, review the information for accuracy and write in any edits.

- Ensure that there is an address or lat/long coordinates provided for each critical facility that you add.
- Only include publicly owned facilities.

EXERCISE #2: Review and sign the sheet of county mitigation strategies.

EXERCISE #3: Identify at least one mitigation strategy specific to your municipality that the community would like to implement if grant funding were available.

Please return your information (with or without edits) no later than February 8, 2019 to Madison Smith at msmith@baylakerpc.org or 425 S. Adams Street, Suite 201, Green Bay, WI 54301.

If you have any questions or need any additional information, please contact Madison at email or phone at (920) 448-2820, Ext. 106. Thank you for your participation in reviewing the enclosed materials.

PLEASE NOTE THAT THIS IS THE ONLY REQUEST THAT WILL BE MADE FOR THIS INFORMATION. IF CITY/VILLAGE MATERIALS ARE NOT RECEIVED, THE MUNICIPALITY WILL NOT BE A PART OF THE PLAN. Not participating in this plan will require the development of a municipal plan in order to be eligible for FEMA funding – including disaster assistance.

Sincerely,

Travis Waack
Emergency Management Director

Enclosures (3): Exercise #1 - Critical Facility Categories and Municipal Critical Facilities List; Exercise #2 - County Mitigation Strategies; and Exercise #3 - Municipal Mitigation Strategy Form



APPENDIX C - Critical Facilities By Municipality

The Manitowoc County Hazard Mitigation Plan Steering Committee and community representatives identified critical infrastructure assets for the communities in the county. Tables adjacent and on the following pages are each of the critical facilities by municipality for Manitowoc County.

NAME	ADDRESS	Source	Type	MCD	Floodplain
Mehicot	East Twin River	DNR 2019	Dam	Village of Mehicot	Yes
Mehicot Fire Department	214 S Main St	Village	Fire and Safety	Village of Mehicot	Yes
Reif's Mills (dry hydrant / Branch River access)	6801 CTH T	Manitowoc County Fire Assoc.	Fire and Safety	Town of Kossuth	Yes
CTH Y / West Twin River (dry hydrant)	4339 CTH Y	Manitowoc County Fire Assoc.	Fire and Safety	Town of Kossuth	Yes
Collins Marsh	Mud Creek	DNR 2019	Dam	Town of Rockland	Yes
Water Pumping Station	20708 Main St		Wastewater Treatment Facility	Town of Rockland	Yes
Clarks Mill	Manitowoc River	DNR 2019	Dam	Town of Cato	Yes
Neshota - South	West Twin River	DNR 2019	Dam	Town of Two Rivers	Yes
Millhome	Sheboygan River	DNR 2019	Dam	Town of Schleswig	Yes
Rockville	Sheboygan River	DNR 2019	Dam	Town of Schleswig	Yes
Kiel	Sheboygan River	DNR 2019	Dam	City of Kiel	Yes
Kiel Fire Department	99 E Fremont St	Hazus MH	Fire and Safety	City of Kiel	Yes
Sewage Lift Station	1162 N Westview St	Village	Wastewater Treatment Facility	Village of Cleveland	Yes
Village of Cleveland	1151 Lakeshore Dr	County	Administrative Building	Village of Cleveland	Yes
Emergency Siren	Salvage Rd & S Rockway St	County	Communication Facility	Village of Mehicot	Yes
Village of Cleveland	1151 Lakeshore Dr		Wastewater Treatment Facility	Village of Cleveland	Yes
Sewage Lift Station	619 STH 67	City	Wastewater Treatment Facility	City of Kiel	Yes
City of Manitowoc Gravel Pit	Gravel Pit Ln	County	Post-Disaster Recovery Site	City of Manitowoc	Yes
Homes Rd / East Twin River (from bridge)	503 Holmes Rd	Town	Fire and Safety	Town of Gibson	Yes
Sewage Lift Station	600 S 19th St	City	Wastewater Treatment Facility	City of Manitowoc	Yes
Sewage Lift Station	4001 Archer St	City	Wastewater Treatment Facility	City of Manitowoc	Yes
B360001	OLD Y RD / WEST TWIN RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360006	N RAPIDS RD / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360011	STH 32 NB-STH 57 NB / SHEBOYGAN RIVER	County/HSI 2019	Bridge	Town of Schleswig	Yes
B360012	DAIRYLAND DR / NORTH BRANCH OF CENTERVILLE CREEK	County/HSI 2019	Bridge	Village of Cleveland	Yes
B360015	STH 32 STH 57 / SHEBOYGAN RIVER	County/HSI 2019	Bridge	City of Kiel	Yes
B360019	CTH JJ / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Rockland	Yes
B360020	N CTH S / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Cato	Yes
B360021	CTH V / WEST TWIN RIVER	County/HSI 2019	Bridge	Town of Kossuth	Yes
B360022	ROCKVILLE RD / SHEBOYGAN RIVER	County/HSI 2019	Bridge	City of Kiel	Yes
B360023	ROCKVILLE RD / SHEBOYGAN RIVER	County/HSI 2019	Bridge	Town of Schleswig	Yes
B360025	LAX CHAPEL RD / TRIBUTARY OF SHEBOYGAN RIVER	County/HSI 2019	Bridge	Town of Schleswig	Yes
B360026	USH 151 / SILVER CREEK	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360028	STURM RD / EAST TWIN RIVER	County/HSI 2019	Bridge	Town of Mehicot	Yes
B360032	ROSECRANS RD / DEVILS RIVER	County/HSI 2019	Bridge	Town of Cooperstown	Yes
B360033	CTH LS / PINE CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360035	CTH B / LITTLE MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360036	I-43 / FISCHER CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes
B360038	GASS LAKE RD / PINE CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360047	I-43 SB / POINT CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes
B360050	I-43 SB / CTH C	County/HSI 2019	Bridge	Town of Newton	Yes
B360051	I-43 NB / CTH C	County/HSI 2019	Bridge	Town of Newton	Yes
B360054	CTH C / PINE CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360055	I-43 / CALVIN CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360060	I-43 / SILVER CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360064	I-43 SB OFF Ramp to CTH C / PINE CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360072	I-43 SB-USH 10 EB / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360073	I-43 NB-USH 10 WB / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360075	STH 67 / CEDAR CREEK	County/HSI 2019	Bridge	Town of Eaton	Yes
B360076	CTH R / DEVILS RIVER	County/HSI 2019	Bridge	Town of Cooperstown	Yes
B360082	I-43 / FRANCIS CREEK	County/HSI 2019	Bridge	Village of Francis Creek	Yes
B360097	I-43 SB / DEVILS RIVER	County/HSI 2019	Bridge	Town of Cooperstown	Yes
B360098	I-43 NB / DEVILS RIVER	County/HSI 2019	Bridge	Town of Cooperstown	Yes
B360105	USH 151 / SILVER CREEK	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360109	STH 147 / EAST TWIN RIVER	County/HSI 2019	Bridge	Town of Mehicot	Yes
B360110	I-43 SB / CENTER ROAD	County/HSI 2019	Bridge	Town of Centerville	Yes
B360111	I-43 NB / CENTER ROAD	County/HSI 2019	Bridge	Town of Centerville	Yes
B360112	USH 10 WB-STH 42 SB-WALDO BLVD / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360113	USH 10 EB-STH 42 NB-WALDO BLVD / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360117	STH 42-WASHINGTON ST / WEST TWIN RIVER	County/HSI 2019	Bridge	City of Two Rivers	Yes
B360118	GRIMMS RD / BRANCH RIVER	County/HSI 2019	Bridge	Town of Franklin	Yes
B360119	WESTVIEW RD / FISCHER CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes
B360120	CTH O / MOLASH CREEK	County/HSI 2019	Bridge	Town of Two Rivers	Yes
B360121	CTH R IN PACKER DR / FRANCIS CREEK	County/HSI 2019	Bridge	Village of Francis Creek	Yes
B360123	STH 147-S MAIN ST / EAST TWIN RIVER	County/HSI 2019	Bridge	Village of Mehicot	Yes
B360124	BROADWAY ST / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360125	DANMAR RD / BRANCH RIVER	County/HSI 2019	Bridge	Town of Kossuth	Yes
B360126	MILL ST / MUD CREEK	County/HSI 2019	Bridge	Village of Reedsville	Yes
B360127	E ZANDER RD / EAST TWIN RIVER	County/HSI 2019	Bridge	Town of Mehicot	Yes
B3601280001	USH 10 EB-10TH ST / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B3601280002	USH 10 EB-10TH ST / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360129	CTH F / POINT CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes
B360131	S CTH J / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Cato	Yes
B360132	STH 67 / SHEBOYGAN RIVER	County/HSI 2019	Bridge	City of Kiel	Yes
B360133	HOLMES RD / EAST TWIN RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360134	STH 42 / MEEME RIVER	County/HSI 2019	Bridge	Town of Meeme	Yes
B360135	STH 147 W / WEST TWIN RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360136	CTH VV-45TH ST / EAST TWIN RIVER	County/HSI 2019	Bridge	City of Two Rivers	Yes
B360137	STH 32 SB-STH 57 SB / SHEBOYGAN RIVER	County/HSI 2019	Bridge	Town of Schleswig	Yes
B360139	W HILLCREST RD / BRANCH RIVER	County/HSI 2019	Bridge	Town of Franklin	Yes
B360140	S 21ST ST NB / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360141	MARITIME DR / LITTLE MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360142	USH 10 WB-8TH ST / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360144	USH 10 / EAST BRANCH OF MUD CREEK	County/HSI 2019	Bridge	Town of Maple Grove	Yes
B360145	REIF'S MILLS RD / BRANCH RIVER	County/HSI 2019	Bridge	Town of Franklin	Yes
B360146	CTH CR / SILVER CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360147	S CTH W / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Rockland	Yes
B360151	N WESTVIEW ST / NORTH BRANCH OF CENTERVILLE CREEK	County/HSI 2019	Bridge	Village of Cleveland	Yes
B360152	W TAPAWINGO RD / EAST TWIN RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360153	NACHTWEY RD / NESHOTA RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360154	CTH B / WEST TWIN RIVER	County/HSI 2019	Bridge	Town of Two Rivers	Yes
B360155	STH 42-2ND ST / EAST TWIN RIVER	County/HSI 2019	Bridge	City of Two Rivers	Yes
B360157	COLLINS RD / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Rockland	Yes
B360160	CTH A / TRIB. OF MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Liberty	Yes
B360161	W ZANDER RD / NESHOTA RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360162	MELNIK RD / W TWIN RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360163	QUARRY RD / MANITOWOC R	County/HSI 2019	Bridge	Town of Eaton	Yes
B360164	VILLAGE DRIVE / BRANCH RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360165	SILVER CREEK RD / SILVER CREEK	County/HSI 2019	Bridge	Town of Manitowoc	Yes
B360166	CTH T / BRANCH R	County/HSI 2019	Bridge	Town of Franklin	Yes
B360167	E SPRING VALLEY RD / MEEME RIVER	County/HSI 2019	Bridge	Town of Meeme	Yes
B360168	POINT CREEK RD / POINT CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes
B360169	MICHIGAN AVE / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360172	STEINTHAL RD / SHEBOYGAN RIVER	County/HSI 2019	Bridge	Town of Schleswig	Yes
B360173	CTH JJ / MUD CREEK	County/HSI 2019	Bridge	Town of Rockland	Yes
B360174	CTH LS-LAKESHORE RD / POINT CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes

NAME	ADDRESS	Source	Type	MCD	Floodplain
Mishicot	East Twin River	DNR 2019	Dam	Village of Mishicot	Yes
Mishicot Fire Department	214 S Main St	Village	Fire and Safety	Village of Mishicot	Yes
Reifs Mills (dry hydrant / Branch River access)	6801 CTH Y	Manitowoc County Fire Assoc.	Fire and Safety	Town of Kossuth	Yes
CTH Y / West Twin River (dry hydrant)	4339 CTH Y	Manitowoc County Fire Assoc.	Fire and Safety	Town of Kossuth	Yes
Collins Marsh	Mud Creek	DNR 2019	Dam	Town of Rockland	Yes
Water Pumping Station	20708 Main St		Wastewater Treatment Facility	Town of Rockland	Yes
Clarks Mill	Manitowoc River	DNR 2019	Dam	Town of Cato	Yes
Neshota - South	West Twin River	DNR 2019	Dam	Town of Two Rivers	Yes
Millhome	Sheboygan River	DNR 2019	Dam	Town of Schleswig	Yes
Rockville	Sheboygan River	DNR 2019	Dam	Town of Schleswig	Yes
Kiel	Sheboygan River	DNR 2019	Dam	City of Kiel	Yes
Kiel Fire Department	99 E Fremont St	Hazus MH	Fire and Safety	City of Kiel	Yes
Sewage Lift Station	1162 N Westview St	Village	Wastewater Treatment Facility	Village of Cleveland	Yes
Village of Cleveland	1151 Lakeshore Dr	County	Administrative Building	Village of Cleveland	Yes
Emergency Siren	Salvage Rd & S Rockway St	County	Communication Facility	Village of Mishicot	Yes
Village of Cleveland	1151 Lakeshore Dr		Wastewater Treatment Facility	Village of Cleveland	Yes
Sewage Lift Station	619 STH 67	City	Wastewater Treatment Facility	City of Kiel	Yes
City of Manitowoc Gravel Pit	Gravel Pit Ln	County	Post-Disaster Recovery Site	City of Manitowoc	Yes
Homes Rd / East Twin River (from bridge)	503 Holmes Rd	Town	Fire and Safety	Town of Gibson	Yes
Sewage Lift Station	600 S 19th St	City	Wastewater Treatment Facility	City of Manitowoc	Yes
Sewage Lift Station	4001 Archer St	City	Wastewater Treatment Facility	City of Manitowoc	Yes
B360001	OLD Y RD / WEST TWIN RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360006	N RAPIDS RD / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360011	STH 32 NB-STH 57 NB / SHEBOYGAN RIVER	County/HSI 2019	Bridge	Town of Schleswig	Yes
B360012	DAIRYLAND DR / NORTH BRANCH OF CENTERVILLE CREEK	County/HSI 2019	Bridge	Village of Cleveland	Yes
B360015	STH 33-STH 57 / SHEBOYGAN RIVER	County/HSI 2019	Bridge	City of Kiel	Yes
B360019	CTH JJ / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Rockland	Yes
B360020	N CTH S / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Cato	Yes
B360021	CTH V / WEST TWIN RIVER	County/HSI 2019	Bridge	Town of Kossuth	Yes
B360022	ROCKVILLE RD / SHEBOYGAN RIVER	County/HSI 2019	Bridge	City of Kiel	Yes
B360023	ROCKVILLE RD / SHEBOYGAN RIVER	County/HSI 2019	Bridge	Town of Schleswig	Yes
B360025	LAX CHAPEL RD / TRIBUTARY OF SHEBOYGAN RIVER	County/HSI 2019	Bridge	Town of Schleswig	Yes
B360026	USH 151 / SILVER CREEK	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360028	STURM RD / EAST TWIN RIVER	County/HSI 2019	Bridge	Town of Mishicot	Yes
B360032	ROSECRANS RD / DEVILS RIVER	County/HSI 2019	Bridge	Town of Cooperstown	Yes
B360033	CTH LS / PINE CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360035	CTH B / LITTLE MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360036	I-43 / FISCHER CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes
B360038	GASS LAKE RD / PINE CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360047	I-43 SB / POINT CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes
B360050	I-43 SB / CTH C	County/HSI 2019	Bridge	Town of Newton	Yes
B360051	I-43 NB / CTH C	County/HSI 2019	Bridge	Town of Newton	Yes
B360054	CTH C / PINE CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360055	I-43 / CALVIN CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360060	I-43 / SILVER CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360064	I-43 SB Off Ramp to CTH C / PINE CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360072	I-43 SB-USH 10 EB / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360073	I-43 NB-USH 10 WB / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360075	STH 67 / CEDAR CREEK	County/HSI 2019	Bridge	Town of Eaton	Yes
B360076	CTH R / DEVILS RIVER	County/HSI 2019	Bridge	Town of Cooperstown	Yes
B360082	I-43 / FRANCIS CREEK	County/HSI 2019	Bridge	Village of Francis Creek	Yes
B360097	I-43 NB / DEVILS RIVER	County/HSI 2019	Bridge	Town of Cooperstown	Yes
B360098	I-43 NB / DEVILS RIVER	County/HSI 2019	Bridge	Town of Cooperstown	Yes
B360105	USH 151 / SILVER CREEK	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360109	STH 147 / EAST TWIN RIVER	County/HSI 2019	Bridge	Town of Mishicot	Yes
B360110	I-43 SB / CENTER ROAD	County/HSI 2019	Bridge	Town of Centerville	Yes
B360111	I-43 NB / CENTER ROAD	County/HSI 2019	Bridge	Town of Centerville	Yes
B360112	USH 10 WB-STH 42 SB-WALDO BLVD / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360113	USH 10 EB-STH 42 NB-WALDO BLVD / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360117	STH 42-WASHINGTON ST / WEST TWIN RIVER	County/HSI 2019	Bridge	City of Two Rivers	Yes
B360118	GRIMMS RD / BRANCH RIVER	County/HSI 2019	Bridge	Town of Franklin	Yes
B360119	WESTVIEW RD / FISCHER CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes
B360120	CTH O / MOLAISH CREEK	County/HSI 2019	Bridge	Town of Two Rivers	Yes
B360121	CTH R IN PACKER DR / FRANCIS CREEK	County/HSI 2019	Bridge	Village of Francis Creek	Yes
B360123	STH 147-S MAIN ST / EAST TWIN RIVER	County/HSI 2019	Bridge	Village of Mishicot	Yes
B360124	BROADWAY ST / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360125	DANMAR RD / BRANCH RIVER	County/HSI 2019	Bridge	Town of Kossuth	Yes
B360126	MILL ST / MUD CREEK	County/HSI 2019	Bridge	Village of Reedsville	Yes
B360127	E ZANDER RD / EAST TWIN RIVER	County/HSI 2019	Bridge	Town of Mishicot	Yes
B3601280001	USH 10 EB-10TH ST / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B3601280002	USH 10 EB-10TH ST / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360129	CTH F / POINT CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes
B360131	S CTH J / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Cato	Yes
B360132	STH 67 / SHEBOYGAN RIVER	County/HSI 2019	Bridge	City of Kiel	Yes
B360133	HOLMES RD / EAST TWIN RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360134	STH 42 / MEEME RIVER	County/HSI 2019	Bridge	Town of Meeme	Yes
B360135	STH 147 W / WEST TWIN RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360136	CTH VV-45TH ST / EAST TWIN RIVER	County/HSI 2019	Bridge	City of Two Rivers	Yes
B360137	STH 32 SB-STH 57 SB / SHEBOYGAN RIVER	County/HSI 2019	Bridge	Town of Schleswig	Yes
B360139	W HILLCREST RD / BRANCH RIVER	County/HSI 2019	Bridge	Town of Franklin	Yes
B360140	S 21ST ST NB / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360141	MARITIME DR / LITTLE MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360142	USH 10 WB-8TH ST / MANITOWOC RIVER	County/HSI 2019	Bridge	City of Manitowoc	Yes
B360144	USH 10 / EAST BRANCH OF MUD CREEK	County/HSI 2019	Bridge	Town of Maple Grove	Yes
B360145	REIFS MILLS RD / BRANCH RIVER	County/HSI 2019	Bridge	Town of Franklin	Yes
B360146	CTH CR / SILVER CREEK	County/HSI 2019	Bridge	Town of Newton	Yes
B360147	S CTH W / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Rockland	Yes
B360151	N WESTVIEW ST / NORTH BRANCH OF CENTERVILLE CREEK	County/HSI 2019	Bridge	Village of Cleveland	Yes
B360152	W TAPAWINGO RD / EAST TWIN RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360153	NACHTWEY RD / NESHOTA RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360154	CTH B / WEST TWIN RIVER	County/HSI 2019	Bridge	Town of Two Rivers	Yes
B360155	STH 42-22ND ST / EAST TWIN RIVER	County/HSI 2019	Bridge	City of Two Rivers	Yes
B360157	COLLINS RD / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Rockland	Yes
B360160	CTH A / TRIB. OF MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Liberty	Yes
B360161	W ZANDER RD / NESHOTA RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360162	MELNIK RD / W TWIN RIVER	County/HSI 2019	Bridge	Town of Gibson	Yes
B360163	QUARRY RD / MANITOWOC R	County/HSI 2019	Bridge	Town of Eaton	Yes
B360164	VILLAGE DRIVE / BRANCH RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360165	SILVER CREEK RD / SILVER CREEK	County/HSI 2019	Bridge	Town of Manitowoc	Yes
B360166	CTH T / BRANCH R	County/HSI 2019	Bridge	Town of Franklin	Yes
B360167	E SPRING VALLEY RD / MEEME RIVER	County/HSI 2019	Bridge	Town of Meeme	Yes
B360168	POINT CREEK RD / POINT CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes
B360169	MICHIGAN AVE / MANITOWOC RIVER	County/HSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360172	STEINTHAL RD / SHEBOYGAN RIVER	County/HSI 2019	Bridge	Town of Schleswig	Yes
B360173	CTH JJ / MUD CREEK	County/HSI 2019	Bridge	Town of Rockland	Yes
B360174	CTH LS-LAKESHORE RD / POINT CREEK	County/HSI 2019	Bridge	Town of Centerville	Yes

Critical Facilities

NAME	ADDRESS	Source	Type	MCD	Floodplain
B360176	STH 310 MADISON ST / W TWIN RIVER	CountyHSI 2019	Bridge	City of Two Rivers	Yes
B360177	CTH J / BRANCH RIVER	CountyHSI 2019	Bridge	Town of Franklin	Yes
B360182	VALLEY DR / SILVER CREEK	CountyHSI 2019	Bridge	Town of Manitowoc	Yes
B360183	CTH T / DEVILS RIVER	CountyHSI 2019	Bridge	Town of Cooperstown	Yes
B360185	S CLEVELAND RD / MEEME RIVER	CountyHSI 2019	Bridge	Town of Meeme	Yes
B360186	MEADOW LN / FRANCIS CREEK	CountyHSI 2019	Bridge	Town of Kossuth	Yes
B360187	CTH CR / CALVIN CREEK	CountyHSI 2019	Bridge	Town of Newton	Yes
B360188	PIONEER RD / MEEME RIVER	CountyHSI 2019	Bridge	Town of Meeme	Yes
B360189	17TH ST / E TWIN RIVER	CountyHSI 2019	Bridge	City of Two Rivers	Yes
B360191	S CLEVELAND RD / PIGEON RIVER	CountyHSI 2019	Bridge	Town of Meeme	Yes
B360192	S CLEVELAND RD / PIGEON RIVER	CountyHSI 2019	Bridge	Town of Meeme	Yes
B360193	USH 10 / BRANCH R	CountyHSI 2019	Bridge	Town of Manitowoc Rapids	Yes
B360210	USH 151 / CEDAR CREEK	CountyHSI 2019	Bridge	Town of Eaton	Yes
B360211	USH 151 / TRIB. OF MANITOWOC RIVER	CountyHSI 2019	Bridge	Town of Eaton	Yes
B360213	MANITOWOC ST / MUD CREEK	CountyHSI 2019	Bridge	Village of Reedsville	Yes
B360214	HILLCREST RD / BRANCH RIVER	CountyHSI 2019	Bridge	Town of Franklin	Yes
B360216	PLEASANT RD / DEVILS RIVER	CountyHSI 2019	Bridge	Town of Cooperstown	Yes
B360217	N 4TH ST / MUD CREEK	CountyHSI 2019	Bridge	Village of Reedsville	Yes
B360218	MINERAL SPRINGS RD / PIGEON RIVER	CountyHSI 2019	Bridge	Town of Meeme	Yes
B360220	HILLCREST RD / BRANCH RIVER	CountyHSI 2019	Bridge	Town of Franklin	Yes
B360221	CENTER RD / NORTH BRANCH OF CENTERVILLE CREEK	CountyHSI 2019	Bridge	Town of Centerville	Yes
B360230	I-43 NB / POINT CREEK	CountyHSI 2019	Bridge	Town of Centerville	Yes
B360237	HICKORY HILLS RD / MUD CREEK	CountyHSI 2019	Bridge	Town of Maple Grove	Yes
B360318	CTH B-S STATE ST / EAST TWIN RIVER	CountyHSI 2019	Bridge	Village of Mishicot	Yes
B360511	TISCH MILLS RD / EAST TWIN RIVER	CountyHSI 2019	Bridge	Town of Mishicot	Yes
B360892	USH 10-MAIN ST / MUD CREEK	CountyHSI 2019	Bridge	Village of Reedsville	Yes
B360900	STH 42-WALDO BLVD / LITTLE MANITOWOC RIVER	CountyHSI 2019	Bridge	City of Manitowoc	Yes
B360910	CTH XX / MEEME RIVER	CountyHSI 2019	Bridge	Town of Meeme	Yes
B360913	CTH XX-E WASHINGTON AVE / S BR. CENTERVILLE CREEK	CountyHSI 2019	Bridge	Village of Cleveland	Yes
B360915	CTH B / EAST TWIN RIVER	CountyHSI 2019	Bridge	Town of Gibson	Yes
C360017	I-43 / CENTERVILLE CREEK	CountyHSI 2019	Bridge	Town of Centerville	Yes
C360040	KOJIAN RD / TRIB. TO BRANCH RIVER	CountyHSI 2019	Bridge	Town of Cooperstown	Yes
P360022	MILL RD (PEDESTRIAN BRIDGE) / MANITOWOC RIVER	CountyHSI 2019	Bridge	Town of Manitowoc Rapids	Yes
P360066	CTH M / PIGEON RIVER	CountyHSI 2019	Bridge	Town of Meeme	Yes
P360069	CTH Q / WEST TWIN RIVER	CountyHSI 2019	Bridge	Town of Mishicot	Yes
P360082	W ZANDER RD / JAMBO CREEK	CountyHSI 2019	Bridge	Town of Gibson	Yes
P360085	TWIN BRIDGE RD / JAMBO CREEK	CountyHSI 2019	Bridge	Town of Gibson	Yes
P360086	HILLVIEW RD / E TWIN RIVER	CountyHSI 2019	Bridge	Town of Gibson	Yes
P360087	ROCKLEDGE RD / EAST TWIN RIVER	CountyHSI 2019	Bridge	Town of Gibson	Yes
P360090	JAMBO CREEK RD / JAMBO CREEK	CountyHSI 2019	Bridge	Town of Gibson	Yes
P360097	ZANDER RD / TRIB. OF DEVILS RIVER	CountyHSI 2019	Bridge	Town of Cooperstown	Yes
P360100	ZANDER RD / DEVILS RIVER	CountyHSI 2019	Bridge	Town of Cooperstown	Yes
P360104	HEROLD RD / DEVILS RIVER	CountyHSI 2019	Bridge	Town of Cooperstown	Yes
P360108	TAUS ROAD / MUD CREEK	CountyHSI 2019	Bridge	Town of Maple Grove	Yes
P360109	REIFS MILLS RD / MUD CREEK	CountyHSI 2019	Bridge	Town of Maple Grove	Yes
P360118	TAUS RD / BRANCH RIVER	CountyHSI 2019	Bridge	Town of Franklin	Yes
P360119	E TAUS RD / BRANCH RIVER	CountyHSI 2019	Bridge	Town of Franklin	Yes
P360121	CTH Y / WEST TWIN RIVER	CountyHSI 2019	Bridge	Town of Kossuth	Yes
P360123	DEVILS RIVER STATE TRAIL / MEADOW LN	CountyHSI 2019	Bridge	Town of Kossuth	Yes
P360125	PARKWAY RD / FRANCIS CREEK	CountyHSI 2019	Bridge	Town of Kossuth	Yes
P360126	FRANCIS CREEK RD / FRANCIS CREEK	CountyHSI 2019	Bridge	Town of Kossuth	Yes
P360133	STEINERS CORNERS RD / EAST TWIN RIVER	CountyHSI 2019	Bridge	Village of Mishicot	Yes
P360134	E HILLCREST RD / EAST TWIN RIVER	CountyHSI 2019	Bridge	Town of Two Rivers	Yes
P360135	MAPLEWOOD RD / EAST TWIN RIVER	CountyHSI 2019	Bridge	Town of Two Rivers	Yes
P360144	N UNION RD / BRANCH RIVER	CountyHSI 2019	Bridge	Town of Manitowoc Rapids	Yes
P360145	CTH CS-W CUSTER ST / SILVER CREEK	CountyHSI 2019	Bridge	Town of Manitowoc Rapids	Yes
P360146	N UNION RD / MANITOWOC RIVER	CountyHSI 2019	Bridge	Town of Manitowoc Rapids	Yes
P360147	BRANCH RIVER RD / BRANCH RIVER	CountyHSI 2019	Bridge	Town of Manitowoc Rapids	Yes
P360148	S ALVERNO RD / SILVER CREEK	CountyHSI 2019	Bridge	Town of Manitowoc Rapids	Yes
P360151	HIGHWAY H RD / MANITOWOC RIVER	CountyHSI 2019	Bridge	Town of Manitowoc Rapids	Yes
P360158	W GOODWIN RD / MUD CREEK	CountyHSI 2019	Bridge	Town of Rockland	Yes
P360165	TOMKINS RD / TRIB. OF MANITOWOC RIVER	CountyHSI 2019	Bridge	Town of Liberty	Yes
P360168	HECKER RD / SILVER CREEK	CountyHSI 2019	Bridge	Town of Newton	Yes
P360174	CTH LS / SILVER CREEK	CountyHSI 2019	Bridge	City of Manitowoc	Yes
P360176	SILVER CREEK RD / SILVER CREEK	CountyHSI 2019	Bridge	Town of Manitowoc	Yes
P360177	S 26TH ST / SILVER CREEK	CountyHSI 2019	Bridge	Town of Manitowoc	Yes
P360182	CENTER RD / POINT CREEK	CountyHSI 2019	Bridge	Town of Centerville	Yes
P360184	CENTERVILLE RD / FISCHER CREEK	CountyHSI 2019	Bridge	Town of Centerville	Yes
P360185	CENTERVILLE RD / POINT CREEK	CountyHSI 2019	Bridge	Town of Centerville	Yes
P360187	CTH LS-LAKESHORE RD / FISCHER CREEK	CountyHSI 2019	Bridge	Town of Centerville	Yes
P360193	W WASHINGTON RD / MEEME RIVER	CountyHSI 2019	Bridge	Town of Meeme	Yes
P360700	CTH LS-LAKESHORE DR / CENTERVILLE CREEK	CountyHSI 2019	Bridge	Village of Cleveland	Yes
P360707	REED AVE / LITTLE MANITOWOC RIVER	CountyHSI 2019	Bridge	City of Manitowoc	Yes
P360904	CTH K / BRANCH RIVER	CountyHSI 2019	Bridge	Town of Franklin	Yes
P360910	S UNION RD / SILVER CREEK	CountyHSI 2019	Bridge	Town of Newton	Yes
P360912	CTH Q / LITTLE MANITOWOC RIVER	CountyHSI 2019	Bridge	Town of Manitowoc	Yes
P360913	CTH Q / LITTLE MANITOWOC RIVER	CountyHSI 2019	Bridge	Town of Manitowoc	Yes
P360914	CTH Q / LITTLE MANITOWOC RIVER	CountyHSI 2019	Bridge	City of Manitowoc	Yes
P360915	MANCAL RD / TRIB. OF BRANCH RIVER	CountyHSI 2019	Bridge	Town of Franklin	Yes
P360917	S 19TH ST / SILVER CREEK	CountyHSI 2019	Bridge	Town of Manitowoc	Yes
P360919	LEIST RD / MANITOWOC RIVER	CountyHSI 2019	Bridge	Town of Cato	Yes
P360925	CTH K / MUD CREEK	CountyHSI 2019	Bridge	Town of Maple Grove	Yes
Nesholo - North	West Twin River	DNR 2019	Dam	Town of Two Rivers	Yes
Meeme	Meeme River	County 2019	Dam	Town of Meeme	Yes
Branch River Fill Site (float)	7901 N Union Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Manitowoc Rapids	Yes
Carstens Lake Public Access (lake access)	6205 Carstens Lake Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Newton	Yes
Collins / Manitowoc River (dry hydrant)	1184 Collins Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Rockland	Yes
E Zander Rd / East Twin River (river access)	522 E Zander Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Mishicot	Yes
English Lake Public Access (lake access)	9348 S Lake Dr	Manitowoc County Fire Assoc.	Fire and Safety	Town of Newton	Yes
Hilltop Dry Hydrant (at Mud Creek)	19586 Hilltop Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Rockland	Yes
Paddlers Park (draft, East Twin River access)	1223 27th St	Manitowoc County Fire Assoc.	Fire and Safety	City of Two Rivers	Yes
Shoto Boat Landing (draft, West Twin River access)	921 CTH VV	Manitowoc County Fire Assoc.	Fire and Safety	Town of Two Rivers	Yes
Vet's Park & Marina (draft at boat ramp)	1818 18th St	Manitowoc County Fire Assoc.	Fire and Safety	City of Two Rivers	Yes
Fels Pond (dry hydrant)	CTH Z	Town	Fire and Safety	Town of Cooperstown	No
Cooperstown Maintenance Shop	11626 CTH Z	Town	Administrative Building	Town of Cooperstown	No
Cooperstown Town Hall	11626 CTH Z	Town	Administrative Building	Town of Cooperstown	No
Gibson Town Hall	14920 CTH Q	Town	Administrative Building	Town of Gibson	No
Tower	11811 Saxonburg Rd	Town	Communication Facility	Town of Mishicot	No
Power Facility	6610 Nuclear Rd	ATC	Power Facility/Bulk Fuel Storage	Town of Two Creeks	No
Power Facility	4802 CTH V	ATC	Power Facility/Bulk Fuel Storage	Town of Two Creeks	No
Point Beach Nuclear Plant	6610 Nuclear Rd	Hazus MH	Power Facility/Bulk Fuel Storage	Town of Two Creeks	No
Two Creeks Town Hall	5128 E Tapawingo Rd	County	Administrative Building	Town of Two Creeks	No
Two Creeks Fire Department	5128 E Tapawingo Rd	Town	Fire and Safety	Town of Two Creeks	No
Water Treatment Facility	14701 Pleasant Rd	Town	Wastewater Treatment Facility	Village of Maribel	No
Water Storage Tower	10416 E Belmar Ave		Water Supply	Village of Maribel	No
Maribel Fire Department	15127 N Maribel Rd	Village	Fire and Safety	Village of Maribel	No
Maribel Village Hall	15127 N Maribel Rd	Village	Administrative Building	Village of Maribel	No

Critical Facilities

NAME	ADDRESS	Source	Type	MCD	Floodplain
New York Ave Pump Station	1906 New York Ave		Water Supply	City of Manitowoc	No
Water Storage Tower	Reed Ave & N 8th St		Water Supply	City of Manitowoc	No
Manitowoc Fire Station 2	1410 N 8th St	County	Fire and Safety	City of Manitowoc	No
Valders Police Department	207 S Liberty St	Hazus MH	Fire and Safety	Village of Valders	No
Valders Fire Department	103 Eisenhower St	Hazus MH	Fire and Safety	Village of Valders	No
Village of Valders	340 N Adams St	Hazus MH	Wastewater Treatment Facility	Village of Valders	No
Valders Elementary	331 W Wilson St	County 2019	School	Village of Valders	No
Valders High	201 W Wilson St	County 2019	School	Village of Valders	No
Valders Middle	138 Jefferson St	County 2019	School	Village of Valders	No
Natural Gas Substation	108 Brennan Rd		Power Facility/Bulk Fuel Storage	Village of Valders	No
Nordic Lands	141 Jackson St	County 2019	Manufactured Housing	Village of Valders	No
Water Storage Tower	250 N Calumet Dr	Village	Water Supply	Village of Valders	No
Valders Village Hall	207 S Liberty St	County	Administrative Building	Village of Valders	No
Water Well 1	207 S Liberty St	Village	Water Supply	Village of Valders	No
Water Well 2	314 S Adams St	Village	Water Supply	Village of Valders	No
Country Visions Coop	511 S Calumet Dr	Village	Power Facility/Bulk Fuel Storage	Village of Valders	No
Power Facility	5109 CTH A	ATC	Power Facility/Bulk Fuel Storage	Town of Liberty	No
Liberty Town Hall	13812 English Lake Rd	Village	Administrative Building	Town of Liberty	No
Building	7520 English Lake Rd (Lakefield Telephone Co. LLC)	County	Communication Facility	Town of Newton	No
Building	Newton Rd (Lakefield Telephone Co. LLC)	County	Communication Facility	Town of Newton	No
Newton Fire Department	6528 Carstens Lake Rd	Hazus MH	Fire and Safety	Town of Newton	No
Saint John's Evangelical Lutheran School	7531A English Lake Rd	County 2019	School	Town of Newton	No
Newton Town Hall	6532 Carstens Lake Rd	Town	Administrative Building	Town of Newton	No
Water Supply Booster/Pumping Station	Viebahn St		Water Supply	Town of Manitowoc	No
Silver Creek Fire Department - Station 1	1822 Silver Creek Rd	County	Fire and Safety	Town of Manitowoc	No
Collector Well C	3983 S 10th St		Water Supply	City of Manitowoc	No
Village St Nazianz	608 N 1st Ave	BLRPC	Wastewater Treatment Facility	Village of St. Nazianz	No
St Nazianz Fire Station	202 N 4th Ave	Hazus MH	Fire and Safety	Village of St. Nazianz	No
Eaton Town Hall	316 W Main St	Town	Administrative Building	Village of St. Nazianz	No
St Nazianz Village Shop	110 Colonial Dr	Village	Administrative Building	Village of St. Nazianz	No
Water Utility Well	106 Colonial Dr	Village	Water Supply	Village of St. Nazianz	No
Water Utility Well	600 S 4th Ave	Village	Water Supply	Village of St. Nazianz	No
Power Facility	1618 E STH 310	ATC	Power Facility/Bulk Fuel Storage	Town of Two Rivers	No
Sewage Lift Station	44th St	City	Wastewater Treatment Facility	City of Two Rivers	No
Two Rivers High	4519 Lincoln Ave	County 2019	School	City of Two Rivers	No
Aurora Medical Center	5000 Memorial Dr	County 2019	Licensed Healthcare Facility	City of Two Rivers	No
Atrium Post Acute Care of Two Rivers	1 Hamilton Dr	County 2019	Licensed Healthcare Facility	City of Two Rivers	No
Two Rivers Police Department	1717 E Park St	Hazus MH	Fire and Safety	City of Two Rivers	No
Two Rivers Fire Department	2122 Monroe St	Hazus MH	Fire and Safety	City of Two Rivers	No
Two Rivers Wastewater Treatment	1415 Lake St	Hazus MH	Wastewater Treatment Facility	City of Two Rivers	No
Koenig Elementary	1114 Lowell St	County 2019	School	City of Two Rivers	No
Clarke Middle	4608 Bellevue Pl	County 2019	School	City of Two Rivers	No
Magee Elementary	3502 Glenwood St	County 2019	School	City of Two Rivers	No
Sewage Lift Station	Lakeview Ave/Jessie St	City	Wastewater Treatment Facility	City of Two Rivers	No
Sewage Lift Station	Gardner St	City	Wastewater Treatment Facility	City of Two Rivers	No
Sewage Lift Station	Columbus St	City	Wastewater Treatment Facility	City of Two Rivers	No
Water Tower	2612 12th St	City	Water Supply	City of Two Rivers	No
Building (Switch Station)	4412 Browns Dr (Lakefield Telephone Co. LLC)	City	Communication Facility	City of Two Rivers	No
Sewage Lift Station	Woodland Dr	City	Wastewater Treatment Facility	City of Two Rivers	No
Building (Switch Station)	1609 Adams St (GTE Telephone Operations)	City	Communication Facility	City of Two Rivers	No
Two Rivers Department Public Works	1415 Lake Street	City	Administrative Building	City of Two Rivers	No
Two Rivers Utility Shop & Office	1415 Lake Street	City	Administrative Building	City of Two Rivers	No
Lakeshore Substation	Memorial Dr & 12th St	City	Power Facility/Bulk Fuel Storage	City of Two Rivers	No
Water Supply Filter Treatment Plant	Memorial Dr	City	Water Supply	City of Two Rivers	No
500 kva Generator	Memorial Dr	City	Power Facility/Bulk Fuel Storage	City of Two Rivers	No
Two Rivers City Hall	1717 E Park St	City	Administrative Building	City of Two Rivers	No
Sewage Lift Station	Pierce St	City	Wastewater Treatment Facility	City of Two Rivers	No
Water Tower	2314 Picnic Hill Ln	City	Water Supply	City of Two Rivers	No
Sewage Lift Station	23rd St/Pine Tree Dr	City	Wastewater Treatment Facility	City of Two Rivers	No
US National Guard	2225 Sandy Bay Rd	City	Military Installation	City of Two Rivers	No
Aurora Two Rivers Clinic	2219 Garfield St	County 2019	Licensed Healthcare Facility	City of Two Rivers	No
Tower	2500 Garfield St	City	Communication Facility	City of Two Rivers	No
Cable TV Control Center	807 34th St (Charter Communications)	City	Communication Facility	City of Two Rivers	No
Sewage Lift Station	Pierce Ct	City	Wastewater Treatment Facility	City of Two Rivers	No
Sewage Lift Station	Blue Heron Dr	City	Wastewater Treatment Facility	City of Two Rivers	No
Sewage Lift Station	31st St	City	Wastewater Treatment Facility	City of Two Rivers	No
West River Substation	27th St & W River St	City	Power Facility/Bulk Fuel Storage	City of Two Rivers	No
Sewage Lift Station	W River St	City	Wastewater Treatment Facility	City of Two Rivers	No
Natural Gas Substation	1921 Columbus St	City	Power Facility/Bulk Fuel Storage	City of Two Rivers	No
Sub Station	2929 Hawthorne Ave	City	Power Facility/Bulk Fuel Storage	City of Two Rivers	No
Sewage Lift Station	Parkway Blvd	City	Wastewater Treatment Facility	City of Two Rivers	No
Sewage Lift Station	37th St	City	Wastewater Treatment Facility	City of Two Rivers	No
St. John's Evangelical Lutheran	3607 45th St	County 2019	School	City of Two Rivers	No
Sewage Lift Station	CTH W (45th St)	City	Wastewater Treatment Facility	City of Two Rivers	No
Holy Family Memorial Two Rivers Health Center	3310 45th St	County 2019	Licensed Healthcare Facility	City of Two Rivers	No
Meadow View Assisted Living	4606 Mithcol Rd	County 2019	Licensed Healthcare Facility	City of Two Rivers	No
Sewage Lift Station	Forest Hills Dr	City	Wastewater Treatment Facility	City of Two Rivers	No
Wisteria Haus Assisted Living	2741 45th St	County 2019	Licensed Healthcare Facility	City of Two Rivers	No
Sewage Lift Station	Riverhills Rd/BelleVue Pl	City	Wastewater Treatment Facility	City of Two Rivers	No
Sewage Lift Station	43rd St ?	City	Wastewater Treatment Facility	City of Two Rivers	No
Building (Switch Station)	2722 45th St (Lakefield Telephone Co. LLC)	City	Communication Facility	City of Two Rivers	No
Schleswig Town Hall	21935 Rockville Rd	Town	Administrative Building	Town of Schleswig	No
Power Facility	705 Washington Ave	ATC	Power Facility/Bulk Fuel Storage	City of Kiel	No
Kiel Police Department	619 Paine St	Hazus MH	Fire and Safety	City of Kiel	No
Divine Savior Catholic School	423 Fremont St	County 2019	School	City of Kiel	No
Kiel High	210 Raider Hts	County 2019	School	City of Kiel	No
Kiel Middle	502 Paine St	County 2019	School	City of Kiel	No
Zelania Elementary	1010 Adams St	County 2019	School	City of Kiel	No
Well #3, Water Storage Tower	1401 1st St	City	Water Supply	City of Kiel	No
Wastewater Treatment Facility	100 Rockville Rd	City	Wastewater Treatment Facility	City of Kiel	No
Well #4	501 CTH XX		Water Supply	City of Kiel	No
Well #5	355 Clay St	City	Water Supply	City of Kiel	No
Trinity Lutheran School	387 Cemetery Rd	County 2019	School	City of Kiel	No
Water Storage Tower	198 3rd St		Water Supply	City of Kiel	No
Kiel City Hall	621 6th St	County	Administrative Building	City of Kiel	No
Well #1	705 Washington St		Water Supply	City of Kiel	No
Natural Gas Substation	Point Creek Rd	Town	Power Facility/Bulk Fuel Storage	Town of Centerville	No
Building	1050 N Linden St		Communication Facility	Village of Cleveland	No
Cleveland Wastewater Treatment Facility	245 Whitetail Ln	BLRPC	Wastewater Treatment Facility	Village of Cleveland	No
Wind Turbine	1290 North Ave		Power Facility/Bulk Fuel Storage	Village of Cleveland	No
Power Facility	W Washington Ave		Power Facility/Bulk Fuel Storage	Village of Cleveland	No
Cleveland Village Hall	1150 W Washington Ave	BLRPC	Administrative Building	Village of Cleveland	No
Sewage Lift Station	1151 Lakeshore Dr	Hazus MH	Wastewater Treatment Facility	Village of Cleveland	No
Lakeshore Technical College	1290 North Ave	County 2019	School	Village of Cleveland	No
Cleveland VA Clinic	1205 North Ave	County 2019	Licensed Healthcare Facility	Village of Cleveland	No
Cleveland Heights Mobile Home Park	115 Edgewood St	County 2019	Manufactured Housing	Village of Cleveland	No
Cleveland Fire Department	1274 W Washington Ave	Village	Fire and Safety	Village of Cleveland	No

Critical Facilities

NAME	ADDRESS	Source	Type	MCD	Floodplain
Water Tower	819 Polk Ln	County 2019	Water Supply	Village of Cleveland	No
Cleveland Police Department	1150 W Washington Ave	Village	Fire and Safety	Village of Cleveland	No
Well #1	1245 Park Ln	Village	Water Supply	Village of Cleveland	No
Well #2	1299 Franklin Dr	Village	Water Supply	Village of Cleveland	No
Manitowoc City Transit System	915 S 11th St	Hazus MH	Transportation Facility	City of Two Rivers	No
US Coast Guard	13 East St	BLRPC	Military Installation	City of Two Rivers	No
Bethany Evangelical Lutheran	3209 Meadow Ln	County 2019	School	City of Manitowoc	No
Tower	1024 S 9th St	BLRPC	Communication Facility	City of Manitowoc	No
McKinley Academy Charter	1010 Huron St	County 2019	School	City of Manitowoc	No
Manitowoc Public School District	2902 Lindbergh Dr	County	Administrative Building	City of Manitowoc	No
Mishicot Village Hall	511 E Main St	BLRPC	Administrative Building	Village of Mishicot	No
Mishicot Police Department	511 E Main St	BLRPC	Fire and Safety	Village of Mishicot	No
Manitowoc Fire Station 3	3820 Dewey St	County	Fire and Safety	City of Manitowoc	No
Manitowoc County Highway Shop	3500 STH 310	County	Administrative Building	Town of Kossuth	No
St Nazianz Village Hall	228 W Main St	County	Administrative Building	Village of St. Nazianz	No
Manitowoc County Highway Shop	318 W Main St	County	Administrative Building	Village of St. Nazianz	No
Mishicot Town Hall	710 N State St	BLRPC	Administrative Building	Village of Mishicot	No
Meeme Town Hall	15316 CTH X	BLRPC	Administrative Building	Town of Meeme	No
Manitowoc Town Hall	1822 Silver Creek Rd	BLRPC	Administrative Building	Town of Manitowoc	No
Manitowoc Rapids Town Hall	8624 CTH JJ	BLRPC	Administrative Building	Town of Manitowoc Rapids	No
Two Rivers Town Hall	6525 CTH B	BLRPC	Administrative Building	Town of Two Rivers	No
Franklin Town Hall	7524 CTH J	BLRPC	Administrative Building	Town of Franklin	No
K-Ville Mobile Home Park	444 Pleasant Ln	County 2019	Manufactured Housing	Village of Kellnersville	No
Building	1915 Mirro Dr (Seehafer Broadcasting)	County 2019	Communication Facility	City of Manitowoc	No
Small Steps Family Child Care	1025 1st St	County 2019	Licensed Childcare Facility	City of Kiel	No
Countryside Family Care Center	24322 Manitowoc Rd	County 2019	Licensed Childcare Facility	Town of Maple Grove	No
Wee Care - Jodi's Day Care	124 Jefferson St	County 2019	Licensed Childcare Facility	Village of Valders	No
Forever Friends Family Child Care	824 Randolph St	County 2019	Licensed Childcare Facility	Village of Mishicot	No
Kids Crayon Club	7219 CTH T	County 2019	Licensed Childcare Facility	Town of Kossuth	No
Tiny Treasures Christian Child Care	1029 33rd St	County 2019	Licensed Childcare Facility	City of Two Rivers	No
A Child's Place Day Care	2611 11th St	County 2019	Licensed Childcare Facility	City of Two Rivers	No
Lakeshore Child Care Center	3400 Division St	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Manitowoc/Two Rivers YMCA Child Development Center	205 Maritime Dr	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Cathey's Day Care Center	1314 Manila St	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Jesus' Lambs of Grace	2426 N Rapids Rd	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Kinderheit Haus Child Care	948 N 5th St	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Rise and Shine Child Care	1335 S 20th St	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Sue's Little Angels Day Care	912 N 12th St	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Lulu's House Family Child Care	1609 Viebahn St	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Tower	1615 Spring St	County	Communication Facility	City of Manitowoc	No
Tower	1815 Freedom Way	County	Communication Facility	City of Manitowoc	No
Tower	23233 Mueller Rd	County	Communication Facility	Town of Schleswig	No
Tower	4400 Michigan Ave	County	Communication Facility	City of Manitowoc	No
Radio Tower	4009 Viebahn St (Seehafer Broadcasting)	County	Communication Facility	City of Manitowoc	No
Tower	1015 S Lakeview Dr	County	Communication Facility	City of Manitowoc	No
Building	3730 Mangin St (Seehafer Broadcasting)	County	Communication Facility	City of Manitowoc	No
Radio Tower	4009 Viebahn St (Seehafer Broadcasting)	County	Communication Facility	City of Manitowoc	No
Radio Tower	4009 Viebahn St (Seehafer Broadcasting)	County	Communication Facility	City of Manitowoc	No
Radio Tower	4009 Viebahn St (Seehafer Broadcasting)	County	Communication Facility	City of Manitowoc	No
The Bay at North Ridge Health and Rehabilitation	1445 N 7th St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
River's Bend Health Services	950 S Rapids Rd	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Laurel Grove Assisted Living Center	1308 S 22nd St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Atrium Senior Living of Two Rivers at Northland	2500 Garfield St	County 2019	Licensed Healthcare Facility	City of Two Rivers	No
Sacred Heart Court	1903 Division St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
The Artisan Manitowoc	1480 N 7th St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Care Partners Manitowoc	1858 Mirro Dr	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Fieldcrest Manor	1510 S 30th St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Hannah Home I	4025 Delta St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Hannah Home II	3407 Wildwood Dr	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Harbor View Assisted Living	2115 Cappaert Road	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
HIL Lighthouse	1301 N 24th St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
HIL Whitetail Court	4705 W Whitetail Ct	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
HIL Wisconsin Home	1348 S 39th St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Kindredhearts Manitowoc	5005 Vista Rd	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Marco Services Inc	1114 S 11th St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
TLC Homes Oakwood	1220 S 8th St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Point Creek Home	1722 New York Ave	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Rainbow House	3100 Southbrook Ct	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Reifs Harmony House II	2303 Marshall Street	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Samaritan on 7th	622 North 7th St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
TLC Homes Fleetwood	4438 Fleetwood Drive	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
The Villa	1600 S 18th St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Whitetail Estates II	910 River Bluff Dr	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
St Mary's Home for the Aged	1635 S. 21st St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Field of Dreams	505 Belitz Dr	County 2019	Licensed Healthcare Facility	City of Kiel	No
Holy Family Memorial Harbor Town	1650 S 41st St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Holy Family Lakeshore Pediatrics	4303 Michigan Ave	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Bellin Health Manitowoc	3415 Custer St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Emergency Siren	CTH Q	County	Communication Facility	Town of Gibson	No
Emergency Siren	E Zander Rd & Stangel Rd	County	Communication Facility	Town of Mishicot	No
Emergency Siren	STH 42	County	Communication Facility	Town of Two Creeks	No
Emergency Siren	Saxonburg Rd	County	Communication Facility	Town of Mishicot	No
Emergency Siren	Nuclear Rd & Twin Elder Rd	County	Communication Facility	Town of Two Creeks	No
Emergency Siren	Chemey Rd	County	Communication Facility	Town of Mishicot	No
Emergency Siren	CTH V	County	Communication Facility	Town of Two Rivers	No
Emergency Siren	Division Dr and Rawley Rd	County	Communication Facility	Town of Mishicot	No
Emergency Siren	CTH V	County	Communication Facility	Town of Two Rivers	No
Emergency Siren	E Hillcrest Rd	County	Communication Facility	Town of Two Rivers	No
Emergency Siren	Crystal Springs Rd	County	Communication Facility	Town of Two Rivers	No
Emergency Siren	3900 block of Bellvue Pl	County	Communication Facility	City of Two Rivers	No
Emergency Siren	29th St & Adams St	County	Communication Facility	City of Two Rivers	No
Emergency Siren	2600 Block of 13th St	County	Communication Facility	City of Two Rivers	No
Emergency Siren	1002 E Cedar Ave	County	Communication Facility	City of Manitowoc	No
Emergency Siren	1605 N 8th St	County	Communication Facility	City of Manitowoc	No
Emergency Siren	26th St and Hamilton St	County	Communication Facility	City of Manitowoc	No
Emergency Siren	1115 Washington St	County	Communication Facility	City of Manitowoc	No
Emergency Siren	708 N Water St	County	Communication Facility	City of Manitowoc	No
Emergency Siren	4921 Expo Dr	County	Communication Facility	City of Manitowoc	No
Emergency Siren	N Rapids Rd & Menasha Ave	County	Communication Facility	City of Manitowoc	No
Emergency Siren	Fleetwood Dr	County	Communication Facility	City of Manitowoc	No
Emergency Siren	21st St & Viebahn St	County	Communication Facility	Town of Manitowoc	No
Emergency Siren	Harvest Cir & Broadway St	County	Communication Facility	City of Manitowoc	No
Emergency Siren	Dairyland Dr & W Washington Ave	County	Communication Facility	Village of Cleveland	No
Emergency Siren	411 E Washington Ave	County	Communication Facility	Village of Cleveland	No
Emergency Siren	207 S Liberty St	County	Communication Facility	Village of Valders	No
Emergency Siren	202 N 4th Ave	County	Communication Facility	Village of St. Nazianz	No
Emergency Siren	212 Church St	County	Communication Facility	Village of St. Nazianz	No

NAME	ADDRESS	Source	Type	MCD	Floodplain
Emergency Siren	1214 Main St	County	Communication Facility	Village of Kellnersville	No
Emergency Siren	520 Manitowoc St	County	Communication Facility	Village of Reedsville	No
Emergency Siren	417 Paine St	County	Communication Facility	City of Kiel	No
Emergency Siren	102 Rockville Rd	County	Communication Facility	City of Kiel	No
Communication Tower for Utility & Public Works	1415 Lake Street	City	Communication Facility	City of Two Rivers	No
Building (Switch Station)	2205 Forest Ave (Lakefield Telephone Co. LLC)	County	Communication Facility	City of Two Rivers	No
Shady Oaks Mobile Home Park LLC	13835 Cedar Lake Rd	County 2019	Manufactured Housing	City of Kiel - Calumet County	No
Affinity Medical	632 Fremont St	County 2019	Licensed Healthcare Facility	City of Kiel	No
Aurora Kiel Clinic	1001 Service Rd	County 2019	Licensed Healthcare Facility	City of Kiel	No
Aurora Manitowoc Clinic	601 Reed Ave	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Manitowoc County Highway Shop	10510 I-43	TAC	Administrative Building	Town of Centerville	No
Manitowoc County Highway Shop	710 N State St	TAC	Administrative Building	Village of Mishicot	No
Menchaiville Fire Department	15331 County Rd K	TAC	Fire and Safety	Town of Franklin	No
Water Reservoir	3900 Bellevue Pl	TAC	Water Supply	City of Two Rivers	No
Silver Lake College	2406 S Alverno Rd	County 2019	School	City of Manitowoc	No
Sewage Lift Station	301 River Ter	City	Wastewater Treatment Facility	City of Kiel	No
Sewage Lift Station	access from Rockville Rd	City	Wastewater Treatment Facility	City of Kiel	No
Sewage Lift Station	Rockville Rd	City	Wastewater Treatment Facility	City of Kiel	No
Sewage Lift Station	402 8th St	City	Wastewater Treatment Facility	City of Kiel	No
Sewage Lift Station	1055 STH 57	City	Wastewater Treatment Facility	City of Kiel - Calumet County	No
Co HWY Dept Gravel Pit	S 15th St	County	Post-Disaster Recovery Site	Town of Manitowoc	No
Gravel Pit (Biese)	Glen Flora Rd	County	Post-Disaster Recovery Site	Town of Eaton	No
Gravel Pit (Brockner)	STH 67	County	Post-Disaster Recovery Site	Town of Eaton	No
Co HWY Dept Gravel Pit	7416 CTH J	County	Post-Disaster Recovery Site	Town of Liberty	No
Co HWY Dept Gravel Pit	16833 Christel Rd	County	Post-Disaster Recovery Site	Town of Liberty	No
Gravel Pit (Cherney Construction)	15201 CTH NN	County	Post-Disaster Recovery Site	Town of Cooperstown	No
Co HWY Dept Gravel Pit	12415 CTH Q	County	Post-Disaster Recovery Site	Town of Gibson	No
Co HWY Dept Gravel Pit	15233 CTH X	County	Post-Disaster Recovery Site	Town of Meeme	No
Gravel Pit (JPC Investments)	14511 CTH Z	County	Post-Disaster Recovery Site	Town of Cooperstown	No
Co HWY Dept Gravel Pit	Schaefer Rd	County	Post-Disaster Recovery Site	Town of Maple Grove	No
Co HWY Dept Gravel Pit	16800 Little Elkhart Lake Rd	County	Post-Disaster Recovery Site	Town of Schleswig	No
Co HWY Dept Gravel Pit	Robley Rd	County	Post-Disaster Recovery Site	Town of Liberty	No
Co HWY Dept Gravel Pit	3107 Fricke Dr	County	Post-Disaster Recovery Site	Town of Newton	No
Co HWY Dept Gravel Pit	14601 Lux Shapel Rd	County	Post-Disaster Recovery Site	Town of Schleswig	No
Co HWY Dept Gravel Pit	Tamarack Rd	County	Post-Disaster Recovery Site	Town of Maple Grove	No
Co HWY Dept Gravel Pit	3198 STH 147 W	County	Post-Disaster Recovery Site	Town of Gibson	No
Co HWY Dept Gravel Pit	CTH Q	County	Post-Disaster Recovery Site	Town of Kossuth	No
Co HWY Dept Gravel Pit	3304 STH 310	County	Post-Disaster Recovery Site	Town of Kossuth	No
Co HWY Dept Gravel Pit	16318 Little Elkhart Lake Rd	County	Post-Disaster Recovery Site	Town of Schleswig	No
Gravel Pit (Triple Pl)	CTH NN	County	Post-Disaster Recovery Site	Town of Cooperstown	No
Only Hwy Dept Gravel Pit	CTH F	County	Post-Disaster Recovery Site	Town of Liberty	No
Co HWY Dept Gravel Pit	CTH Q	County	Post-Disaster Recovery Site	Town of Kossuth	No
Co HWY Dept Gravel Pit	E Tapawingo Rd	County	Post-Disaster Recovery Site	Town of Mishicot	No
Co HWY Dept Gravel Pit	English Lake Rd	County	Post-Disaster Recovery Site	Town of Liberty	No
Co HWY Dept Gravel Pit	Lax Shapel Rd	County	Post-Disaster Recovery Site	Town of Schleswig	No
Co HWY Dept Gravel Pit	Glen Flora Rd	County	Post-Disaster Recovery Site	Town of Eaton	No
Gravel Pit (Litiz)	9803 Long Lake Rd	County	Post-Disaster Recovery Site	Town of Maple Grove	No
Co HWY Dept Gravel Pit	15322 CTH C	County	Post-Disaster Recovery Site	Town of Liberty	No
Co HWY Dept Gravel Pit	3500 STH 310	County	Post-Disaster Recovery Site	Town of Kossuth	No
Co HWY Dept Gravel Pit	CTH VV	County	Post-Disaster Recovery Site	Town of Two Rivers	No
Gravel Pit (Sauer)	1534 Highway H Rd	County	Post-Disaster Recovery Site	Town of Cato	No
Co HWY Dept Gravel Pit	Mineral Springs Rd	County	Post-Disaster Recovery Site	Town of Meeme	No
Co HWY Dept Gravel Pit (Olm)	Hickory Hills Rd	County	Post-Disaster Recovery Site	Town of Eaton	No
Co HWY Dept Gravel Pit	13701 English Lake Rd	County	Post-Disaster Recovery Site	Town of Liberty	No
Co HWY Dept Gravel Pit	Parkway Rd	County	Post-Disaster Recovery Site	Town of Kossuth	No
Co HWY Dept Gravel Pit	Reifs Mills Rd	County	Post-Disaster Recovery Site	Town of Kossuth	No
Co HWY Dept Gravel Pit	5202 Silver Creek Rd	County	Post-Disaster Recovery Site	Town of Newton	No
Co HWY Dept Gravel Pit	4005 Rockwood Rd	County	Post-Disaster Recovery Site	Town of Kossuth	No
Gravel Pit (MCC)	12599 Hidden Valley Rd	County	Post-Disaster Recovery Site	Town of Cooperstown	No
Co HWY Dept Gravel Pit	English Lake Rd	County	Post-Disaster Recovery Site	Town of Liberty	No
Co HWY Dept Gravel Pit	2941 STH 147 W	County	Post-Disaster Recovery Site	Town of Gibson	No
Co HWY Dept Gravel Pit	6800 Manitou Dr	County	Post-Disaster Recovery Site	Town of Two Rivers	No
Co HWY Dept Gravel Pit (Sukowaty)	USH 151	County	Post-Disaster Recovery Site	Town of Eaton	No
Co HWY Dept Gravel Pit	Quarry Rd	County	Post-Disaster Recovery Site	Town of Rockland	No
Co HWY Dept Gravel Pit	Quarry Ln	County	Post-Disaster Recovery Site	Village of Valders	No
Co HWY Dept Gravel Pit	CTH C	County	Post-Disaster Recovery Site	Town of Liberty	No
Co HWY Dept Gravel Pit	CTH C	County	Post-Disaster Recovery Site	Town of Liberty	No
Gravel Pit (Graymont Western Lime)	16377 Lime Kiln Rd	County	Post-Disaster Recovery Site	Town of Cato	No
Co HWY Dept Gravel Pit	CTH Q	County	Post-Disaster Recovery Site	Town of Gibson	No
Manitowoc County Office Complex	4319 Expo Dr	County	Administrative Building	City of Manitowoc	No
Gravel Pit (Kolarik)	Cooperstown Rd	County	Post-Disaster Recovery Site	Town of Cooperstown	No
Kellnersville Fire Department and First Responders	807 Main St	Village	Fire and Safety	Village of Kellnersville	No
Sewage Lift Station	Zeman Rd	Village	Wastewater Treatment Facility	Village of Kellnersville	No
Waste Storage	E Tapawingo Rd	Town	Power Facility/Bulk Fuel Storage	Town of Two Creeks	No
Wotachek Pond	18804 STH 42	Town	Fire and Safety	Town of Two Creeks	No
Sprang Pond	16704 Lakeshore Dr	Town	Fire and Safety	Town of Two Creeks	No
Harpt Lake Boat Landing (dry hydrant)	6001 North Lake Rd	Town	Fire and Safety	Town of Gibson	No
Cenex	Avery Rd	Town	Power Facility/Bulk Fuel Storage	Town of Gibson	No
Schaus (LP tank fill station)	3200 STH 147 W	Town	Power Facility/Bulk Fuel Storage	Town of Gibson	No
Utility Support Building	1418 S Main St	Village	Administrative Building	Village of Mishicot	No
Sewage Lift Station 2	676 E Church St	Village	Wastewater Treatment Facility	Village of Mishicot	No
Sewage Lift Station 3	400 Washington St	Village	Wastewater Treatment Facility	Village of Mishicot	No
Sewage Lift Station 4	E Samz Rd/S State St	Village	Wastewater Treatment Facility	Village of Mishicot	No
Sewage Lift Station 5	139 W Church St	Village	Wastewater Treatment Facility	Village of Mishicot	No
Sewage Lift Station 6	Riverwood Dr/Riverwood Ct	Village	Wastewater Treatment Facility	Village of Mishicot	No
Sewage Lift Station 1	Laduron Dr	Village	Wastewater Treatment Facility	Village of Mishicot	No
Fox Hills Pond (dry hydrant)	898 W Samz Rd	Village	Fire and Safety	Village of Mishicot	No
Water Tower	3145 Basswood St	City	Water Supply	Town of Manitowoc Rapids	No
Public Utilities	15201/1540 Dewey St	City	Administrative Building	City of Manitowoc	No
Manitowoc Two Rivers YMCA - Onon	2210 Woodland Dr	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Sewage Lift Station	2511 Lakeside Blvd	City	Wastewater Treatment Facility	City of Manitowoc	No
Sewage Lift Station	3201 S 10th St	City	Wastewater Treatment Facility	City of Manitowoc	No
Sewage Lift Station	1396 Irving Cr	City	Wastewater Treatment Facility	City of Manitowoc	No
Sewage Lift Station	1800 E Horseshoe Dr	City	Wastewater Treatment Facility	City of Manitowoc	No
Sewage Lift Station	2329 Silveredge Dr	City	Wastewater Treatment Facility	City of Manitowoc	No
Sewage Lift Station	500 S 16th St	City	Wastewater Treatment Facility	City of Manitowoc	No
Sewage Lift Station	2319 S 14th St	City	Wastewater Treatment Facility	City of Manitowoc	No
Sewage Lift Station	5023 River Heights Dr	City	Wastewater Treatment Facility	City of Manitowoc	No
Sewage Lift Station	2300 Paul Rd	City	Wastewater Treatment Facility	City of Manitowoc	No
Sewage Lift Station	911 Lawton Ter	City	Wastewater Treatment Facility	City of Manitowoc	No
Sewage Lift Station	820 Marline Dr	City	Wastewater Treatment Facility	City of Manitowoc	No
Lakeshore Tech College Child Care	1290 North Avenue	County 2019	Licensed Childcare Facility	Village of Cleveland	No
Precious Memories Daycare LLC	132 W Menasha Avenue	County 2019	Licensed Childcare Facility	Village of Whitelaw	No
Chatterbox Child Learning Center	65 Riverview Road	County 2019	Licensed Childcare Facility	City of Kiel	No
Chatterbox Kids Campus	510 Woodlawn Dr	County 2019	Licensed Childcare Facility	Village of Mishicot	No
Chatterbox Kids Campus - Valders	331 Wilson Street	County 2019	Licensed Childcare Facility	Village of Valders	No
Falling Star Child Care LLC	1501 N Rapids Road	County 2019	Licensed Childcare Facility	City of Manitowoc	No

Critical Facilities

NAME	ADDRESS	Source	Type	MCD	Floodplain
Kiel Cooperative Preschool	621 6th Street	County 2019	Licensed Childcare Facility	City of Kiel	No
Good Shepherd Lutheran Preschool 4k	3234 Micholot Road	County 2019	Licensed Childcare Facility	City of Two Rivers	No
The Peanut Gallery CC and Learning Center	2411 Wolmer Street	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Manitowoc Two Rivers YMCA SACC - Franklin	800 S 35th Street	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Man-Tr YMCA - Madison	701 N 4th Street	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Manitowoc Two Rivers YMCA - Riverview	4400 Michigan Avenue	County 2019	Licensed Childcare Facility	City of Manitowoc	No
St Peter's Lutheran Tiny Treasures Preschool	325 Randolph St	County 2019	Licensed Childcare Facility	Village of Mishicot	No
Redeemer Lutheran Christian Preschool	1712 Menasha Ave	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Follow Your Heart Learning Center LLC	2132 32nd Street	County 2019	Licensed Childcare Facility	City of Two Rivers	No
Happy Hearts Childcare	440 Elizabeth Street	County 2019	Licensed Childcare Facility	Village of Mishicot	No
Creative Learning Child Enrichment Center	4404 Bellevue Pl	County 2019	Licensed Childcare Facility	City of Two Rivers	No
Creative Kids Club	3502 Glenwood Street	County 2019	Licensed Childcare Facility	City of Two Rivers	No
CESA 7 Head Start - Manitowoc	4400 Michigan Avenue	County 2019	Licensed Childcare Facility	City of Manitowoc	No
CESA 7 Head Start - Two Rivers	3234 Micholot Road	County 2019	Licensed Childcare Facility	City of Two Rivers	No
CESA 7 Head Start	1130 S 9th Street	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Building Blocks Day Care Center and Preschool	315 S Adams Street	County 2019	Licensed Childcare Facility	Village of Valders	No
Children's House Montessori of Manitowoc	4020 Memorial Drive	County 2019	Licensed Childcare Facility	City of Two Rivers	No
Cooperative Nursery Center Preschool	501 8th Street	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Learning Center	1630 28th Street	County 2019	Licensed Childcare Facility	City of Two Rivers	No
Magic Ladder Nursery School	255 Roosevelt Street	County 2019	Licensed Childcare Facility	Village of Valders	No
St Gregory Preschool and Daycare	212 Church Street	County 2019	Licensed Childcare Facility	Village of St. Nazianz	No
St Peter the Fisherman Preschool	2203 12th Street	County 2019	Licensed Childcare Facility	City of Two Rivers	No
Trinity Christian School 4-year-old Kindergarten	2201 S 42nd St	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Two Rivers Nursery School	1218 Madison Street	County 2019	Licensed Childcare Facility	City of Two Rivers	No
Ashling Montessori School	2005 Johnston Dr	County 2019	Licensed Childcare Facility	City of Manitowoc	No
Ascension Medical Group Kiel	1160 Servis Rd, Kiel	County 2019	Licensed Healthcare Facility	City of Kiel	No
Pathways to a Better Life 2 LLC	13127 Lax Chapel Rd, Kiel	County 2019	Licensed Healthcare Facility	Town of Schleswig	No
Pathways to a Better Life 1 LLC	13111 Lax Chapel Rd, Kiel	County 2019	Licensed Healthcare Facility	Town of Schleswig	No
Aurora Valders Clinic	106 Wilson St, Valders	County 2019	Licensed Healthcare Facility	Village of Valders	No
The Willows	611 Washington St, Mishicot	County 2019	Licensed Healthcare Facility	Village of Mishicot	No
Holy Family Lakefront Campus	800 Lakefront Way, Two Rivers	County 2019	Licensed Healthcare Facility	City of Two Rivers	No
TLC Homes East Cedar	705 E Cedar Ave	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Vista Care North 21st Street AFH	2127 Menasha Ave, Manitowoc	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
TLC Homes Cappaert Road	2233 Cappaert Rd, Manitowoc	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Hi The Winds	2408 Knuehl St, Manitowoc	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Vista Care Kimberly Circle AFH	3302 Kimberly Circle, Manitowoc	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
TLC Homes Paul Road	2213 Paul Rd, Manitowoc	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Vista Care Rock Street AFH	4020 Rock St, Manitowoc	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Orthopedic Associates	501 N. 10th St, Manitowoc	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Lakeshore Community Health Care	2719 Calumet Ave	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Hi Wisconsin Home	1350 S 39th St	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Prevea Manitowoc Health Center	4810 Expo Dr	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Vista Care Expo Drive AFH	5053 Expo Dr, Manitowoc	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Tender Reflections of Manitowoc	2210 Dufek Dr	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Aurora Manitowoc Clinic	4100 Dewey Ave	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Aurora Manitowoc Clinic	3509 Dewey Ave	County 2019	Licensed Healthcare Facility	City of Manitowoc	No
Hi Newport Home	3609 Hecker Rd	County 2019	Licensed Healthcare Facility	Town of Newton	No
Kiel Elementary	416 Paine St	County 2019	School	City of Kiel	No
Saint Francis of Assisi Elementary	223 Manitowoc St	County 2019	School	Village of Reedsville	No
Lakeside Mennonite School	722 Hillview Road	County 2019	School	Town of Gibson	No
Lighthouse Learning Acad	4521 Lincoln Ave	County 2019	School	City of Two Rivers	No
Life Academy	2810 Wolmer St	County 2019	School	City of Manitowoc	No
Saint Francis of Assisi Middle	2109 Marshall St	County 2019	School	City of Manitowoc	No
Saint Mary/Saint Michael School	19 S CTH J	County 2019	School	Town of Cato	No
St. John's Lutheran School	14323 S Maribel Rd	County 2019	School	Village of Maribel	No
UW Green Bay - Manitowoc Campus	705 Viebahn St	County 2019	School	City of Manitowoc	No
Cleveland Elementary School	411 E Washington Ave	County 2019	School	Village of Cleveland	No
Northeast Wisconsin Montessori School	411 E Washington Ave	County 2019	School	Village of Cleveland	No
Meeme Leads Charter School	12121 XX	County 2019	School	Town of Meeme	No
Collins Marsh Sub-impound	Trib. of Mud Creek	DNR 2019	Dam	Town of Rockland	No
9360013	DAIRYLAND DR / FISCHER CREEK	County/HSI 2019	Bridge	Town of Centerville	No
9360016	DAIRYLAND DR / SOUTH BRANCH OF CENTERVILLE CREEK	County/HSI 2019	Bridge	Town of Centerville	No
9360029	USH 10-STH 42-WALDO BLVD / WISCONSIN CENTRAL RR	County/HSI 2019	Bridge	City of Manitowoc	No
9360030	CTH R / DEVILS RIVER STATE TRAIL	County/HSI 2019	Bridge	Town of Gibson	No
9360034	N CTH J / BRANCH OF BRANCH RIVER	County/HSI 2019	Bridge	Town of Cato	No
9360037	CLEVELAND RD / I-43	County/HSI 2019	Bridge	Town of Centerville	No
9360039	CTH XX / I-43	County/HSI 2019	Bridge	Town of Centerville	No
9360040	I-43 SB / CTH F	County/HSI 2019	Bridge	Town of Newton	No
9360041	I-43 NB / NEWTON RD	County/HSI 2019	Bridge	Town of Newton	No
9360042	I-43 SB / WESTVIEW RD	County/HSI 2019	Bridge	Town of Centerville	No
9360043	FISCHER CREEK RD / I-43	County/HSI 2019	Bridge	Town of Centerville	No
9360045	CTH X / I-43	County/HSI 2019	Bridge	Town of Centerville	No
9360046	POINT CREEK RD / I-43	County/HSI 2019	Bridge	Town of Centerville	No
9360048	I-43 NB / CTH F	County/HSI 2019	Bridge	Town of Centerville	No
9360052	I-43 SB / CARSTENS LAKE RD	County/HSI 2019	Bridge	Town of Newton	No
9360053	I-43 NB / CARSTENS LAKE RD	County/HSI 2019	Bridge	Town of Newton	No
9360056	I-43 SB / CLOVER RD	County/HSI 2019	Bridge	Town of Newton	No
9360057	I-43 NB / CLOVER RD	County/HSI 2019	Bridge	Town of Newton	No
9360058	I-43 / PINE CREEK	County/HSI 2019	Bridge	Town of Newton	No
9360059	SILVER CREEK RD / I-43	County/HSI 2019	Bridge	Town of Newton	No
9360061	I-43 NB / WESTVIEW RD	County/HSI 2019	Bridge	Town of Centerville	No
9360062	CTH CL-VIEBAHN ST / I-43	County/HSI 2019	Bridge	City of Manitowoc	No
9360063	USH 151-STH 42 NB / I-43	County/HSI 2019	Bridge	City of Manitowoc	No
9360065	I-43 SB-STH 42 SB / CTH CS-W CUSTER ST	County/HSI 2019	Bridge	Town of Manitowoc Rapids	No
9360066	I-43 NB-STH 42 NB / CTH CS-W CUSTER ST	County/HSI 2019	Bridge	Town of Manitowoc Rapids	No
9360067	I-43 SB-STH 42 SB / Wisconsin Central RR	County/HSI 2019	Bridge	Town of Manitowoc Rapids	No
9360068	I-43 NB-STH 42 NB / Wisconsin Central RR	County/HSI 2019	Bridge	Town of Manitowoc Rapids	No
9360069	MIDDLE RD / I-43-STH 42	County/HSI 2019	Bridge	Town of Manitowoc Rapids	No
9360070	I-43 SB / USH 10 EB-STH 42 SB	County/HSI 2019	Bridge	Town of Manitowoc Rapids	No
9360071	I-43 NB / USH 10 EB-STH 42 SB	County/HSI 2019	Bridge	Town of Manitowoc Rapids	No
9360077	I-43 SB / USH 10 WB-STH 310	County/HSI 2019	Bridge	Town of Kossuth	No
9360078	I-43 NB / USH 10 WB-STH 310	County/HSI 2019	Bridge	Town of Manitowoc Rapids	No
9360079	ROCKWOOD RD / I-43	County/HSI 2019	Bridge	Town of Kossuth	No
9360080	REIFS MILL RD / I-43	County/HSI 2019	Bridge	Town of Kossuth	No
9360081	CTH V-HILLCREST RD / I-43	County/HSI 2019	Bridge	Town of Kossuth	No
9360083	HIDDEN VALLEY RD / I-43	County/HSI 2019	Bridge	Town of Cooperstown	No
9360084	POLIFKA RD / I-43	County/HSI 2019	Bridge	Town of Kossuth	No
9360085	CTH P-HOMESTEAD RD / I-43-USH 10	County/HSI 2019	Bridge	Town of Manitowoc Rapids	No
9360086	I-43 SB / CTH K	County/HSI 2019	Bridge	Town of Kossuth	No
9360087	I-43 NB / CTH K	County/HSI 2019	Bridge	Town of Kossuth	No
9360088	FISCHERVILLE RD / I-43	County/HSI 2019	Bridge	Town of Kossuth	No
9360089	ZANDER RD / I-43	County/HSI 2019	Bridge	Town of Cooperstown	No
9360090	GREENSTREET RD / I-43	County/HSI 2019	Bridge	Town of Cooperstown	No
9360091	I-43 SB / DEVILS RIVER STATE TRAIL	County/HSI 2019	Bridge	Town of Cooperstown	No
9360092	I-43 NB / DEVILS RIVER STATE TRAIL	County/HSI 2019	Bridge	Town of Cooperstown	No
9360093	I-43 SB / STH 147	County/HSI 2019	Bridge	Town of Cooperstown	No
9360094	I-43 NB / STH 147	County/HSI 2019	Bridge	Town of Cooperstown	No

Critical Facilities

NAME	ADDRESS	Source	Type	MCD	Floodplain
B360095	I-43 SB / SCHLEY RD	CountyHSI 2019	Bridge	Town of Cooperstown	No
B360096	I-43 NB / SCHLEY RD	CountyHSI 2019	Bridge	Town of Cooperstown	No
B360099	I-43 NB / CTH T	CountyHSI 2019	Bridge	Town of Cooperstown	No
B360100	I-43 SB / CTH T	CountyHSI 2019	Bridge	Town of Cooperstown	No
B360101	I-43 SB / DEVILS RIVER STATE TRAIL	CountyHSI 2019	Bridge	Town of Cooperstown	No
B360102	I-43 NB / DEVILS RIVER STATE TRAIL	CountyHSI 2019	Bridge	Town of Cooperstown	No
B360103	I-43 SB / ROSECRANS RD	CountyHSI 2019	Bridge	Town of Cooperstown	No
B360104	I-43 NB / ROSECRANS RD	CountyHSI 2019	Bridge	Town of Cooperstown	No
B360106	18TH ST / SPRING ST CONNECTOR	CountyHSI 2019	Bridge	City of Manitowoc	No
B360114	USH 10 WB-STH 42 SB-WALDO BLVD / WHITEWATER DR	CountyHSI 2019	Bridge	Town of Manitowoc Rapids	No
B360115	USH 10 EB-STH 42 NB-WALDO BLVD / WHITEWATER DR	CountyHSI 2019	Bridge	Town of Manitowoc Rapids	No
B360116	WISCONSIN CENTRAL RR / DEWEY ST	CountyHSI 2019	Bridge	City of Manitowoc	No
B360122	REVERE DR SB / MANITOWOC RIVER	CountyHSI 2019	Bridge	City of Manitowoc	No
B3601280003	USH 10 EB-10TH ST / MANITOWOC RIVER	CountyHSI 2019	Bridge	City of Manitowoc	No
B360130	ZANDER RD / DEVILS RIVER STATE TRAIL	CountyHSI 2019	Bridge	Town of Cooperstown	No
B360138	CTH W / BRANCH OF MUD CREEK	CountyHSI 2019	Bridge	Town of Rockland	No
B360143	CTH B / WEST TWIN RIVER	CountyHSI 2019	Bridge	Town of Two Rivers	No
B360148	COOPERSTOWN RD / TRIBUTARY OF THE DEVILS RIVER	CountyHSI 2019	Bridge	Town of Cooperstown	No
B360158	BOXWOOD RD / BRANCH OF MUD CREEK	CountyHSI 2019	Bridge	Town of Rockland	No
B360159	CTH BB / BLACK CREEK	CountyHSI 2019	Bridge	Town of Gibson	No
B360170	PINE RIVER RD / POINT CREEK	CountyHSI 2019	Bridge	Town of Liberty	No
B360178	STH 42 / S TWO CREEKS	CountyHSI 2019	Bridge	Town of Two Creeks	No
B360179	NEWTON RD / POINT CREEK	CountyHSI 2019	Bridge	Town of Newton	No
B360180	STH 42 / TRIB. TO MEEME CR	CountyHSI 2019	Bridge	Town of Meeme	No
B360181	STH 42 / TRIB. TO POINT CREEK	CountyHSI 2019	Bridge	Town of Newton	No
B360224	CTH X / TRIB. TO SHEBOYGAN RIVER	CountyHSI 2019	Bridge	Town of Schleswig	No
B360227	STH 42 / UNNAMED TRIB. TO LAKE MICHIGAN	CountyHSI 2019	Bridge	Town of Two Creeks	No
B360229	S UNION RD / POINT CREEK	CountyHSI 2019	Bridge	Town of Newton	No
B360231	I-43 SB / NEWTON RD	CountyHSI 2019	Bridge	Town of Newton	No
B360317	SHOTO RD / BRANCH OF WEST TWIN RIVER	CountyHSI 2019	Bridge	Town of Kossuth	No
B360461	STH 42 / SILVER CREEK	CountyHSI 2019	Bridge	Town of Manitowoc	No
C360002	I-43 / TRIB. TO FISCHER CREEK	CountyHSI 2019	Bridge	Town of Centerville	No
C360005	STH 42 / MOLASH CREEK	CountyHSI 2019	Bridge	Town of Two Rivers	No
C360006	STH 42 / Unnamed Creek	CountyHSI 2019	Bridge	Town of Two Creeks	No
C360007	STH 42 / Unnamed Creek	CountyHSI 2019	Bridge	Town of Two Creeks	No
C360008	STH 42 / Unnamed Creek	CountyHSI 2019	Bridge	Town of Two Creeks	No
C360010	STH 42 / Drainage Way	CountyHSI 2019	Bridge	Town of Two Creeks	No
C360011	STH 42 / Drainage Way	CountyHSI 2019	Bridge	Town of Two Creeks	No
C360013	STH 42 / Drainage Way	CountyHSI 2019	Bridge	City of Two Rivers	No
C360014	STH 147-S MAIN ST / TRIB. TO EAST TWIN RIVER	CountyHSI 2019	Bridge	Town of Mishicot	No
C360015	STH 147 / Unnamed Creek	CountyHSI 2019	Bridge	Town of Mishicot	No
C360019	I-43 / Unnamed Creek	CountyHSI 2019	Bridge	Town of Centerville	No
C360020	I-43 / PINE CREEK	CountyHSI 2019	Bridge	Town of Newton	No
C360021	I-43 / SOUTH BRANCH OF CENTERVILLE CREEK	CountyHSI 2019	Bridge	Town of Centerville	No
C360025	I-43 / Unnamed Creek	CountyHSI 2019	Bridge	Town of Kossuth	No
C360026	STH 147-S MAIN ST / JOHNSON CREEK	CountyHSI 2019	Bridge	Village of Mishicot	No
C360028	I-43 / KRIWANKE CREEK	CountyHSI 2019	Bridge	Town of Cooperstown	No
C360034	CTH W / NORTH BRANCH OF MUD CREEK	CountyHSI 2019	Bridge	Town of Rockland	No
C360035	STH 42 / POINT CREEK	CountyHSI 2019	Bridge	Town of Newton	No
C360037	USH 10 / TRIB. OF BRANCH RIVER	CountyHSI 2019	Bridge	Town of Cato	No
C360039	GRIMMS RD / TRIB. TO BRANCH RIVER	CountyHSI 2019	Bridge	Town of Cato	No
C360046	STH 32 / MILLHOME CREEK	CountyHSI 2019	Bridge	Town of Schleswig	No
C360058	USH 10 / Unnamed Creek	CountyHSI 2019	Bridge	Town of Maple Grove	No
C360090	I-43 / Unnamed Creek	CountyHSI 2019	Bridge	Town of Cooperstown	No
C360784	USH 151 / UNNAMED CREEK	CountyHSI 2019	Bridge	Town of Eaton	No
C360785	USH 151 / TRIB. TO MANITOWOC RIVER	CountyHSI 2019	Bridge	Town of Eaton	No
C361016	STH 42 / Drainage way	CountyHSI 2019	Bridge	City of Two Rivers	No
C361024	STH 42 / DRAINAGE WAY	CountyHSI 2019	Bridge	Town of Newton	No
P360068	OLD Q RD / TRIB. TO WEST TWIN RIVER	CountyHSI 2019	Bridge	Town of Kossuth	No
P360094	COOPERSTOWN RD / TRIBUTARY OF THE DEVILS RIVER	CountyHSI 2019	Bridge	Town of Cooperstown	No
P360105	KVITEK RD / DEVILS RIVER	CountyHSI 2019	Bridge	Town of Cooperstown	No
P360127	FRANCIS CREEK RD / TRIB. TO FRANCIS CREEK	CountyHSI 2019	Bridge	Town of Kossuth	No
P360130	CHURCH ST / TRIB. TO EAST TWIN RIVER	CountyHSI 2019	Bridge	Town of Mishicot	No
P360154	OLD WOODEN BRIDGE RD / SOO LINE	CountyHSI 2019	Bridge	Town of Cato	No
P360156	MANITOWOC RD / TRIB. OF MUD CREEK	CountyHSI 2019	Bridge	Town of Rockland	No
P360160	HILLTOP RD / MUD CREEK	CountyHSI 2019	Bridge	Town of Rockland	No
P360171	CTH U / PINE CREEK	CountyHSI 2019	Bridge	Town of Newton	No
P360191	WILLMAS RD / MEEME RIVER	CountyHSI 2019	Bridge	Town of Meeme	No
P360199	POINT CREEK RD / TRIB TO SHEBOYGAN RIVER	CountyHSI 2019	Bridge	Town of Schleswig	No
P360903	DEVILS RIVER STATE TRAIL / HOSTAK RD	CountyHSI 2019	Bridge	Town of Cooperstown	No
P360911	LAKE SHORE RD / RABE FOREST CREEK	CountyHSI 2019	Bridge	Town of Two Rivers	No
P360920	CTH Q / TRIB. OF WEST TWIN RIVER	CountyHSI 2019	Bridge	Town of Kossuth	No
P360924	E CTH V / TRIB. OF EAST TWIN RIVER	CountyHSI 2019	Bridge	Town of Mishicot	No
P360927	BOOT LAKE RD / LONG LAKE TRIB	CountyHSI 2019	Bridge	Town of Rockland	No
P360935	CTH X / FISCHER CREEK	CountyHSI 2019	Bridge	Town of Centerville	No
P360942	LAKE SHORE RD / TRIB. TO LAKE MICHIGAN	CountyHSI 2019	Bridge	Town of Two Creeks	No
Cell Tower	4004 N CTH J	County 2019	Communication Facility	Town of Cato	No
Cell Tower	13615 McGuire Rd	County 2019	Communication Facility	Town of Cato	No
Cell Tower	15709 Limestone Rd	County 2019	Communication Facility	Town of Cato	No
Cell Tower	13003 USH 151	County 2019	Communication Facility	Town of Cato	No
Cell Tower	16317 Dairyland Dr	County 2019	Communication Facility	Town of Centerville	No
Cell Tower	West View Rd	County 2019	Communication Facility	Town of Centerville	No
Cell Tower	10167 Schley Rd	County 2019	Communication Facility	Town of Cooperstown	No
Cell Tower	8304 Paulz Rd	County 2019	Communication Facility	Town of Cooperstown	No
Cell Tower	22520 Croh Rd	County 2019	Communication Facility	Town of Eaton	No
Cell Tower	9388 Menchaville Rd	County 2019	Communication Facility	Town of Franklin	No
Cell Tower	16818 Long Rd	County 2019	Communication Facility	Town of Franklin	No
Cell Tower	7318 Old Y Rd	County 2019	Communication Facility	Town of Gibson	No
Cell Tower	11000 Thunder Rd	County 2019	Communication Facility	Town of Kossuth	No
Cell Tower	11315 CTH T	County 2019	Communication Facility	Town of Kossuth	No
Cell Tower	9635 Hillside Ln	County 2019	Communication Facility	Town of Kossuth	No
Cell Tower	7500 Village Dr	County 2019	Communication Facility	Town of Kossuth	No
Cell Tower	7500 Village Dr	County 2019	Communication Facility	Town of Kossuth	No
Cell Tower	5102 Marken Rd	County 2019	Communication Facility	Town of Liberty	No
Cell Tower	15562 CTH C	County 2019	Communication Facility	Town of Liberty	No
Cell Tower	9526 Hilltop Rd	County 2019	Communication Facility	Town of Manitowoc Rapids	No
Cell Tower	6492 Homestead Rd	County 2019	Communication Facility	Town of Manitowoc Rapids	No
Cell Tower	5712 CTH JJ	County 2019	Communication Facility	Town of Manitowoc Rapids	No
Cell Tower	2033 Highway H RD	County 2019	Communication Facility	Town of Manitowoc Rapids	No
Cell Tower	9630 Old 151 Rd	County 2019	Communication Facility	Town of Manitowoc Rapids	No
Cell Tower	Oakwood Rd / USH 10	County 2019	Communication Facility	Town of Maple Grove	No
Cell Tower	20400 Manitowoc Rd	County 2019	Communication Facility	Town of Maple Grove	No
Cell Tower	15318 CTH X	County 2019	Communication Facility	Town of Meeme	No
Cell Tower	11932 CTH X	County 2019	Communication Facility	Town of Meeme	No
Cell Tower	13103 Moraine Rd	County 2019	Communication Facility	Town of Meeme	No
Cell Tower	15007 CTH XX	County 2019	Communication Facility	Town of Meeme	No
Cell Tower	9940 STH 147	County 2019	Communication Facility	Town of Mishicot	No

Critical Facilities

NAME	ADDRESS	Source	Type	MCD	Floodplain
Cell Tower	2786 Sturm Rd	County 2019	Communication Facility	Town of Mishicot	Ni
Cell Tower	5405 CTH CR	County 2019	Communication Facility	Town of Newton	Ni
Cell Tower	4014 Carstens Lake Rd	County 2019	Communication Facility	Town of Newton	Ni
Cell Tower	9542 CTH C	County 2019	Communication Facility	Town of Newton	Ni
Cell Tower	9407 Newton Rd	County 2019	Communication Facility	Town of Newton	Ni
Radio Tower	7914 CTH F (Seehafer Broadcasting)	County 2019	Communication Facility	Town of Newton	Ni
Cell Tower	9431 Center Rd	County 2019	Communication Facility	Town of Newton	Ni
Cell Tower	5622 CTH F	County 2019	Communication Facility	Town of Newton	Ni
Cell Tower	13426 Meggers Rd	County 2019	Communication Facility	Town of Schleswig	Ni
Cell Tower	14000 Louis Corners Rd	County 2019	Communication Facility	Town of Schleswig	Ni
Cell Tower	23233 MUELLER RD	County 2019	Communication Facility	Town of Schleswig	Ni
Cell Tower	6010 Nuclear Rd	County 2019	Communication Facility	Town of Two Creeks	Ni
Cell Tower	5036 Lehmann Rd	County 2019	Communication Facility	Town of Two Creeks	Ni
Cell Tower	4802 CTH V	County 2019	Communication Facility	Town of Two Creeks	Ni
Cell Tower	6220 STH 42	County 2019	Communication Facility	Town of Two Rivers	Ni
Cell Tower	6200 STH 42	County 2019	Communication Facility	Town of Two Rivers	Ni
Cell Tower	3607 Maplewood Rd	County 2019	Communication Facility	Town of Two Rivers	Ni
Cell Tower	5103 CTH B	County 2019	Communication Facility	Town of Two Rivers	Ni
Cell Tower	6229 Greenfield Ln	County 2019	Communication Facility	Town of Two Rivers	Ni
Cell Tower	10416 E Belmar Rd	County 2019	Communication Facility	Village of Manibel	Ni
Cell Tower	819 Polk Ln	County 2019	Communication Facility	Village of Cleveland	Ni
Cell Tower	621 6th St	County 2019	Communication Facility	City of Kiel	Ni
Cell Tower	198 3rd St	County 2019	Communication Facility	City of Kiel	Ni
Cell Tower	2701 18th St	County 2019	Communication Facility	City of Two Rivers	Ni
Cell Tower	2318 Plonic Hill Ln	County 2019	Communication Facility	City of Two Rivers	Ni
Cell Tower	800 Columbus St	County 2019	Communication Facility	City of Two Rivers	Ni
Cell Tower	4410 Custer St	County 2019	Communication Facility	City of Manitowoc	Ni
Cell Tower	2515 Viebahn St	County 2019	Communication Facility	City of Manitowoc	Ni
Cell Tower	1915 Mirro Dr	County 2019	Communication Facility	City of Manitowoc	Ni
Cell Tower	1915 Mirro Dr	County 2019	Communication Facility	City of Manitowoc	Ni
Cell Tower	221 S Rockway St	County 2019	Communication Facility	Village of Mishicot	Ni
Cell Tower	425 E Samz Rd	County 2019	Communication Facility	Village of Mishicot	Ni
Cell Tower	419 Buchanan St	County 2019	Communication Facility	Village of Mishicot	Ni
Cell Tower	250 N Calumet Dr	County 2019	Communication Facility	Village of Valders	Ni
Cell Tower	111 Industrial Park Dr	County 2019	Communication Facility	Village of Reedsville	Ni
Cell Tower	6610 Nuclear Rd	County 2019	Communication Facility	Town of Two Creeks	Ni
Cell Tower	16919 USH 10	County 2019	Communication Facility	Town of Cato	Ni
Cell Tower	3636 CTH CR	County 2019	Communication Facility	Town of Newton	Ni
Cell Tower	1290 North Ave	County 2019	Communication Facility	Village of Cleveland	Ni
Cell Tower	1400 N 8th St	County 2019	Communication Facility	City of Manitowoc	Ni
Cell Tower	736 Revere Dr	County 2019	Communication Facility	City of Manitowoc	Ni
Cell Tower	3110 Viebahn St	County 2019	Communication Facility	City of Manitowoc	Ni
Cell Tower	2035 S 30th ST	County 2019	Communication Facility	City of Manitowoc	Ni
Cell Tower	204 N 8th St	County 2019	Communication Facility	City of Manitowoc	Ni
Cell Tower	Hempton Lake Rd	County 2019	Communication Facility	Town of Franklin	Ni
West Shore Retreat	3301 Long Lake Rd	County 2019	Manufactured Housing	Town of Rockland	Ni
Voigt's Maple Terrace Mobile Home Court	400 E Main St	County 2019	Manufactured Housing	Village of St. Nazianz	Ni
Al Miller's Mobile Home Park	23604 Sunny Slope Rd	County 2019	Manufactured Housing	Town of Maple Grove	Ni
Manitowoc County Administration Office Building	1110 S 9th St	County	Administrative Building	City of Manitowoc	Ni
Manitowoc County Airport	1815 Freedom Way	County	Administrative Building	City of Manitowoc	Ni
Manitowoc County Communications & Technology Bldg.	1024 S 9th St	County	Administrative Building	City of Manitowoc	Ni
Manitowoc County Exps	4921 Expo Dr	County	Administrative Building	City of Manitowoc	Ni
Manitowoc County Heritage Center	1701 Michigan Ave	County	Administrative Building	City of Manitowoc	Ni
Manitowoc County Human Services Department	926 S 8th St	County	Administrative Building	City of Manitowoc	Ni
Manitowoc County Material Recycling Facility	3000 Basswood Rd	County	Administrative Building	Town of Manitowoc Rapids	Ni
Manitowoc County Public Health Department	1028 S 9th St	County	Administrative Building	City of Manitowoc	Ni
Manitowoc County Sheriff's Office	1025 S 9th St	County	Administrative Building	City of Manitowoc	Ni
Tower	3730 Mangin St	County	Communication Facility	City of Manitowoc	Ni
Branch Fire Dept	8124 Village Dr	County	Fire and Safety	Town of Manitowoc Rapids	Ni
Town of Two Rivers Fire Department	6525 CTH B	County	Fire and Safety	Town of Two Rivers	Ni
Town of Two Rivers Fire Dept (equip. storage)	7915 STH 42	County	Fire and Safety	Town of Two Rivers	Ni
Bullhead Lake Public Access (dry hydrant)	507 Bullhead Lake Ln	Manitowoc County Fire Assoc.	Fire and Safety	Town of Rockland	Ni
Cedar Lake Boat Landing (lake access; draft)	18584 Split Rail Ln	Manitowoc County Fire Assoc.	Fire and Safety	Town of Schleswig	Ni
Clarks Mills (dry hydrant; Manitowoc River access)	13845 Old Mill Ln	Manitowoc County Fire Assoc.	Fire and Safety	Town of Cato	Ni
Eggers Industries Pond (dry hydrant)	1 Eggers Dr	Manitowoc County Fire Assoc.	Fire and Safety	City of Two Rivers	Ni
Grotegut Pond (pond on farm)	7407 Newton Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Newton	Ni
Horseshoe Lake Boat Landing (dry hydrant)	13716 Northwood Ct	Manitowoc County Fire Assoc.	Fire and Safety	Town of Meeme	Ni
Kalies Pond Dry Hydrant	7206 E Taus Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Franklin	Ni
Long Lake Rd (dry hydrant)	pond on W side of rd 1600' N of Long Lake Rd	Manitowoc County Fire Assoc.	Fire and Safety	Calumet County	Ni
Man-Cal Rd (dry hydrant)	pond on S side of rd 500' W of Long Lake Rd	Manitowoc County Fire Assoc.	Fire and Safety	Calumet County	Ni
Marquette Pond (dry hydrant)	19420 Marquette Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Maple Grove	Ni
Matthias Pond	1540 N Union Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Manitowoc Rapids	Ni
Natural Owens Tank	4300 CTH CR	Manitowoc County Fire Assoc.	Fire and Safety	Town of Newton	Ni
Newton Fire Station (50,000 gallon tank)	6528 Carstens Lake Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Newton	Ni
Osman Cistern 2 (underground tank)	11380 Point Creek Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Meeme	Ni
Osman Cistern 1	10521 STH 42	Manitowoc County Fire Assoc.	Fire and Safety	Town of Meeme	Ni
Pigeon Lake Public Access (dry hydrant)	8964 Pigeon Lake Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Liberty	Ni
Pt Peach NPP Hydrant (hydrant on north end)	6610 Nuclear Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Two Creeks	Ni
Rokillo Pump (pump on north side of Cedar Lake)	14004 Rokillo Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Schleswig	Ni
Schenian Dry Hydrant (pond)	10455 Menchalville Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Franklin	Ni
Schenian Dry Hydrant	10455 Menchalville Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Franklin	Ni
School Hill Cistern (Marken Rd and Lincoln Ave)	12228 Marden Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Meeme	Ni
Seven Lakes (dry hydrant)	3108 N CTH S	Manitowoc County Fire Assoc.	Fire and Safety	Town of Cato	Ni
Stocks Pond	6007 Gass Lake Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Newton	Ni
Wilke Lake Boat Landing (draft; lake access)	10901 Wilke Lake Rd	Manitowoc County Fire Assoc.	Fire and Safety	Town of Schleswig	Ni

APPENDIX D - Public Meeting Notice & Sign-in Sheet

Bay-Lake Regional Planning Commission Website & Newsletter Posting:

PUBLIC REVIEW & SURVEYS

Click on the icons below to participate in public review of documents and provide input via surveys.

MANITOWOC COUNTY
HAZARD MITIGATION PLAN UPDATE

Manitowoc County has worked alongside the Bay-Lake Regional Planning Commission to create the updated [Manitowoc County, Wisconsin Hazard Mitigation Plan 2020-2025](#).

Please review the draft document online and submit written comments on the proposed updated hazard plan. Feedback can be emailed to [Madison Smith](mailto:Madison.Smith@manitowocwi.gov). A public informational meeting to present the draft plan, maps, and materials will be held **November 11, 2019 from 5:30-6:30PM** at the Manitowoc County Emergency Operations Center (EOC) 1024 S 9th Street, Manitowoc, WI 54220.

Manitowoc County Hazard Mitigation Plan Update



Manitowoc County and the Bay-Lake Regional Planning Commission have been working together over the past year to create the updated [Manitowoc County, Wisconsin Hazard Mitigation Plan 2020-2025](#). Now it's your chance to review the draft document online and submit written comments on the proposed updated hazard plan. Feedback can be emailed to [Madison Smith](#). A public informational meeting to present the draft plan, maps, and materials will be held **November 11, 2019, from 5:30-6:30PM** at the Manitowoc County Emergency Operations Center (EOC), 1024 S 9th Street, Manitowoc, WI 54220.

Public Notices (2) by Manitowoc County Emergency Services:



Manitowoc County Emergency Services

1024 South 9th Street - Manitowoc, WI 54220

Director Travis Waack

920-683-4207 - traviswaack@co.manitowoc.wi.us

For Immediate Release
October 11th, 2019

Manitowoc County Undertaking Hazard Mitigation Planning

MANITOWOC – Manitowoc County Emergency Services, together with response and planning personnel from various entities have been working together as a steering committee to update the County's Hazard Mitigation Plan.

Development of the plan update is being led by the County Emergency Services Department with the Bay-Lake Regional Planning Commission facilitating the process and writing the plan under the direction of the steering committee. The steering committee is made up of personnel from County Departments, including Planning and Zoning and the Health Department, utilities, and various municipalities.

Hazard mitigation planning involves developing a set of actions designed to reduce or eliminate long-term risk to people and property from hazards and their effects. The rising costs associated with hazard recovery activities have led a much greater emphasis being placed on dealing with hazards before they occur through hazard mitigation planning. Hazard mitigation planning is the only phase of emergency management planning specifically dedicated to breaking the cycle of damage, reconstruction, and repeated damage.

With this plan, the County is able to identify the actions steps it needs to take in order to minimize risk and damage to people and property from natural hazards. Additionally, the County maintains its qualification to apply for FEMA funding to undertake identified projects that will minimize future risks.

A public informational meeting to present the draft plan will be held on November 11th, 2019, from 5:30 p.m. – 6:30 p.m. at the Manitowoc County Emergency Operations Center (EOC), 1024 S 9th Street, Manitowoc, WI 54220.

The draft plan can be downloaded from the Bay-Lake RPC website at <https://baylakerpc.org/about/surveys>.

If you have any questions, please contact Travis Waack with Manitowoc County Emergency Services at 920-683-4207 or Madison Smith with the Bay-Lake Regional Planning Commission at 920-448-2820, Ext. 106.

**Manitowoc County Emergency Services**

1024 South 9th Street - Manitowoc, WI 54220

Director Travis Waack

920-683-4207 – traviswaack@co.manitowoc.wi.us

For Immediate Release
October 24th, 2019

Public Meeting Reminder for the Manitowoc County Hazard Mitigation Plan

MANITOWOC – As a reminder, the public is invited to view the draft Manitowoc County Hazard Mitigation Plan and ask questions at a public meeting scheduled on November 11th, 2019, from 5:30 p.m. – 6:30 p.m. at the Manitowoc County Emergency Operations Center (EOC), 1024 S 9th Street, Manitowoc, WI 54220.

The draft plan can also be downloaded from the Bay-Lake RPC website at <https://baylakerpc.org/about/surveys>.

Manitowoc County Emergency Services, together with response and planning personnel from various entities have been working together as a steering committee to update the County's Hazard Mitigation Plan.

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With this plan, the County is able to identify the actions steps it needs to take in order to minimize risk and damage to people and property from natural hazards. Additionally, the County maintains its qualification to apply for FEMA funding to undertake identified projects that will minimize future risks.

If you have any questions, please contact Travis Waack with Manitowoc County Emergency Services at 920-683-4207 or Madison Smith with the Bay-Lake Regional Planning Commission at 920-448-2820, Ext. 106.

**Sign-In Sheet: Hazard Mitigation Plan Public Meeting
November 11th, 2019**

[illegible]

MANITOWOC COUNTY, WISCONSIN

Hazard Mitigation Plan 2020 - 2025





Department of Public Works
 1717 East Park Street
 Post Office Box 87
 Two Rivers, WI 54241-0087
 Director/Engineer.....920-793-5539
 Public Works Shop.....920-793-5576
 Wastewater Superintendent.....920-793-5574
pubwks@two-rivers.org

Council Manager Government Since 1924

--MEMORANDUM--

TO: Owners of Properties Fronting on:
 24th Street, between Forest Avenue and Jefferson Street
 25th Street, between West River Street and Forest Avenue
 Madison Street, between 19th Street and 22nd Street

FROM: City of Two Rivers Engineering Department

DATE: July 10, 2020

SUBJECT: Street and Utility Improvement Project

As you may be aware, the City's adopted 2020 Budget included funding for a reconstruction of 25th Street and Madison Street, with 24th Street reconstruction slated for the 2021 construction season, as indicated above.

These projects **will not be happening this year**, as the City has held off on these due to COVID-19 Pandemic.

Reconstruction of these streets will again be addressed in the 2021 City Budget, as projects to be undertaken in the summer of 2021.

These projects will involve removal of the existing pavement, reconstruction of the sanitary sewer, water main, and storm sewer utilities, including replacement of service laterals, installation of concrete pavement, spot replacement of sidewalk, and restoration.

Per City policy, portions of the projects be funded through special assessments on properties that front on the street. Special assessments are based on your lot's street frontage, and our **preliminary estimate** of the special assessment rate \$70.00 per front foot, and a storm lateral charge of \$1500.00 per property.

In addition to special assessments costs, lead water service laterals will be replaced from the main to the water meter. The portion from the curb stop to the water meter is considered private, and costs associated with this will be charged to the property owner. Work will also include replacement of the sewer lateral from the main up to inside the building, if found to be defective (constructed of clay, or other defects such as containing roots). The cost of sewer lateral replacement from the street to the building will also be charged to the property owner.

(over)

Attachment: PropertyOwnerLetter MEMO (2903 : Street Reconstruction in 2021)

If the project indeed moves forward in 2021, you will receive formal written notice of the proposed special assessment for your property some time in the Spring of 2021, and will have the opportunity to present your views on the proposed project and special assessments at a public hearing to be held before the City Council.

A couple of notes regarding special assessments and charges for service lateral replacements:

--Current City policy allows special assessments to be paid in full at the time of billing, or property owners can elect to pay their assessment in ten annual installments, subject to an interest charge (currently 5.5 percent) and no penalty for early payoff.

--If you own a corner lot, your assessment will be based on your full frontage on the street if that is the “short side” of your lot, or based on 50 percent of your frontage on the street if that is the “long side” of your lot.)

--A storm lateral will be installed to your property. **Per City Ordinance, you will be required to connect sump pump discharge lines to this storm lateral.**

--Private water services will be required to be replaced from the street to the water meter if found to be lead or lead contaminated.

-- Private sewer laterals will be required to be replaced, from the street to inside the basement, if found to be defective (such as constructed of clay, or have other defects, such as roots)

--Costs for private service laterals will be charged to the property owners, with payment due by the following October.

--Assistance for payment of private water and sanitary service replacements may be available for low to moderate income property owners. More information will be provided over the coming year.

This communication is being provided so you are aware of the status of this project, so you can plan for the special assessments and lateral replacement charges, that will be associated with these street and utility improvement projects.

If you have questions or concerns, feel free to contact James Mc Donald (jammcd@two-rivers.org), or Scott Ahl (scoahl@two-rivers.org), City of Two Rivers Engineering Department by the indicated e-mail, or call at 920-793-5539.

August 14, 2020

NOTICE OF POSSIBLE ORDINANCE CHANGES

This notice is being sent to the owners of record of all properties located within two hundred fifty (250) feet of the boundaries of a premises having a Class B liquor license and operating as a tavern.

The City of Two Rivers is considering amending several provisions of Ordinance 6-1-19, pertaining to Beer Gardens. City staff is seeking input from the owners of properties that would be directly impacted, before making recommendations to City Council regarding such changes in the ordinance. A copy of the current ordinance is included on the back of this notice for your reference.

The following changes have been proposed:

Beer Gardens:

- Eliminate or reduce the current required distance between beer gardens and any residential structure used for residential purposes. *Current ordinance prohibits the establishment of any beer garden within 50 feet of a residential structure used for residential purposes.*
- Allow amplified sound or music to be played beyond 9:00 PM and until the beer garden closes at 11:00 PM (required closing time for beer gardens). *Current ordinance prohibits amplified sound or music being played after 9:00 PM.*
- Allow patrons to remain in a beer garden after 11:00 PM and until the establishment closes, but only for the purpose of smoking; no beverages or food consumption allowed. *Current ordinance prohibits anyone from being in the area designated as a beer garden, for any purpose, after 11:00 PM.*

Any recommended amendments to the existing ordinances stated herein are strictly advisory to the City Council. The City Council has the authority to approve, revise, deny or table said amendments.

If you have comments or concerns regarding this matter, please either:

- Submit written comments to the City Clerk's Office by noon on Friday, September 4, 2020. Such written comments will be copied for distribution to all Councilmembers. You can email comments to kgraves@two-rivers.org, or mail them to Kim Graves, City Clerk, 1717 East Park Street, Two Rivers, WI 54241; or
- Attend the City Council meeting at 6:00 PM on Tuesday, September 8, 2020 to provide comments on this matter. While the Governor's face mask order is in effect, the City Council is also accepting public comments by telephone; go to www.two-rivers.org/government/agendas and [minutes](#) to view the City Council agenda for September 8, and to find the call-in number near the top of the agenda.

If you have any questions, please contact me at the number listed below.

CITY OF TWO RIVERS

Kim Graves
City Clerk
Telephone: (920) 793-5526

Sec. 6-1-19 Beer Gardens Regulated

(a) REQUIRED FOR OUTDOOR CONSUMPTION. No license shall permit the consumption of alcohol beverages on any part of the licensed premises not enclosed within the building, except under permit granted by the City Council. The permits are a privilege in which no rights vest; and therefore, may be revoked by the City Council at its pleasure at any time, or shall otherwise expire on June 30th of each year. No person shall consume or have in his or her possession alcohol beverages on any unenclosed part of a licensed premises which is not described in a valid beer garden permit. It is the purpose of fencing in the beer garden area to prohibit or significantly restrict the ease in which alcoholic beverages may be passed from within the beer garden area to anyone outside the beer garden area.

(b) LIMITATIONS ON ISSUANCE OF BEER GARDEN PERMITS. No permit shall be issued for a beer garden located in a nonresidential district if any part of the beer garden is within fifty (50) feet of a structure used for residential purposes except residential uses located in the same structure as the licensed premises or a residence which is owned by the same person who owns the licensed premises. No permit shall be issued to a licensed premises located in a district zoned R-I-R-4. No permit shall be issued for a beer garden if the beer garden area is greater than the gross floor area of the adjoining licensed premises. Each applicant for a beer garden permit shall accurately describe the area intended for use as a beer garden and shall indicate the nature of fencing or other measures intended to provide control over the operation of the beer garden.

Every beer garden shall be completely enclosed with a fence or wall not less than five (5) feet in height above the ground of the area immediately outside of the enclosed fenced area of the beer garden, except as otherwise provide herein. When a portion of the beer garden's perimeter lies along the shoreline of the East or West Twin Rive, there shall be no requirement for a fence along such river frontage; provided, however, that the fence or wall enclosing the balance of the beer garden's perimeter shall extend to points as close to the water as practicable, subject to the review and recommendation of the Police Department. The City reserves the right to require such fence to extend toward the water to the maximum extent allowed by law (i.e., to the ordinary high water mark or the bulkhead line, if a bulkhead exists).

Amplified sound or music is not permitted after 9:00 PM. There shall be a licensed operator within the beer garden when alcohol beverages are dispensed in the beer garden. The beer garden shall remain closed to the public between 11:00 PM and 8:00 AM.

(c) STATE STATUTES ENFORCED WITHIN BEER GARDEN. Every permittee under this section shall comply with and enforce all provisions of Chapter 125, Wis. Stats., applicable to Class "B" licensed premises, except insofar as such provisions are clearly inapplicable. Violation of the provisions of Ch. 125, Wis. Stats., shall be grounds for immediate revocation of the beer garden permit by the City Council.

(d) LICENSE FEES. Fees for a beer garden permit shall be Fifty (\$50.00) Dollars per year.

(e) PENALTY. Any person who shall violate any provisions of this Chapter or any order, rule or regulation made or adopted hereunder shall be subject to the general provisions penalty of this Code.

ORDINANCE

AN ORDINANCE to amend Municipal Code Section 10-1-28(a)(1), entitled Principal Permit Uses, to change "restaurant with no outdoor seating" to "restaurant" and to repeal Section 10-1-28(a)(2), entitled Conditional Uses, to eliminate restaurants with outdoor seating in the Waterfront Business District (WFB) in the City.

The Council of the City of Two Rivers ordains as follows:

SECTION 1. That Section 10-1-28(a)(1) of the Municipal Code shall hereby be amended as follows:

(q) Restaurant.

and to renumber subsequent sections as appropriate.

SECTION 2. That Section 10-1-28(a)(2)(m) of the Municipal Code shall hereby be repealed.

and to renumber subsequent sections as appropriate.

SECTION 3. This ordinance shall take effect and be in force from and after its date of passage and publication of same.

Dated this 8th day of September, 2020

Curt Andrews
President, City Council

Gregory E. Buckley
City Manager

Attest:

Kim M. Graves
City Clerk

Approved as to form and legality:

John M. Bruce
City Attorney

Attachment: Zoning public hearing (2884 : Consider Zoning Amendments Waterfront Business District)

RESOLUTION

Authorizing a Conditional Use for Development of 0.18 acres of land adjacent to Lot 16, Block 2, in Sandy Bay Highlands Subdivision No. 2 as a Conservation Subdivision in the R-1 Single Family Zoning District

WHEREAS, the City of Two Rivers has adopted provisions in its Zoning Ordinance, to allow development of Conservations Subdivisions in the City's various Residential Zoning Districts; and

WHEREAS, the Plan Commission has recommended, and the City Council has approved a Conditional Use for development of Sandy Bay Highlands Subdivision No. 2 as a Conservation Subdivision; and

WHEREAS, said lands adjacent to Lot 16, Block 2, in Sandy Bay Highlands Subdivision No. 2, is further described as follows:

A tract of land in the SE1/4 of the NW1/4 of Section 31, T. 20 N., R. 25 E., City of Two Rivers, Manitowoc County, Wisconsin, described as follows: Commencing at the NW corner of said Section 31, thence N88°56'55"E (recorded as N88°58'56"E) along the section line 1304.66 feet to the 1/16th section line; thence S00°21'32"W (recorded as S00°30'23"E) along said 1/16th section line 1691.00 feet; thence N89°03'54"E 88.00 feet to the point of real beginning; thence S03°38'58"E 129.08 feet; thence S59°14'46"E 90.00 feet to the westerly right-of-way of Sandy Ridge Drive, also being a point on a 266.0 foot radius right-of-way curve to the right; thence northeasterly along the arc of said curve 36.50 feet (chord N35°32'33"E 36.49 feet); thence N36°19'54"W 180.19 feet to the point of real beginning.

Said described land contains 0.18 acres (7900 square feet) more or less.

WHEREAS, the City Council on this date has conducted a Public Hearing on the proposed Conditional Use for this property; and

WHEREAS, after review and consideration, the City Council finds that the development of the above described parcel of land in Sandy Bay Highlands Subdivision No. 2 as a Conservation Subdivision is not contrary to the purpose and intent of the Municipal Code; and

NOW, THEREFORE, BE IT HEREBY RESOLVED that the City Council of the City of Two Rivers does hereby authorize and grant a Conditional Use for the development 0.18 acres of land described herein, adjacent to Lot 16 in Sandy Bay Highlands Subdivision No. 2 as a Conservation Subdivision, subject to the following conditions:

1. Compliance with all provisions of the "Open Space Management Plan" for Sandy Bay Highlands Subdivision, as previously adopted in 2004;

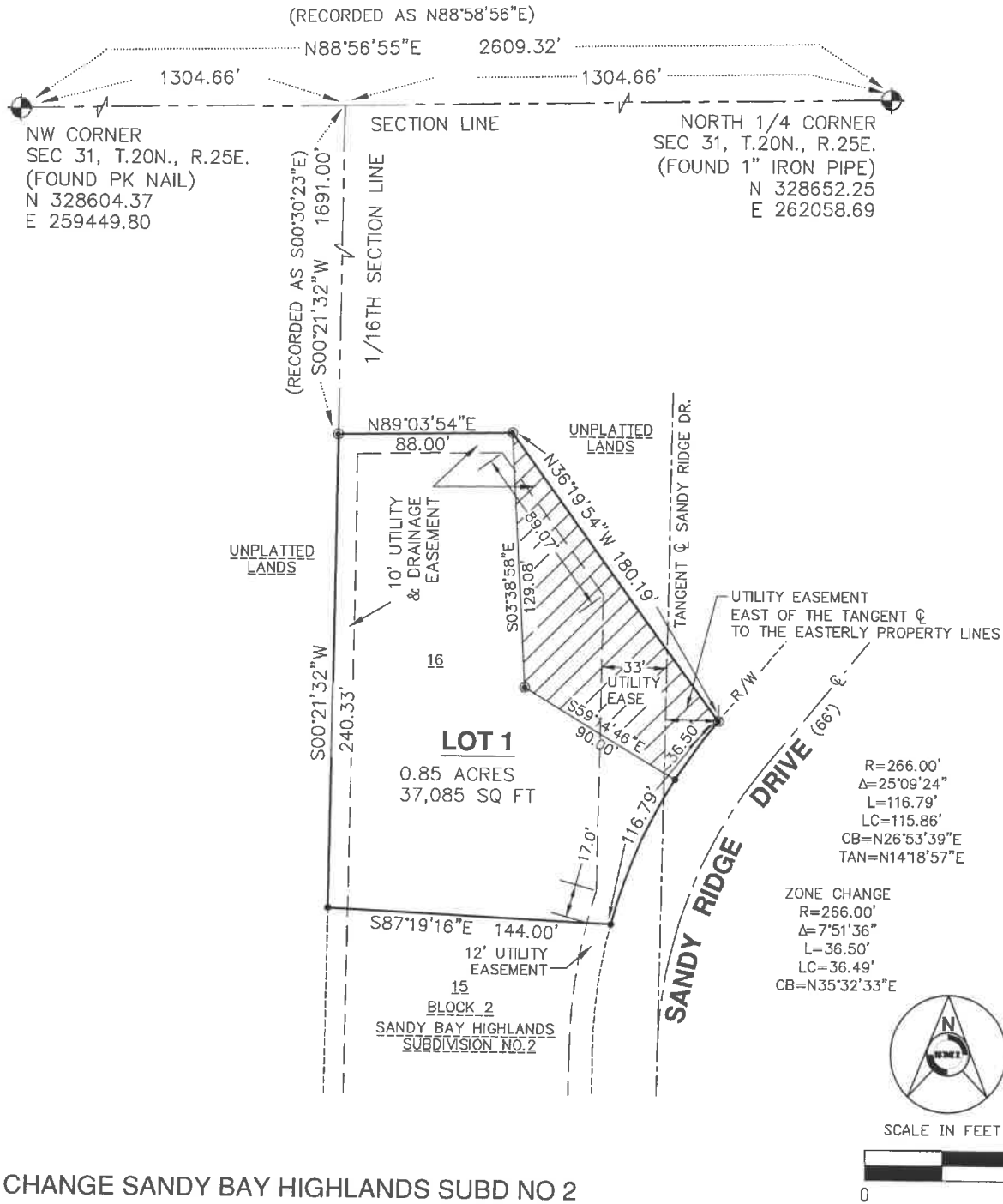
2. Compliance with all "Performance Standards and Modified Infrastructure Design Standards for Sandy Bay Highlands", as previously adopted in 2004;
3. Compliance with the requirements of the Findings of Fact, Conclusions of Law and Water Quality Certification applicable to this property issued in Case Number 3-NE-00-0114LB before the State of Wisconsin Division of Hearings and Appeals as clarified by subsequent three (3) e-mail messages of the Administrative Law Judge in that matter.

BE IT RESOLVED FURTHER, that this Resolution shall take effect upon compliance with all specified conditions, approved plans and specifications.

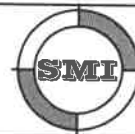
Dated this 8th day of September, 2020.

Councilmember

Gregory E. Buckley
City Manager



ZONE CHANGE SANDY BAY HIGHLANDS SUBD NO 2



SMI
CIVIL AND STRUCTURAL ENGINEERS
102 REVERE DRIVE
MANITOWOC, WISCONSIN 54220-3147
PHONE 920-684-5583 FAX 920-684-5584

Sandy Bay Highlands Subdivision No. 2 (partial map)

Location of lands to
be designated as
Conservation Subdivision
District

0.18
acres

Lot 16

1610121023

1610121004

1610121022

1610121003

1610121005

1610121021

1610121002

1610121020

Lake Breeze Wa

1610121019

1610121017

1610121014

1610121016

Sandy Ridge Drive

12030029

Attachment: Sandy Bay Resolution (2885 : Conservation Subdivision District)

ORDINANCE

AN ORDINANCE to repeal and recreate Section 10-2-1 and repeal Sections 10-2-2 through 10-2-10 of the Municipal Code to comply with requirements of the Federal Emergency Management Agency and the Wisconsin Department of Natural Resources related to Flood Protection and Control.

The Council of the City of Two Rivers ordains as follows:

SECTION 1. That Sections 10-2-1 through 10-2-10 of the Municipal Code shall hereby be repealed and recreated as follows:

SEC10-2-1 FLOODPLAIN

1.0 STATUTORY AUTHORIZATION, FINDING OF FACT, STATEMENT OF PURPOSE, TITLE AND GENERAL PROVISIONS

1.1 STATUTORY AUTHORIZATION

This ordinance is adopted pursuant to the authorization in s. 62.23 and the requirements in s. 87.30, Stats.

1.2 FINDING OF FACT

Uncontrolled development and use of the floodplains and rivers of this municipality would impair the public health, safety, convenience, general welfare and tax base.

1.3 STATEMENT OF PURPOSE

This ordinance is intended to regulate floodplain development to:

- (1) Protect life, health and property;
- (2) Minimize expenditures of public funds for flood control projects;
- (3) Minimize rescue and relief efforts undertaken at the expense of the taxpayers;
- (4) Minimize business interruptions and other economic disruptions;
- (5) Minimize damage to public facilities in the floodplain;
- (6) Minimize the occurrence of future flood blight areas in the floodplain;
- (7) Discourage the victimization of unwary land and homebuyers;

- (8) Prevent increases in flood heights that could increase flood damage and result in conflicts between property owners; and
- (9) Discourage development in a floodplain if there is any practicable alternative to locate the activity, use or structure outside of the floodplain.

1.4 **TITLE**

This ordinance shall be known as the Floodplain Zoning Ordinance for the City of Two Rivers, Wisconsin.

1.5 **GENERAL PROVISIONS**

(1) **AREAS TO BE REGULATED**

This ordinance regulates all areas that would be covered by the regional flood or base flood as shown on the Flood Insurance Rate Map (FIRM) or other maps approved by the DNR. Base flood elevations are derived from the flood profiles in the Flood Insurance Study (FIS) and are shown as AE, A1-30 and AH Zones on the FIRM. Other regulatory zones are displayed as A and AO zones. Regional Flood Elevations (RFE) may be derived from other studies. If more than one map or revision is referenced, the most restrictive information shall apply.

(2) **OFFICIAL MAPS & REVISIONS**

The boundaries of all floodplain districts are designated as A, AE, AH and AO or A1-30 on the maps based on the Flood Insurance Study (FIS) listed below. Any change to the base flood elevations (BFE) or any changes to the boundaries of the floodplain or floodway in the FIS or on the Flood Insurance Rate Map (FIRM) must be reviewed and approved by the DNR and FEMA through the letter of map change process (see 8.0 *Amendments*) before it is effective. No changes to RFE's on non-FEMA maps shall be effective until approved by the DNR. These maps and revisions are on file in the office of the Zoning Administrator, City of Two Rivers. If more than one map or revision is referenced, the most restrictive approved information shall apply.

- (a) Flood Insurance Rate Map (FIRM), panel numbers 55071C0211D, 55071C0212D, 55071C0213D, 55071C0214D, 55071C0216D, 55071C0218D and 55071C0326D, dated August 2, 2011; with corresponding profiles that are based on the Flood Insurance Study (FIS) dated August 2, 2011, 55071CV000A.

(3) **ESTABLISHMENT OF FLOODPLAIN ZONING DISTRICTS**

The regional floodplain areas are divided into four districts as follows:

- (a) The Floodway District (FW) is the channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the regional floodwaters and are contained within AE Zones as shown on the FIRM.
- (b) The Floodfringe District (FF) is that portion of the floodplain between the regional flood limits and the floodway and displayed as AE Zones on the FIRM.
- (c) The General Floodplain District (GFP) is those areas that have been or may be covered by floodwater during the regional flood and does not have a BFE or floodway boundary determined, including A, AH and AO Zones on the FIRM.
- (d) The Flood Storage District (FSD) is that area of the floodplain where storage of floodwaters is calculated to reduce the regional flood discharge.

(4) LOCATING FLOODPLAIN BOUNDARIES

Discrepancies between boundaries on the official floodplain zoning map and actual field conditions shall be resolved using the criteria in paragraphs (a) or (b) below. If a significant difference exists, the map shall be amended according to s. 8.0. The zoning administrator can rely on a boundary derived from a profile elevation to grant or deny a land use permit, whether or not a map amendment is required. The zoning administrator shall be responsible for documenting actual pre-development field conditions and the basis upon which the district boundary was determined and for initiating any map amendments required under this section. Disputes between the zoning administrator and an applicant over the district boundary line shall be settled according to s. 7.3(3) and the criteria in (a) and (b) below. Where the flood profiles are based on established base flood elevations from a FIRM, FEMA must approve any map amendment or revision pursuant to s. 8.0 *Amendments*.

- (a) If flood profiles exist, the map scale and the profile elevations shall determine the district boundary. The regional or base flood elevations shall govern if there are any discrepancies.
- (b) Where flood profiles do not exist, the location of the boundary shall be determined by the map scale.

(5) REMOVAL OF LANDS FROM FLOODPLAIN

Compliance with the provisions of this ordinance shall not be grounds for removing land from the floodplain unless it is filled at least two feet above the regional or base flood elevation, the fill is contiguous to land outside the floodplain, and the map is amended pursuant to s. 8.0 *Amendments*.

(6) COMPLIANCE

Any development or use within the areas regulated by this ordinance shall be in compliance with the terms of this ordinance, and other applicable local, state, and federal regulations.

(7) MUNICIPALITIES AND STATE AGENCIES REGULATED

Unless specifically exempted by law, all cities, villages, towns, and counties are required to comply with this ordinance and obtain all necessary permits. State agencies are required to comply if s. 13.48(13), Stats., applies. The construction, reconstruction, maintenance and repair of state highways and bridges by the Wisconsin Department of Transportation is exempt when s. 30.2022, Stats., applies.

(8) ABROGATION AND GREATER RESTRICTIONS

- (a) This ordinance supersedes all the provisions of any municipal zoning ordinance enacted under s. 62.23 or s. 87.30, Stats., which relate to floodplains. A more restrictive ordinance shall continue in full force and effect to the extent of the greater restrictions, but not otherwise.
- (b) This ordinance is not intended to repeal, abrogate or impair any existing deed restrictions, covenants or easements. If this ordinance imposes greater restrictions, the provisions of this ordinance shall prevail.

(9) INTERPRETATION

In their interpretation and application, the provisions of this ordinance are the minimum requirements liberally construed in favor of the governing body and are not a limitation on or repeal of any other powers granted by the Wisconsin Statutes. If a provision of this ordinance, required by ch. NR 116, Wis. Adm. Code, is unclear, the provision shall be interpreted in light of the standards in effect on the date of the adoption of this ordinance or in effect on the date of the most recent text amendment to this ordinance.

(10) WARNING AND DISCLAIMER OF LIABILITY

The flood protection standards in this ordinance are based on engineering experience and scientific research. Larger floods may occur or the flood height may be increased by man-made or natural causes. This ordinance does not imply or guarantee that non-floodplain areas or permitted floodplain uses will be free from flooding and flood damages. Nor does this ordinance create liability on the part of, or a cause of action against, the municipality or any officer or employee thereof for any flood damage that may result from reliance on this ordinance.

(11) SEVERABILITY

Should any portion of this ordinance be declared unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance shall not be affected.

(12) ANNEXED AREAS FOR CITIES AND VILLAGES

The Manitowoc County floodplain zoning provisions in effect on the date of annexation shall remain in effect and shall be enforced by the municipality for all annexed areas until the municipality adopts and enforces an ordinance which meets the requirements of ch. NR 116, Wis. Adm. Code and 44 CFR 59-72, National Flood Insurance Program (NFIP). These annexed lands are described on the municipality's official zoning map. County floodplain zoning provisions are incorporated by reference for the purpose of administering this section and are on file in the office of the municipal zoning administrator. All plats or maps of annexation shall show the regional flood elevation and the floodway location.

2.0 GENERAL STANDARDS APPLICABLE TO ALL FLOODPLAIN DISTRICTS

The community shall review all permit applications to determine whether proposed building sites will be reasonable safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall be designed and anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads; be constructed with flood-resistant materials; be constructed to minimize flood damages and to ensure that utility and mechanical equipment is designed and/or located so as to prevent water from entering or accumulating within the equipment during conditions of flooding.

Subdivisions shall be reviewed for compliance with the above standards. All subdivision proposals (including manufactured home parks) shall include regional flood elevation and floodway data for any development that meet the subdivision definition of this ordinance and all other requirements in s. 7.1(2). Adequate drainage shall be provided to reduce exposure to flood hazards and all public utilities and facilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damages.

2.1 HYDRAULIC AND HYDROLOGIC ANALYSES

- (1) No floodplain development shall:
 - (a) Obstruct flow, defined as development which blocks the conveyance of floodwaters by itself or with other development, causing any increase in the regional flood height; or
 - (b) Cause any increase in the regional flood height due to floodplain storage area lost.

- (2) The zoning administrator shall deny permits if it is determined the proposed development will obstruct flow or cause any increase in the regional flood height based on the officially adopted FIRM or other adopted map, unless the provisions of s. 8.0 *Amendments* are met.

2.2 **WATERCOURSE ALTERATIONS**

No land use permit to alter or relocate a watercourse in a mapped floodplain shall be issued until the local official has notified in writing all adjacent municipalities, the Department and FEMA regional offices, and required the applicant to secure all necessary state and federal permits. The standards of s. 2.1 must be met and the flood carrying capacity of any altered or relocated watercourse shall be maintained.

As soon as is practicable, but not later than six months after the date of the watercourse alteration or relocation and pursuant to s. 8.0 *Amendments*, the community shall apply for a Letter of Map Revision (LOMR) from FEMA. Any such alterations must be reviewed and approved by FEMA and the DNR through the LOMC process

2.3 **CHAPTER 30, 31, WIS. STATS., DEVELOPMENT**

Development which requires a permit from the Department, under chs. 30 and 31, Wis. Stats., such as docks, piers, wharves, bridges, culverts, dams and navigational aids, may be allowed if the necessary permits are obtained and amendments to the floodplain zoning ordinance are made according to s. 8.0 *Amendments*.

2.4 **PUBLIC OR PRIVATE CAMPGROUNDS**

Public or private campgrounds shall have a low flood damage potential and shall meet the following provisions:

- (1) The campground is approved by the Department of Health Services;
- (2) A land use permit for the campground is issued by the zoning administrator;
- (3) The character of the river system and the elevation of the campground is such that a 72-hour warning of an impending flood can be given to all campground occupants;
- (4) There is an adequate flood warning procedure for the campground that offers the minimum notice required under this section to all persons in the campground. This procedure shall include a written agreement between the campground owner, the municipal emergency government coordinator and the chief law enforcement official which specifies the flood elevation at which evacuation shall occur, personnel responsible for monitoring flood elevations, types of warning systems to be used and the procedures for notifying at-risk parties, and the methods and

personnel responsible for conducting the evacuation;

- (5) This agreement shall be for no more than one calendar year, at which time the agreement shall be reviewed and updated - by the officials identified in sub. (4) - to remain in compliance with all applicable regulations, including those of the state Department of Health Services and all other applicable regulations;
- (6) Only camping units are allowed;
- (7) The camping units may not occupy any site in the campground for more than 180 consecutive days, at which time the camping unit must be removed from the floodplain for a minimum of 24 hours;
- (8) All camping units that remain on site for more than 30 days shall be issued a limited authorization by the campground operator, a written copy of which is kept on file at the campground. Such authorization shall allow placement of a camping unit for a period not to exceed 180 days and shall ensure compliance with all the provisions of this section;
- (9) The municipality shall monitor the limited authorizations issued by the campground operator to assure compliance with the terms of this section;
- (10) All camping units that remain in place for more than 180 consecutive days must meet the applicable requirements in either s. 3.0, 4.0 or 5.0 for the floodplain district in which the structure is located;
- (11) The campground shall have signs clearly posted at all entrances warning of the flood hazard and the procedures for evacuation when a flood warning is issued; and
- (12) All service facilities, including but not limited to refuse collection, electrical service, natural gas lines, propane tanks, sewage systems and wells shall be properly anchored and placed at or floodproofed to the flood protection elevation.

3.0 FLOODWAY DISTRICT (FW)

3.1 APPLICABILITY

This section applies to all floodway areas on the floodplain zoning maps and those identified pursuant to s. 5.1(4).

3.2 PERMITTED USES

The following open space uses are allowed in the Floodway District and the floodway areas of the General Floodplain District, if

- they are not prohibited by any other ordinance;

- they meet the standards in s. 3.3 and 3.4; and
 - all permits or certificates have been issued according to s. 7.1.
- (1) Agricultural uses, such as: farming, outdoor plant nurseries, horticulture, viticulture and wild crop harvesting.
 - (2) Nonstructural industrial and commercial uses, such as loading areas, parking areas and airport landing strips.
 - (3) Nonstructural recreational uses, such as golf courses, tennis courts, archery ranges, picnic grounds, boat ramps, swimming areas, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting, trap and skeet activities, hunting and fishing areas and hiking and horseback riding trails, subject to the fill limitations of s. 3.3(4).
 - (4) Uses or structures accessory to open space uses or classified as historic structures that comply with ss. 3.3 and 3.4.
 - (5) Extraction of sand, gravel or other materials that comply with s. 3.3(4).
 - (6) Functionally water-dependent uses, such as docks, piers or wharves, dams, flowage areas, culverts, navigational aids and river crossings of transmission lines, and pipelines that comply with chs. 30 and 31, Stats.
 - (7) Public utilities, streets and bridges that comply with s. 3.3(3).

3.3 **STANDARDS FOR DEVELOPMENTS IN FLOODWAY AREAS**

- (1) GENERAL
 - (a) Any development in floodway areas shall comply with s. 2.0 and have a low flood damage potential.
 - (b) Applicants shall provide the following data to determine the effects of the proposal according to s. 2.1 and 7.1(2)(c):
 1. A cross-section elevation view of the proposal, perpendicular to the watercourse, showing if the proposed development will obstruct flow; or
 2. An analysis calculating the effects of this proposal on regional flood height.
 - (c) The zoning administrator shall deny the permit application if the project will increase flood elevations upstream or downstream based on the data submitted for subd. (b) above.

(2) STRUCTURES

Structures accessory to permanent open space uses or functionally dependent on a waterfront location may be allowed by permit if the structures comply with the following criteria:

- (a) The structure is not designed for human habitation and does not have a high flood damage potential and is constructed to minimize flood damage;
- (b) Shall have a minimum of two openings on different walls having a total net area not less than one square inch for every square foot of enclosed area, and the bottom of all such openings being no higher than one foot above grade. The openings shall be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (c) Must be anchored to resist flotation, collapse and lateral movement;
- (d) Mechanical and utility equipment must be elevated or flood proofed to or above the flood protection elevation; and
- (e) It must not obstruct flow of flood waters or cause any increase in flood levels during the occurrence of the regional flood.

(3) PUBLIC UTILITIES, STREETS AND BRIDGES

Public utilities, streets and bridges may be allowed by permit, if:

- (a) Adequate floodproofing measures are provided to the flood protection elevation; and
- (b) Construction meets the development standards of s. 2.1.

(4) FILLS OR DEPOSITION OF MATERIAL

Fills or deposition of materials may be allowed by permit, if:

- (a) The requirements of s. 2.1 are met;
- (b) No material is deposited in the navigable waters unless a permit is issued by the Department pursuant to ch. 30, Stats., and a permit pursuant to s. 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1344 has been issued, if applicable, and the other requirements of this section are met;

- (c) The fill or other materials will be protected against erosion by riprap, vegetative cover, sheet piling or bulkheading; and
- (d) The fill is not classified as a solid or hazardous material.

3.4 PROHIBITED USES

All uses not listed as permitted uses in s. 3.2 are prohibited, including the following uses:

- (1) Habitable structures, structures with high flood damage potential, or those not associated with permanent open-space uses;
- (2) Storing materials that are buoyant, flammable, explosive, injurious to property, water quality, or human, animal, plant, fish or other aquatic life;
- (3) Uses not in harmony with or detrimental to uses permitted in the adjoining districts;
- (4) Any private or public sewage systems, except portable latrines that are removed prior to flooding and systems associated with recreational areas and Department-approved campgrounds that meet the applicable provisions of local ordinances and ch. SPS 383, Wis. Adm. Code.
- (5) Any public or private wells which are used to obtain potable water, except those for recreational areas that meet the requirements of local ordinances and chs. NR 811 and NR 812, Wis. Adm. Code;
- (6) Any solid or hazardous waste disposal sites;
- (7) Any wastewater treatment ponds or facilities, except those permitted under s. NR 110.15(3)(b), Wis. Adm. Code;
- (8) Any sanitary sewer or water supply lines, except those to service existing or proposed development located outside the floodway which complies with the regulations for the floodplain area occupied.

4.0 FLOODFRINGE DISTRICT (FF)

4.1 APPLICABILITY

This section applies to all floodfringe areas shown on the floodplain zoning maps and those identified pursuant to s. 5.1(4).

4.2 PERMITTED USES

Any structure, land use, or development is allowed in the Floodfringe District if the standards in s. 4.3 are met, the use is not prohibited by this or any other ordinance or regulation and all permits or certificates specified in s. 7.1 have been issued.

4.3 STANDARDS FOR DEVELOPMENT IN THE FLOODFRINGE

S. 2.1 shall apply in addition to the following requirements according to the use requested. Any existing structure in the floodfringe must meet the requirements of s. 6.0 Nonconforming Uses;

(1) RESIDENTIAL USES

Any structure, including a manufactured home, which is to be newly constructed-or moved into the floodfringe area, must meet the requirements of s. 6.0 *Nonconforming Uses*;

- (a) The elevation of the lowest floor shall be at or above the flood protection elevation on fill unless the requirements of s. 4.3(1)(b) can be met. The fill shall be one foot or more above the regional flood elevation extending at least 15 feet beyond the limits of the structure;
- (b) The basement or crawlway floor may be placed at the regional flood elevation if it is dry floodproofed to the flood protection elevation. No basement or crawlway floor is allowed below the regional flood elevation;
- (c) Contiguous dryland access shall be provided from a structure to land outside of the floodplain, except as provided in subd. (d).
- (d) In developments where existing street or sewer line elevations make compliance with subd. (c) impractical, the municipality may permit new development and substantial improvements where access roads are below the regional flood elevation, if:
 1. The municipality has written assurance from police, fire and emergency services that rescue and relief will be provided to the structure(s) by wheeled vehicles during a regional flood event; or
 2. The municipality has a DNR-approved emergency evacuation plan.

(2) ACCESSORY STRUCTURES OR USES

Accessory structures shall be constructed on fill with the lowest floor at or above the regional flood elevation.

(3) COMMERCIAL USES

Any commercial structure which is erected, altered or moved into the floodfringe shall meet the requirements of s. 4.3(1). Subject to the requirements of s. 4.3(5), storage yards, surface parking lots and other such uses may be placed at lower

elevations if an adequate warning system exists to protect life and property.

(4) MANUFACTURING AND INDUSTRIAL USES

Any manufacturing or industrial structure which is erected, altered or moved into the floodfringe shall have the lowest floor elevated to or above the flood protection elevation or meet the floodproofing standards s. 7.5. Subject to the requirements of s. 4.3(5), storage yards, surface parking lots and other such uses may be placed at lower elevations if an adequate warning system exists to protect life and property.

(5) STORAGE OF MATERIALS

Materials that are buoyant, flammable, explosive, or injurious to property, water quality or human, animal, plant, fish or aquatic life shall be stored at or above the flood protection elevation or floodproofed in compliance with s. 7.5. Adequate measures shall be taken to ensure that such materials will not enter the water body during flooding.

(6) PUBLIC UTILITIES, STREETS AND BRIDGES

All utilities, streets and bridges shall be designed to be compatible with comprehensive floodplain development plans; and

- (a) When failure of public utilities, streets and bridges would endanger public health or safety, or where such facilities are deemed essential, construction or repair of such facilities shall only be permitted if they are designed to comply with s. 7.5;
- (b) Minor roads or nonessential utilities may be constructed at lower elevations if they are designed to withstand flood forces to the regional flood elevation.

(7) SEWAGE SYSTEMS

All sewage disposal systems shall be designed to minimize or eliminate infiltration of flood water into the system, pursuant to s. 7.5(3), to the flood protection elevation and meet the provisions of all local ordinances and ch. SPS 83, Wis. Adm. Code.

(8) WELLS

All wells shall be designed to minimize or eliminate infiltration of flood waters into the system pursuant to s. 7.5(3), to the flood protection elevation and shall meet the provisions of chs. NR 811 and NR 812, Wis. Adm. Code.

(9) SOLID WASTE DISPOSAL SITES

Disposal of solid or hazardous waste is prohibited in floodfringe areas.

(10) DEPOSITION OF MATERIALS

Any deposited material must meet all the provisions of this ordinance.

(11) MANUFACTURED HOMES

- (a) Owners or operators of all manufactured home parks and subdivisions shall provide adequate surface drainage to minimize flood damage, and prepare, secure approval and file an evacuation plan, indicating vehicular access and escape routes, with local emergency management authorities.
- (b) In existing manufactured home parks, all new homes, replacement homes on existing pads, and substantially improved homes shall:
 - 1. Have the lowest floor elevated to the flood protection elevation; and
 - 2. Be anchored so they do not float, collapse or move laterally during a flood.
- (c) Outside of existing manufactured home parks, including new manufactured home parks and all single units outside of existing parks, all new, replacement and substantially improved manufactured homes shall meet the residential development standards for the floodfringe in s. 4.3(1).

(12) MOBILE RECREATIONAL VEHICLES

All mobile recreational vehicles that are on site for 180 consecutive days or more or are not fully licensed and ready for highway use shall meet the elevation and anchoring requirements in s. 4.3(11)(b) and (c). A mobile recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect utilities and security devices and has no permanently attached additions.

5.0 OTHER FLOODPLAIN DISTRICTS

Other floodplain districts may be established under the ordinance and reflected on the floodplain zoning map. These districts may include general floodplain districts and flood storage districts.

5.1 GENERAL FLOOD PLAIN DISTRICT (GFRP)

(1) APPLICABILITY

The provisions for this district shall apply to all floodplains mapped as A, AO or AH zones.

(2) PERMITTED USES

Pursuant to s. 5.1(4), it shall be determined whether the proposed use is located within a floodway or floodfringe.

Those uses permitted in Floodway (s. 3.2) and Floodfringe (s. 4.2) Districts are allowed within the General Floodplain District, according to the standards of s. 5.1(3), provided that all permits or certificates required under s. 7.1 have been issued.

(3) STANDARDS FOR DEVELOPMENT

S. 3.0 applies to floodway areas, s. 4.0 applies to floodfringe areas. The rest of this ordinance applies to either district.

- (a) In AO/AH Zones the structure's lowest floor must meet on the conditions listed below, whichever is higher:
 - 1. At or above the flood protection elevation; or
 - 2. Two feet above the highest adjacent grade around the structure; or
 - 3. The depth as shown on the FIRM.
- (b) In AO/AH Zones, provided plans showing adequate drainage path to guide floodwaters around structures.

(4) DETERMINING FLOODWAY AND FLOODFRINGE LIMITS

Upon receiving an application for development within the general floodplain district, the zoning administrator shall:

- (a) Require the applicant to submit two copies of an aerial photograph or a plan which shows the proposed development with respect to the general floodplain district limits, stream channel, and existing floodplain developments, along with a legal description of the property, fill limits and elevations, building floor elevations and flood proofing measures; and the flood zone as shown on the FIRM.
- (b) Require the applicant to furnish any of the following information deemed necessary by the Department to evaluate the effects of the proposal upon flood height and flood flows, regional flood elevation and to determine floodway boundaries:
 - 1. A Hydrologic and Hydraulic Study as specified in s. 7.1(2)(c);

2. Plan (surface view) showing elevations or contours of the ground; pertinent structure, fill or storage elevations; size, location and layout of all proposed and existing structures on the site; location and elevations of streets, water supply, and sanitary facilities; soil types and other pertinent information;
3. Specifications for building construction and materials, floodproofing, filling, dredging, channel improvement, storage, water supply and sanitary facilities.

5.2 **FLOOD STORAGE DISTRICT**

The flood storage district delineates that portion of the floodplain where storage of floodwaters has been taken into account and is relied upon to reduce the regional flood discharge. The district protects the flood storage areas and assures that any development in the storage areas will not decrease the effective flood storage capacity which would cause higher flood elevations.

(1) **APPLICABILITY**

The provisions of this section apply to all areas within the Flood Storage District (FSD), as shown on the official floodplain zoning maps.

(2) **PERMITTED USES**

Any use or development which occurs in the flood storage district must meet the applicable requirements in s. 4.3.

(3) **STANDARDS FOR DEVELOPMENT IN FLOOD STORAGE DISTRICTS**

- (a) Development in a flood storage district shall not cause an increase equal or greater than 0.00 of a foot in the height of the regional flood.
- (b) No development shall be allowed which removed flood storage volume unless an equal volume of storage as defined by the pre-development ground surface and the regional flood elevation shall be provided in the immediate area of the proposed development to compensate for the volume of storage which is lost (compensatory storage). Excavation below the groundwater table is not considered to provide an equal volume of storage.
- (c) If compensatory storage cannot be provided, the area may not be developed unless the entire area zoned as flood storage district - on this waterway - is rezoned to the floodfringe district. This must include a revision to the floodplain study and map done for the waterway to revert to the higher regional flood discharge calculated without floodplain storage, as per s. 8.0

Amendments of this ordinance.

- (d) No area may be removed from the flood storage district unless it can be shown that the area has been filled to the flood protection elevation and is contiguous to other lands lying outside of the floodplain.

6.0 NONCONFORMING USES (6.0)

6.1 GENERAL

(1) APPLICABILITY

If these standards conform with s. 87.30, Stats. and NR 116.15, Wis. Adm. Code and 44 CFR 59-72, they shall apply to all modifications or additions to any nonconforming use or structure and to the use of any structure or premises which was lawful before the passage of this ordinance or any amendment thereto.

- (2) The existing lawful use of a structure or its accessory use which is not in conformity with the provisions of this ordinance may continue subject to the following conditions:

- (a) No modifications or additions to a nonconforming use or structure shall be permitted unless they comply with this ordinance. The words "modification" and "addition" include, but are not limited to, any alteration, addition, modification, structural repair, rebuilding or replacement of any such existing use, structure or accessory structure or use. Maintenance is not considered a modification; this includes painting, decorating, paneling and other nonstructural components and the maintenance, repair or replacement of existing private sewage or water supply systems or connections to public utilities. Any costs associated with the repair of a damaged structure are not considered maintenance.

The construction of a deck that does not exceed 200 square feet and that is adjacent to the exterior wall of a principal structure is not an extension, modification or addition. The roof of the structure may extend over a portion of the deck in order to provide safe ingress and egress to the principal structure.

- (b) If a nonconforming use or the use of a nonconforming structure is discontinued for 12 consecutive months, it is no longer permitted and any future use of the property, and any structure or building thereon, shall conform to the applicable requirements of this ordinance;
- (c) The municipality shall keep a record which lists all nonconforming uses and nonconforming structures, their present equalized assessed value, the cost of all modifications or additions which have been permitted, and the

percentage of the structure's total current value those modifications represent;

- (d) No modification or addition to any nonconforming structure or any structure with a nonconforming use, which over the life of the structure would equal or exceed 50% of its present equalized assessed value, shall be allowed unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this ordinance. Contiguous dry land access must be provided for residential and commercial uses in compliance with s. 4.3(1). The costs of elevating a nonconforming building or a building with a nonconforming use to the flood protection elevation are excluded from the 50% provisions of this paragraph;
- (e) No maintenance to any nonconforming structure or any structure with a nonconforming use, the cost of which would equal or exceed 50% of its present equalized assessed value, shall be allowed unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this ordinance. Contiguous dry land access must be provided for residential and commercial uses in compliance with s. 4.3(1).
- (f) If on a per event basis the total value of the work being done under (d) and (e) equals or exceeds 50% of the present equalized assessed value the work shall not be permitted unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this ordinance. Contiguous dry land access must be provided for residential and commercial uses in compliance with s. 4.3(1).
- (g) Except as provided in subd. (h), if any nonconforming structure or any structure with a nonconforming use is destroyed or is substantially damaged, it cannot be replaced, reconstructed or rebuilt unless the use and the structure meet the current ordinance requirements. A structure is considered substantially damaged if the total cost to restore the structure to its pre-damaged condition equal or exceeds 50% of the structure's present equalized assessed value.
- (h) For nonconforming buildings that are substantially damaged or destroyed by a nonflood disaster, the repair or reconstruction of any such nonconforming building shall be permitted in order to restore it to the size and use in effect prior to the damage event, provided that the minimum federal code requirements below are met and all required permits have been granted prior to the start of construction.

1. Residential Structures

- a. Shall have the lowest floor, including basement, elevated to or above the base flood elevation using fill, pilings, columns, posts or perimeter walls. Perimeter walls must meet the requirements of s. 7.5(2).
- b. Shall be anchored to prevent floatation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy and shall be constructed with methods and materials resistant to flood damage.
- c. Shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or elevated so as to prevent water from entering or accumulating within the components during conditions of flooding.
- d. In A Zones, obtain, review and utilize any flood ate available from a federal, state or other source.
- e. In AO Zones with no elevations specified, shall have the lowest floor, including basement, meet the standards in s. 5.1(3).
- f. In AO Zones, shall have adequate drainage paths around structures on slopes to guide floodwaters around and away from the structure.

2. Nonresidential Structures

- a. Shall meet the requirements of s. 6.1(2)(h)1a-f.
- b. Shall either have the lowest floor, including basement, elevated to or above the regional flood elevation; or, together with attendant utility and sanitary facilities, shall meet the standards in s. 7.5(1) or (2).
- c. On AO Zones with no elevations specified, shall have the lowest floor, including basement, meet the standards of 5.1(3).

- (3) A nonconforming historic structure may be altered if the alteration will not preclude the structure's continued designation as a historic structure, the alteration will comply with s. 3.3(1), flood resistant materials are used, and construction practices and floodproofing methods that comply with s 7.5 are used. Repair of rehabilitation

of historic structures shall be exempt from the development standards of s. 6.1(2)(h)1 if it is determined that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and is the minimum necessary to preserve the historic character and design of the structure.

6.2 **FLOODWAY DISTRICT**

- (1) No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use in a Floodway District, unless such modification or addition:
 - (a) Has been granted a permit or variance which meets all ordinance requirements;
 - (b) Meets the requirements of s. 6.1;
 - (c) Will not increase the obstruction to flood flows or regional flood height;
 - (d) Any addition to the existing structure shall be floodproofed, pursuant to s. 7.5, by means other than the use of fill, to the flood protection elevation; and
 - (e) If any part of the foundation below the flood protection elevation is enclosed, the following standards shall apply:
 1. The enclosed area shall be designed by a registered architect or engineer to allow for the efficient entry and exit of flood waters without human intervention. A minimum of two openings must be provided with a minimum net area of at least one square inch for every one square foot of the enclosed area. The lowest part of the opening can be no more than 12 inches above the adjacent grade;
 2. The parts of the foundation located below the flood protection elevation must be constructed of flood-resistant materials;
 3. Mechanical and utility equipment must be elevated or floodproofed to or above the flood protection elevation; and
 4. The use must be limited to parking, building access or limited storage.
- (2) No new on-site sewage disposal system, or addition to an existing on-site sewage disposal system, except where an addition has been ordered by a government agency to correct a hazard to public health, shall be allowed in a Floodway District. Any replacement, repair or maintenance of an existing on-site sewage disposal system in a Floodway District shall meet the applicable requirements of all municipal ordinances, s. 7.5(3) and ch. SPS 383, Wis. Adm. Code.

- (3) No new well or modification to an existing well used to obtain potable water shall be allowed in a Floodway District. Any replacement, repair or maintenance of an existing well in a Floodway District shall meet the applicable requirements of all municipal ordinances, s. 7.5(3) and chs. NR 811 and NR 812, Wis. Adm. Code.

6.3 FLOODFRINGE AREAS

- (1) No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use unless such modification or addition has been granted a permit or variance by the municipality, and meets the requirements of s. 4.3, except where s. 6.3(2) is applicable.
- (2) Where compliance with the provisions of subd. (1) would result in unnecessary hardship and only where the structure will not be used for human habitation or be associated with a high flood damage potential, the Board of Appeals, using the procedures established in s. 7.3, may grant a variance from those provisions of subd. (1) for modifications or additions using the criteria listed below. Modifications or additions which are protected to elevations lower than the flood protection elevation may be permitted if:
 - (a) No floor is allowed below the regional flood elevation for residential or commercial structures;
 - (b) Human lives are not endangered;
 - (c) Public facilities, such as water or sewer, will not be installed;
 - (d) Flood depths will not exceed two feet;
 - (e) Flood velocities will not exceed two feet per second; and
 - (f) The structure shall not be used for storage of materials as described in s. 4.3(5).
- (3) All new private sewage disposal systems, or addition to replacement, repair or maintenance of a private sewage disposal system shall meet all the applicable provisions of all local ordinances, s. 7.5(3) and ch. SPS 383, Wis. Adm. Code.
- (4) All new wells or addition to, replacement, repair or maintenance of a well shall meet the applicable provisions of this ordinance, s. 7.5(3) and ch. NR 811 and NR 812, Wis. Adm. Code.

6.4 FLOOD STORAGE DISTRICT

No modifications or additions shall be allowed to any nonconforming structure in a flood

storage area unless the standards outlined in 5.2(3) are met.

7.0 ADMINISTRATION (7.0)

Where a zoning administrator, planning agency or a board of appeals has already been appointed to administer a zoning ordinance adopted under s. 62.23(7), Stats., these officials shall also administer this ordinance.

7.1 ZONING ADMINISTRATOR

(1) DUTIES AND POWERS

The zoning administrator is authorized to administer this ordinance and shall have the following duties and powers:

- (a) Advise applicants of the ordinance provisions, assist in preparing permit applications and appeals, and assure that the regional flood elevation for the proposed development is shown on all permit applications.
- (b) Issue permits and inspect properties for compliance with provisions of this ordinance, and issue certificates of compliance where appropriate.
- (c) Inspect all damaged floodplain structures and perform a substantial damage assessment to determine if substantial damage to the structures has occurred.
- (d) Keep records of all official actions such as:
 - 1. All permits issued, inspections made, and work approved.
 - 2. Documentation of certified lowest floor and regional flood elevations for floodplain development.
 - 3. Floodproofing certificates.
 - 4. Water surface profiles, floodplain zoning maps and ordinances, nonconforming uses and structures including changes, appeals, variances and amendments.
 - 5. All substantial damage assessment reports for floodplain structures.
 - 6. List of nonconforming structure and uses.
- (e) Submit copies of the following items to the Department Regional office:
 - 1. Within 10 days of the decision, a copy of any decisions on variances,

appeals for map or text interpretations, and map or text amendments.

2. Copies of any case-by-case analyses, and any other information required including an annual summary of the number and types of floodplain zoning actions taken.
 3. Copies of substantial damage assessments performed and all related correspondence concerning the assessments.
- (f) Investigate, prepare reports, and report violations of this ordinance to the municipal zoning agency and attorney for prosecution. Copies of the reports shall also be sent to the Department Regional office.
- (g) Submit copies of amendments to the FEMA Regional office.

(2) LAND USE PERMIT

A land use permit shall be obtained before any new development; repair, modification or addition to an existing structure; or change in the use of a building or structure including sewer and water facilities, may be initiated. Application to the zoning administrator shall include:

(a) GENERAL INFORMATION.

1. Name and address of the applicant, property owner and contractor;
2. Legal description, proposed use, and whether it is new construction or a modification;

(b) SITE DEVELOPMENT PLAN. A site plan drawn to scale shall be submitted with the permit application form and shall contain:

1. Location, dimensions, area and elevation of the lot;
2. Location of the ordinary highwater mark of any abutting navigable waterways;
3. Location of any structures with distances measured from the lot lines and street center lines;
4. Location of any existing or proposed on-site sewage systems or private water supply systems;
5. Location and elevation of existing or future access roads;
6. Location of floodplain and floodway limits as determined from the

official floodplain zoning maps;

7. The elevation of the lowest floor of proposed buildings and any fill using the vertical datum from the adopted study - either national Geodetic Vertical Datum (NGVD) or North American Vertical Datum (NAVD);
8. Data sufficient to determine the regional flood elevation in NGVD or NAVD at the location of the development and to determine whether or not the requirements of s. 3.0 or 4.0 are met; and
9. Data to determine if the proposed development will cause an obstruction to flow or an increase in regional flood height or discharge according to s. 2.1. This may include any of the information noted in s. 3.3(1).

(c) **HYDRAULIC AND HYDROLOGIC STUDIES TO ANALYZE DEVELOPMENT.**

All hydraulic and hydrologic studies shall be completed under the direct supervision of a professional engineer registered in the State. The study contractor shall be responsible for the technical adequacy of the study. All studies shall be reviewed and approved by the Department.

1. **Zone A Floodplains:**

a. **Hydrology**

- i. The appropriate method shall be based on the standards in ch. NR 116.07(3), Wis. Admin. Code, Hydrologic Analysis: Determination of Regional Flood Discharge.

b. **Hydraulic modeling**

The regional flood elevation shall be based on the standards in ch. NR 116.07(4), Wis. Admin. Code, Hydraulic Analysis: Determination of Regional Flood Elevation and the following:

- i. Determination of the required limits of the hydraulic model shall be based on detailed study information for downstream structures (dam, bridge, culvert) to determine adequate starting WSEL for the study.
- ii. Channel sections must be surveyed.

- iii. Minimum four foot contour data in the overbanks shall be used for the development of cross section overbank and floodplain mapping.
 - iv. A maximum distance of 500 feet between cross sections is allowed in developed areas with additional intermediate cross sections required at transitions in channel bottom slope including a survey of the channel at each location.
 - v. The most current version of HEC_RAS shall be used.
 - vi. A survey of bridge and culvert openings and the top of road is required at each structure.
 - vii. Additional cross sections are required at the downstream and upstream limits of the proposed development and any necessary intermediate locations based on the length of the reach if greater than 500 feet.
 - viii. Standard accepted engineering practices shall be used when assigning parameters for the base model such as flow, Manning's N values, expansion and contraction coefficients or effective flow limits. The base model shall be calibrated to past flooding data such as high water marks to determine the reasonableness of the model results. If no historical data is available, adequate justification shall be provided for any parameters outside standard accepted engineering practices.
 - ix. The model must extend past the upstream limit of the difference in the existing and proposed flood profiles in order to provide a tie-in to existing studies. The height difference between the proposed flood profile and the existing study profiles shall be no more than 0.00 feet.
- c. Mapping

A work map of the reach study shall be provided, showing all cross section locations, floodway/floodplain limits based on best available topographic data, geographic limits of the proposed development and whether the proposed development is located in the floodway.

- i. If the proposed development is located outside of the floodway, then it is determined to have no impact on the regional flood elevation.
- ii. If any part of the proposed development is in the floodway, it must be added to the base model to show the difference between existing and proposed conditions. The study must ensure that all coefficients remain the same as in the existing model, unless adequate justification based on standard accepted engineering practices is provided.

2. Zone AE Floodplains

a. Hydrology

If the proposed hydrology will change the existing study, the appropriate method to be used shall be on ch. NR 116.07(3), Wis. Admin. Code, Hydrologic Analysis: Determination of Regional Flood Discharge.

b. Hydraulic model

The regional flood elevation shall be based on the standards in ch. NR 116.07(4), Wis. Admin. Code, Hydraulic Analysis: Determination of Regional Flood Elevation and the following:

i. Duplicate Effective Model

The effective model shall be reproduced to ensure correct transference of the model data and to allow integration of the revised data to provide a continuous FIS model upstream and downstream of the revised reach. If data from the effective model is available, models shall be generated that duplicate the FIS profiles and the elevations shown in the Floodway Data Table in the FIS report to within 0.1 foot.

ii. Corrected Effective Model

The Corrected Effective Model shall not include any man-made physical changes since the effective model date, but shall import the model into the most current version of HEC-RAS for Department review.

iii. Existing (Pre-Project Conditions) Model

The Existing Model shall be required to support conclusions about the actual impacts of the project associated with the Revised (Post-Project) Model or to establish more up-to-date models on which to base the Revised (Post-Project) Model

iv. Revised (Post-Project Conditions) Model

The Revised Model shall incorporate the Existing Model and any proposed changes to the topography caused by the proposed development. This model shall reflect proposed conditions.

v. All changes to the Duplicate Effective Model and subsequent models must be supported by certified topographic information, bridge plans, construction plans and survey notes.

vi. Changes to the Hydraulic models shall be limited to the stream reach for which the revision is being requested. Cross sections upstream and downstream of the revised reach shall be identical to those in the effective model and result in water surface elevations and topwidths computed by the revised models matching those in the effective models upstream and downstream of the revised reaches required. The Effective Model shall not truncated.

c. Mapping

Maps and associated engineering data shall be submitted to the Department for review which meet the following conditions:

- i. Consistency between the revised hydraulic models, the revised floodplain and floodway delineations, the revised flood profiles, topographic work map, annotated FIRMs and/or Flood Boundary Floodway Maps (FBFMs)m construction plans and bridge plans.
- ii. Certified topographic map of suitable scale, contour interval, and a planimetric map showing the applicable terms. If a digital version of the map is available, it may be submitted in order that the FIRM may be more easily revised.
- iii. Annotated FIRM panel showing the revised 1% and 0.2% annual chance floodplains and floodway boundaries.
- iv. If an annotated FIRM and/or FBFM and digital mapping date (GIS or CADD) are used then all supporting documentation or metadata must be included with the data submission along with the Universal Transverse Mercator (UTM) projection and State Plan Coordinate System in accordance with FEMA mapping specifications.
- v. The revised floodplain boundaries shall tie into the effective floodplain boundaries.
- vi. All cross sections from the effective model shall be labeled in accordance with the effective map and a cross section lookup table shall be included to relate to the model input numbering scheme.
- vii. Both the current and proposed floodways shall be shown on the map.
- viii. The stream centerline, or profile baseline used to measure stream distances in the model shall be visible on the map.

- (d) **EXPIRATION.** All permits issued under the authority of this ordinance shall expire no more than 180 days after issuance. The permit may be extended for a maximum of 180 days for good and sufficient cause.

(3) **CERTIFICATE OF COMPLIANCE**

No land shall be occupied or used, and no building which is hereafter constructed, altered, added to, modified, repaired, rebuilt or replaced shall be occupied until a certificate of compliance is issued by the zoning administrator, except where no permit is required, subject to the following provisions:

- (a) The certificate of compliance shall show that the building or premises or part thereof, and the proposed use, conform to the provisions of this ordinance;
- (b) Application for such certificate shall be concurrent with the application for a permit;
- (c) If all ordinance provisions are met, the certificate of compliance shall be issued within 10 days after written notification that the permitted work is completed;
- (d) The applicant shall submit a certification signed by a registered professional engineer, architect or land surveyor that the fill, lowest floor and floodproofing elevations are in compliance with the permit issued. Floodproofing measures also require certification by a registered professional engineer or architect that the requirements of s. 7.5 are met.

(4) **OTHER PERMITS**

Prior to obtaining a floodplain development permit, the applicant must secure all necessary permits from federal, state, and local agencies, including but not limited to those required by the U.S. Army Corps of Engineers under s. 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1344.

7.2 ZONING AGENCY

- (1) The Plan Commission shall:
 - (a) Oversee the functions of the office of the zoning administrator; and
 - (b) Review and advise the governing body on all proposed amendments to this ordinance, maps and text.
- (2) This zoning agency shall not:
 - (a) Grant variances to the terms of the ordinance in place of action by the Board of Appeals; or
 - (b) Amend the text or zoning maps in place of official action by the governing body.

7.3 **BOARD OF APPEALS**

The Board of Appeals created under s. 62.23(7)(e) Stats. is hereby authorized or shall be appointed to act for the purposes of this ordinance. The Board shall exercise the powers conferred by Wisconsin Statutes and adopt rules for the conduct of business. The zoning administrator may not be the secretary of the Board.

(1) **POWERS AND DUTIES**

The Board of Appeals shall:

- (a) Appeals - Hear and decide appeals where it is alleged there is an error in any order, requirement, decision or determination made by an administrative official in the enforcement or administration of this ordinance;
- (b) Boundary Disputes - Hear and decide disputes concerning the district boundaries shown on the official floodplain zoning map; and
- (c) Variances - Hear and decide, upon appeal, variances from the ordinance standards.

(2) **APPEALS TO THE BOARD**

- (a) Appeals to the board may be taken by any person aggrieved, or by any officer or department of the municipality affected by any decision of the zoning administrator or other administrative officer. Such appeal shall be taken within 30 days unless otherwise provided by the rules of the board, by filing with the official whose decision is in question, and with the board, a notice of appeal specifying the reasons for the appeal. The official whose decision is in question shall transmit to the board all records regarding the matter appealed.

(b) **NOTICE AND HEARING FOR APPEALS INCLUDING VARIANCES.**

- 1. Notice - The Board shall:
 - a. Fix a reasonable time for the hearing;
 - b. Publish adequate notice pursuant to Wisconsin Statutes, specifying the date, time, place and subject of the hearing;
 - c. Assure that notice shall be mailed to the parties in interest and the Department Regional office at least 10 days in advance of the hearing.

2. Hearing - Any party may appear in person or by agent. The Board shall:
 - a. Resolve boundary disputes according to s. 7.3(3);
 - b. Decide variance applications according to s. 7.3(4); and
 - c. Decide appeals of permit denials according to s. 7.4.
- (c) DECISION. The final decision regarding the appeal or variance application shall:
 1. Be made within a reasonable time;
 2. Be sent to the Department Regional office within 10 days of the decision;
 3. Be a written determination signed by the chairman or secretary of the Board;
 4. State the specific facts which are the basis for the Board's decision;
 5. Either affirm, reverse, vary or modify the order, requirement, decision or determination appealed, in whole or in part, dismiss the appeal for lack of jurisdiction or grant or deny the variance application; and
 6. Include the reasons for granting an appeal, describing the hardship demonstrated by the applicant in the case of a variance, clearly stated in the recorded minutes of the Board proceedings.

(3) BOUNDARY DISPUTES

The following procedure shall be used by the Board in hearing disputes concerning floodplain district boundaries:

- (a) If a floodplain district boundary is established by approximate or detailed floodplain studies, the flood elevations or profiles shall prevail in locating the boundary. If none exist, other evidence may be examined;
- (b) In all cases, the person contesting the boundary location shall be given a reasonable opportunity to present arguments and technical evidence to the Board; and
- (c) If the boundary is incorrectly mapped, the Board should inform the zoning committee or the person contesting the boundary location to petition the

governing body for a map amendment according to s. 8.0 *Amendments*.

(4) VARIANCE

- (a) The Board may, upon appeal, grant a variance from the standards of this ordinance if an applicant convincingly demonstrates that:
 - 1. Literal enforcement of the ordinance provisions will cause unnecessary hardship;
 - 2. The hardship is due to adoption of the floodplain ordinance and unique property conditions, not common to adjacent lots or premises. In such case the ordinance or map must be amended;
 - 3. The variance is not contrary to the public interest; and
 - 4. The variance is consistent with the purpose of this ordinance in s. 1.3.
- (b) In addition to the criteria in subd. (a), to qualify for a variance under FEMA regulations, the following criteria must be met:
 - 1. The variance may not cause any increase in the regional flood elevation;
 - 2. Variances can only be granted for lots that are less than one-half acre and are contiguous to existing structures constructed below the RFE; and
 - 3. Variances shall only be granted upon a showing of good and sufficient cause, shall be the minimum relief necessary, shall not cause increased risks to public safety or nuisances, shall not increase costs for rescue and relief efforts and shall not be contrary to the purpose of the ordinance.
- (c) A variance shall not:
 - 1. Grant, extend or increase any use prohibited in the zoning district;
 - 2. Be granted for a hardship based solely on an economic gain or loss;
 - 3. Be granted for a hardship which is self-created;
 - 4. Damage the rights or property values of other persons in the area;
 - 5. Allow actions without the amendments to this ordinance or map(s)

required in s. 8.0 *Amendments*; and

6. Allow any alteration of an historic structure, including its use, which would preclude its continued designation as an historic structure.
- (d) When a floodplain variance is granted the Board shall notify the applicant in writing that it may increase risks to life and property and flood insurance premiums could increase up to \$25.00 for \$100.00 of coverage. A copy shall be maintained with the variance record.

7.4 TO REVIEW APPEALS OF PERMIT DENIALS

- (1) The Zoning Agency (s. 7.2) or Board shall review all data related to the appeal.

This may include:

- (a) Permit application data listed in s. 7.1(2);
 - (b) Floodway/floodfringe determination data in s. 5.1(4);
 - (c) Data listed in s. 3.3(1)(b) where the applicant has not submitted this information to the zoning administrator; and
 - (d) Other data submitted with the application, or submitted to the Board with the appeal;
- (2) For appeals of all denied permits the Board shall:
 - (a) Follow the procedures of s. 7.3;
 - (b) Consider zoning agency recommendations; and
 - (c) Either uphold the denial or grant the appeal.
 - (3) For appeals concerning increases in regional flood elevation the Board shall:
 - (a) Uphold the denial where the Board agrees with the data showing an increase in flood elevation. Increases may only be allowed after amending the flood profile and map and all appropriate legal arrangements are made with all adversely affected property owners as per the requirements of s. 8.0 *Amendments*; and
 - (b) Grant the appeal where the Board agrees that the data properly demonstrates that the project does not cause an increase provided no other reasons for denial exist.

7.5 **FLOODPROOFING**

- (1) No permit or variance shall be issued for a non-residential structure designed to be watertight below the regional flood elevation until the applicant submits a plan certified by a registered professional engineer or architect that the floodproofing measures will protect the structure or development to the flood protection elevation and submits a FEMA Floodproofing Certificate.
- (2) For a structure designed to allow the entry of floodwaters, no permit or variance shall be issued until the applicant submits a plan either:
 - (a) Certified by a registered professional engineer or architect; or
 - (b) Meets or exceeds the following standards:
 1. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 2. The bottom of all openings shall be no higher than one foot above grade; and
 3. Openings may be equipped with screens, louvers, valves or other covering or devices provided that they permit the automatic entry and exit of floodwaters.
- (3) Floodproofing measures shall be designed, as appropriate, to:
 - (a) Withstand flood pressures, depths, velocities, uplift and impact forces and other regional flood factors;
 - (b) Protect structures to the flood protection elevation;
 - (c) Anchor structures to foundations to resist flotation and lateral movement;
 - (d) Minimize or eliminate infiltration of flood waters;
 - (e) Minimize or eliminate discharges into flood waters.

7.6 **PUBLIC INFORMATION**

- (1) Place marks on structures to show the depth of inundation during the regional flood.
- (2) All maps, engineering data and regulations shall be available and widely distributed.

- (3) All real estate transfers should show what floodplain zoning district any real property is in.

8.0 AMENDMENTS

Obstruction or increases may only be permitted if amendments are made to this ordinance, the official floodplain zoning maps, floodway lines and water surface profiles, in accordance with s. 8.1

- (1) In AE Zones with a mapped floodway, no obstructions or increases shall be permitted unless the applicant receives a Conditional Letter of Map Revision from FEMA and amendments are made to this ordinance, the official floodplain zoning maps, floodway lines and water surface profiles, in accordance with s. 8.1.
- (2) In A Zones, increases equal to or greater than 1.0 foot may only be permitted if the applicant receives a Conditional Letter of Map Revision from FEMA and amendment are made to this ordinance, the official floodplain maps, floodway lines and water surface profiles, in accordance with s. 8.1.

8.1 GENERAL

The governing body may change or supplement the floodplain zoning district boundaries and this ordinance in the manner outlined in 8.2 below. Actions which require an amendment to the ordinance and/or submittal of a Letter of Map Change (LOMC) include, but are not limited to, the following:

- (1) Any fill or floodway encroachment that obstructs flow causing any increase in the regional flood height;
- (2) Any change to the floodplain boundaries and/or watercourse alterations on the FIRM;
- (3) Any changes to any other officially adopted floodplain maps listed in s. 1.5(2)(b);
- (4) Any floodplain fill which raises the elevation of the filled area to a height at or above the flood protection elevation and is contiguous to land lying outside the floodplain;
- (5) Correction of discrepancies between the water surface profiles and floodplain maps;
- (6) Any upgrade to a floodplain zoning ordinance text requires by s. NR 116.05, Wis. Adm. Code, or otherwise required by law, or for changes by the municipality; and
- (7) All channel relocations and changes to the maps to alter floodway lines or to remove an area from the floodway or the floodfringe that is based on a base flood

elevation from a FIRM requires prior approval by FEMA.

Any such alterations must be reviewed and approved by FEMA and the DNR.

8.2 PROCEDURES

Ordinance amendments may be made upon petition of any party according to the provisions of s. 62.23 Stats. The petitions shall include all data required by ss. 5.1(4) and 7.1(2). The Land Use Permit shall not be issued until a Letter of Map Revision is issued by FEMA for the proposed changes.

- (1) The proposed amendment shall be referred to the zoning agency for a public hearing and recommendation to the governing body. The amendment and notice of public hearing shall be submitted to the Department Regional office for review prior to the hearing. The amendment procedure shall comply with the provisions of s. 62.23, Stats.
- (2) No amendments shall become effective until reviewed and approved by the Department.
- (3) All persons petitioning for a map amendment that obstructs flow causing any increase in the regional flood height, shall obtain flooding easements or other appropriate legal arrangements from all adversely affected property owners and notify local units of government before the amendment can be approved by the governing body.

9.0 ENFORCEMENT AND PENALTIES

Any violation of the provisions of this ordinance by any person shall be unlawful and shall be referred to the municipal attorney who shall expeditiously prosecute all such violators. A violator shall, upon conviction, forfeit to the municipality a penalty of not less than \$5.00 (five dollars) and not more than \$50.00 (fifty dollars), together with a taxable cost of such action. Each day of continued violation shall constitute a separate offense. Every violation of this ordinance is a public nuisance and the creation may be enjoined and the maintenance may be abated by action at suit of the municipality, the state, or any citizen thereof pursuant to s. 87.30, Stats.

10.0 DEFINITIONS

Unless specifically defined, words and phrases in this ordinance shall have their common law meaning and shall be applied in accordance with their common usage. Words used in the present tense include the future, the singular number includes the plural and the plural number includes the singular. The word "may" is permissive, "shall" is mandatory and is not discretionary.

1. A ZONES - Those areas shown on the Official Floodplain Zoning Map which

would be inundated by the regional flood. These areas may be numbered or unnumbered A Zones. The A Zones may or may not be reflective of flood profiles, depending on the availability of data for a given area.

2. AH ZONE - See AREA OF SHALLOW FLOODING.
3. AO ZONE - See AREA OF SHALLOW FLOODING.
4. ACCESSORY STRUCTURE OR USE - A facility, structure, building or use which is accessory or incidental to the principal use of a property, structure or building.
5. ALTERATION - An enhancement, upgrading or substantial change or modifications other than an addition or repair to a dwelling or to electrical, plumbing, heating, ventilating, air conditioning and other systems within a structure.
6. AREA OF SHALLOW FLOODING - A designated AO, AH, AR/AO or VO zone on a community's Flood Insurance Rate Map (FIRM) with a 1 percent or greater annual change of flooding to an average dept of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flood may be evident. Such flooding is characterized by ponding or sheet flow.
7. BASE FLOOD - Means the flood having a one percent chance of being equaled or exceeded in any given year, as published by FEMA as part of a FIS and depicted on a FIRM.
8. BASEMENT - Any enclosed area of a building having its floor sub-grade, i.e., below ground level, on all sides.
9. BUILDING - See STRUCTURE.
10. BULKHEAD LINE - A geographic line along a reach of navigable water that has been adopted by a municipal ordinance and approved by the Department pursuant to s. 30.11, Stats., and which allows limited filling between this bulkhead line and the original ordinary highwater mark, except where such filling is prohibited by the floodway provisions of this ordinance.
11. CAMPGROUND - Any parcel of land which is designed, maintained, intended or used for the purpose of providing sites for nonpermanent overnight use by 4 or more camping units, or which is advertised or represented as a camping area.
12. CAMPING UNIT - Any portable device, no more than 400 square feet in area, used as a temporary shelter, including but not limited to a camping trailer, motor home, bus, van, pick-up truck, tent that is fully licensed, if required, and ready for highway use.

13. **CERTIFICATE OF COMPLIANCE** - A certification that the construction and the use of land or a building, the elevation of fill or the lowest floor of a structure is in compliance with all of the provisions of this ordinance.
14. **CHANNEL** - A natural or artificial watercourse with definite bed and banks to confine and conduct normal flow of water.
15. **CRAWLWAYS OR CRAWL SPACE** - An enclosed area below the first usable floor of a building, generally less than five feet in height, used for access to plumbing and electrical utilities.
16. **DECK** - An unenclosed exterior structure that has no roof or sides but has a permeable floor which allows the infiltration of precipitation.
17. **DEPARTMENT** - The Wisconsin Department of Natural Resources.
18. **DEVELOPMENT** - Any artificial change to improved or unimproved real estate, including, but not limited to, the construction of buildings, structures or accessory structures; the construction of additions or alterations to buildings, structures or accessory structures; the repair of any damaged structure or the improvement or renovation of any structure, regardless of percentage of damage or improvement; the placement of buildings or structures; subdivision layout and site preparation; mining, dredging, filling, grading, paving, excavation or drilling operations; the storage, deposition or extraction of materials or equipment; and the installation, repair or removal of public or private sewage disposal systems or water supply facilities.
19. **DRYLAND ACCESS** - A vehicular access route which is above the regional flood elevation and which connects land located in the floodplain to land outside the floodplain, such as a road with its surface above regional flood elevation and wide enough for wheeled rescue and relief vehicles.
20. **ENCROACHMENT** - Any fill, structure, equipment, building, use or development in the floodway.
21. **FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)** - The federal agency that administers the National Flood Insurance Program.
22. **FLOOD INSURANCE RATE MAP (FIRM)** - A map of a community on which the Federal Insurance Administration has delineated both the floodplain and the risk premium zones applicable to the community. This map can only be amended by the Federal Emergency Management Agency.
23. **FLOOD or FLOODING** - A general and temporary condition of partial or complete inundation of normally dry land areas caused by one of the following conditions:

- The overflow or rise of inland waters;
 - The rapid accumulation or runoff of surface waters from any source;
 - The inundation caused by waves or currents of water exceeding anticipated cyclical levels along the shore of Lake Michigan or Lake Superior, or
 - The sudden increase caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a seiche, or by some similarly unusual event.
24. **FLOOD FREQUENCY** - The probability of a flood occurrence which is determined from statistical analyses. The frequency of a particular flood event is usually expressed as occurring, on the average once in a specified number of years or as a percent (%) chance of occurring in any given year.
 25. **FLOODFRINGE** - That portion of the floodplain outside of the floodway which is covered by flood waters during the regional flood and associated with standing water rather than flowing water.
 26. **FLOOD HAZARD BOUNDARY MAP** - A map designating approximate flood hazard areas. Flood hazard areas are designated as unnumbered A-Zones and do not contain floodway lines or regional flood elevations. This map forms the basis for both the regulatory and insurance aspects of the National Flood Insurance Program (NFIP) until superseded by a Flood Insurance Study and a Flood Insurance Rate Map.
 27. **FLOOD INSURANCE STUDY** - A technical engineering examination, evaluation, and determination of the local flood hazard areas. It provides maps designating those areas affected by the regional flood and provides both flood insurance rate zones and base flood elevations and may provide floodway lines. The flood hazard areas are designated as numbered and unnumbered A-Zones. Flood Insurance Rate Maps, that accompany the Flood Insurance Study, form the basis for both the regulatory and the insurance aspects of the National Flood Insurance Program.
 28. **FLOODPLAIN** - Land which has been or may be covered by flood water during the regional flood. It includes the floodway and the floodfringe and may include other designated floodplain areas for regulatory purposes.
 29. **FLOODPLAIN ISLAND** - A natural geologic land formation within the floodplain that is surrounded, but not covered, by floodwater during the regional flood.
 30. **FLOODPLAIN MANAGEMENT** - Policy and procedures to insure wise use of floodplains, including mapping and engineering, mitigation, education, and administration and enforcement of floodplain regulations.
 31. **FLOOD PROFILE** - A graph or a longitudinal profile line showing the relationship of the water surface elevation of a flood event to locations of land surface elevations

along a stream or river.

32. **FLOODPROOFING** - Any combination of structural provisions, changes or adjustments to properties and structures, water and sanitary facilities and contents of buildings subject to flooding, for the purpose of reducing or eliminating flood damage.
33. **FLOOD PROTECTION ELEVATION** - An elevation of two feet of freeboard above the water surface profile elevation designated for the regional flood. (Also see: **FREEBOARD**)
34. **FLOOD STORAGE** - Those floodplain areas where storage of floodwaters has been taken into account during analysis in reducing the regional flood discharge.
35. **FLOODWAY** - The channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the regional flood discharge.
36. **FREEBOARD** - A safety factor expressed in terms of a specified number of feet above a calculated flood level. Freeboard compensates for any factors that cause flood heights greater than those calculated, including ice jams, debris accumulation, wave action, obstruction of bridge openings and floodways, the effects of watershed urbanization, loss of flood storage areas due to development and aggregation of the river or stream bed.
37. **HABITABLE STRUCTURE** - Any structure or portion thereof used or designed for human habitation.
38. **HEARING NOTICE** - Publication or posting meeting the requirements of Ch. 985, Stats. For appeals, a Class 1 notice, published once at least one week (7 days) before the hearing, is required. For all zoning ordinances and amendments, a Class 2 notice, published twice, once each week consecutively, the last at least a week (7 days) before the hearing. Local ordinances or bylaws may require additional notice, exceeding these minimums.
39. **HIGH FLOOD DAMAGE POTENTIAL** - Damage that could result from flooding that includes any danger to life or health or any significant economic loss to a structure or building and its contents.
40. **HIGHEST ADJACENT GRADE** - The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.
41. **HISTORIC STRUCTURE** - Any structure that is either:
 - Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

- Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
 - Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
 - Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by an approved state program, as determined by the Secretary of the Interior; or by the Secretary of the Interior in states without approved programs.
42. **INCREASE IN REGIONAL FLOOD HEIGHT** - A calculated upward rise in the regional flood elevation greater than 0.00 foot, based on a comparison of existing conditions and proposed conditions which is directly attributable to development in the floodplain but not attributable to manipulation of mathematical variables such as roughness factors, expansion and contraction coefficients and discharge.
43. **LAND USE** - Any nonstructural use made of unimproved or improved real estate. (Also see DEVELOPMENT)
44. **LOWEST ADJACENG GRADE** - Elevation of the lowest ground surface that touches any of the exterior walls of a building.
45. **LOWEST FLOOR** - The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of 44 CFR 60.3.
46. **MAINTENANCE** - The act or process to restoring to original soundness, including redecorating, refinishing, non-structural repairs, or the replacement of existing fixtures, systems or equipment with equivalent fixtures, systems or equipment.
47. **MANUFACTURED HOME** - A structure transportable in one or more sections, which is built on a permanent chassis and is designed to be used with or without a permanent foundation when connected to required utilities. The term "manufactured home" includes a mobile home but does not include a "mobile recreational vehicle."
48. **MOBILE/MANUFACTURED HOME PARK OR SUBDIVISION** - A parcel (or contiguous parcels) of land, divided into two or more manufactured home lots for rent or sale.
49. **MOBILE/MANUFACTURED HOME PARK OF SUBDIVISION, EXISTING** -

A parcel of land, divided into two or more manufacture home lots for rent or sale, on which the construction of facilities for servicing the lots is completed before the effective date of this ordinance. At a minimum, this would include the installation of utilities, the construction of streets and either final site grading, or the pouring of concrete pads.

50. **MOBILE/MANUFACTURED HOME PARK, EXPANSION TO EXISTING** - The preparation of additional sites by the construction of facilities for servicing the lots on which the manufacture homes are to be affixed. This include installation of utilities, construction of streets and either final site grading, or the pouring of concrete pads.
51. **MOBILE RECREATIONAL VEHICLE** - A vehicle which is built on a single chassis, 400 square feet or less when measured at the largest horizontal projection, designed to be self-propelled, carried or permanently towable by a licensed, light-duty vehicle, is licensed for highway use if registration is required and is designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel or seasonal use. Manufactured homes that are towed or carried onto a parcel of land, but do not remain capable of being towed or carried, including park model homes, do not fall within the definition of "mobile recreational vehicles."
52. **MODEL, CORRECTEE EFFECTIVE** - A hydraulic engineering model that corrects any errors that occur in the Duplicate Effective Model, adds any additional cross sections to the Duplicate Effective Model, or incorporates more detailed topographic information than that used in the current effective model.
53. **MODEL, DUPLICATE EFFECTIVE** - A copy of the hydraulic analysis used in the effective FIS and referred to as the effective model.
54. **MODEL, EFFECTIVE** - The Hydraulic engineering model that was used t produce he current effective Flood Insurance Study.
55. **MODEL, EXISTING (PRE-PROJECT)** - A modification of the Duplicate Effective Model or Corrected Effective Model to reflect any man made modifications that have occurred within the floodplain since the date of the effective model but prior to the construction of the project for which the revision is being requested. If no modification has occurred since the date of the effective model, then this model would be identical to the Corrected Effective Model or Duplicate Effective Model.
56. **MODEL, REVISED (POST-PROJECT)** - A modification of the Existing or Pre-Project Conditions Model, Duplicate Effective Model or Corrected Effective Model to reflect revised or post-project conditions.
57. **MUNICIPALITY or MUNICIPAL** - The county, city or village governmental units enacting, administering and enforcing this zoning ordinance.

58. NAVD or NORTH AMERICAN VERTICAL DATUM - Elevations referenced to mean sea level datum, 1988 adjustment.
59. NGVD or NATIONAL GEODETIC VERTICAL DATUM - Elevations referenced to mean sea level datum, 1929 adjustment.
60. NEW CONSTRUCTION - For floodplain management purposes, "new construction" means structures for which the start of construction commenced on or after the effective date of floodplain zoning regulations adopted by this community and includes any subsequent improvements to such structures. For the purpose of determining flood insurance rates, it includes any structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures.
61. NONCONFORMING STRUCTURE - An existing lawful structure or building which is not in conformity with the dimensional or structural requirements of this ordinance for the area of the floodplain which it occupies. (For example, an existing residential structure in the floodfringe district is a conforming use. However, if the lowest floor is lower than the flood protection elevation, the structure is nonconforming.)
62. NONCONFORMING USE - An existing lawful use or accessory use of a structure or building which is not in conformity with the provisions of this ordinance for the area of the floodplain which it occupies. (Such as a residence in the floodway.)
63. OBSTRUCTION TO FLOW - Any development which blocks the conveyance of floodwaters such that this development alone or together with any future development will cause an increase in regional flood height.
64. OFFICIAL FLOODPLAIN ZONING MAP - That map, adopted and made part of this ordinance, as described in s. 1.5(2), which has been approved by the Department and FEMA.
65. OPEN SPACE USE - Those uses having a relatively low flood damage potential and not involving structures.
66. ORDINARY HIGHWATER MARK - The point on the bank or shore up to which the presence and action of surface water is so continuous as to leave a distinctive mark such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic.
67. PERSON - An individual, or group of individuals, corporation, partnership, association, municipality or state agency.

68. **PRIVATE SEWAGE SYSTEM** - A sewage treatment and disposal system serving one structure with a septic tank and soil absorption field located on the same parcel as the structure. It also means an alternative sewage system approved by the Department of Safety and Professional Services, including a substitute for the septic tank or soil absorption field, a holding tank, a system serving more than one structure or a system located on a different parcel than the structure.
69. **PUBLIC UTILITIES** - Those utilities using underground or overhead transmission lines such as electric, telephone and telegraph, and distribution and collection systems such as water, sanitary sewer and storm sewer.
70. **"REASONABLY SAFE FROM FLOODING** - Means base flood waters will not inundate the land or damage structures to be removed from the floodplain and that any subsurface waters related to the base flood will not damage existing or proposed buildings.
71. **REGIONAL FLOOD** - A flood determined to be representative of large floods known to have occurred in Wisconsin. A regional flood is a flood with a one percent chance of being equaled or exceeded in any given year, and if depicted on the FIRM, the RFE is equivalent to the BFE.
72. **START OF CONSTRUCTION** - The date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond initial excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling, nor does it include the installation of streets and/or walkways, nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms, nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For an alteration, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.
73. **STRUCTURE** - Any manmade object with form, shape and utility, either permanently or temporarily attached to, placed upon or set into the ground, stream bed or lake bed, including, but not limited to, roofed and walled buildings, gas or liquid storage tanks, bridges, dams and culverts.
74. **SUBDIVISION** - Has the meaning given in s. 236.02(12), Wis. Stats.
75. **SUBSTANTIAL DAMAGE** - Damage of any origin sustained by a structure, whereby the cost of restoring the structure to its pre-damaged condition would

equal or exceed 50 percent of the equalized assessed value of the structure before the damage occurred.

76. **SUBSTANTIAL IMPROVEMENT** - Any repair, reconstruction, rehabilitation, addition or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the equalized assessed value of the structure before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the work performed. The term does not, however, include either any project for the improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions; or any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.
77. **UNNECESSARY HARDSHIP** - Where special conditions affecting a particular property, which were not self-created, have made strict conformity with restrictions governing areas, setbacks, frontage, height or density unnecessarily burdensome or unreasonable in light of the purposes of the ordinance.
78. **VARIANCE** - An authorization by the board of appeals for the construction or maintenance of a building or structure in a manner which is inconsistent with dimensional standards (not uses) contained in the floodplain zoning ordinance.
79. **VIOLATION** - The failure of a structure or other development to be fully compliant with the floodplain zoning ordinance. A structure or other development without required permits, lowest floor elevation documentation, floodproofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.
80. **WATERSHED** - The entire region contributing runoff or surface water to a watercourse or body of water.
81. **WATER SURFACE PROFILE** - A graphical representation showing the elevation of the water surface of a watercourse for each position along a reach of river or stream at a certain flood flow. A water surface profile of the regional flood is used in regulating floodplain areas.
82. **WELL** - Means an excavation opening in the ground made by digging, boring, drilling, driving or other methods, to obtain groundwater regardless of its intended use.

and to renumber subsequent sections as appropriate.

SECTION 2. This ordinance shall take effect and be in force from and after its date of passage and publication of same.

Dated this _____ day of _____, 2020

Curt Andrews
President, City Council

Gregory E. Buckley
City Manager

Attest:

Kim M. Graves
City Clerk

Approved as to form and legality:

John M. Bruce
City Attorney

Attachment: Ordinance Flood Plain (2886 : Zoning Code Text Amendment to repeal and recreate the City's Floodplain ordinance)

Celebrate

TWO RIVERS

SATURDAY
AUG. 29

WALSH FIELD
4-10PM

SCHEDULE OF EVENTS:

4:00 FOOD TRUCKS BEGIN SERVING

6-8:00 LIVE MUSIC BY **NETTLE HILL**

8:00 SHORT COMMUNITY ADDRESS

GREG BUCKLEY- CITY MANAGER

CURT ANDREWS- BRANDING COMMITTEE

8:45-10 NETTLE HILL RESUMES

FACE PAINTING • SURPRISES • GIVEAWAYS
ALL NIGHT LONG!



FOOD TRUCK VENDORS:

- BRIAN'S BARBEQUE
- CARIBBEAN CRUISER
- THE DOUGH SHOPPE
- GOURMET CORN
- ICE CLOUDS
- MA'S KETTLE KORN
- PARADISE FOODS
- WILD FIRE PIZZA



VISIT [EXPLORETWORIVERS.COM](https://www.exploretworivers.com)

Packet Pg. 244

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