



BOARD OF TRUSTEES  
MEETING AGENDA

Wednesday, November 16, 2016 at 6:00 P.M.

Sister Bay Village Hall – 10693 N. Bay Shore Drive

For additional information check: [www.sisterbaywi.gov](http://www.sisterbaywi.gov)

In order for everyone to hear the discussion please, turn off your cell phone. Thank you.

Call Meeting to Order

Deviations from the agenda order shown may occur.

Roll Call

Approval of agenda and minutes as published

Comments and Correspondence

New Village Board Business Items

1. Presentation by Becky Kerwin of the Door County Planning Department on the County's Hazard Mitigation Plan. Discussion on the Plan; consider any relevant motions for action.
2. Public Hearing on a Planned Unit Development Ordinance for the Sister Bay Market Place. Discussion on Ordinance 245-111616, Authorizing a PUD for the Sister Bay Market Place; consider an appropriate motion for action.
3. Consider a motion to discuss and confirm President Lienau's Appointments.
4. Report on County activities from the County Supervisor, Dave Lienau.
5. Report by the Village Administrator on Village Activities and Projects.
6. Consider a motion to convene into Executive Session pursuant to Wis. Stats., §19.85(1) (g) Conferring with legal counsel for the governmental body who is rendering oral or written advice concerning strategy to be adopted by the body with respect to litigation in which it is or is likely to become involved and Wis. Stats., §19.85(1) (e) Deliberating or negotiating the purchasing of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons require a closed session.
7. Consider a motion to reconvene into Open Session.
8. Consider a motion to take action, if required.
9. Discussion regarding matters to be placed on a future agenda or referred to a Committee, official or employee.

Committee Reports (Committees may approve the minutes of their meetings that are presented in unapproved form.)

- |                      |                              |                       |
|----------------------|------------------------------|-----------------------|
| 1. Administrative    | 2. Reserved                  | 3. Coastal Byways     |
| 4. DCEDC             | 5. Economic Development      | 6. Finance            |
| 7. Fire              | 8. Fire District Exploratory | 9. Historical Society |
| 10. Library Building | 11. Marina and Marina Fest   | 12. Parks             |
| 13. Personnel        | 14. Plan                     | 15. Comm / Tech       |
| 16. SBAA             | 17. Youth Center             | 18. TZC               |
| 19. Utility          | 20. Admin and Comp Oversight |                       |

Adjournment

Public Notice

Questions regarding the nature of the agenda items or more detail on the agenda items listed above scheduled to be considered by the governmental body listed above can be directed to Zeke Jackson, Village Administrator at 920-854-4118 or at [zeke.jackson@sisterbaywi.gov](mailto:zeke.jackson@sisterbaywi.gov). It is possible that members of and possibly a quorum of members of other 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. Upon reasonable notice, a good faith effort will be made to accommodate the needs of disabled individuals through sign language interpreters or other auxiliary aid at no cost to the individual to participate in public meetings. Due to the difficulty in finding interpreters, requests should be made as far in advance as possible preferably a minimum of 48 hours. For additional information or to request this service, contact the Sister Bay Village Administrator at 854-4118, (FAX) 854-9637, or by writing to the Village Administrator at the Village Administration Building, 2383 Maple Drive, PO Box 769, Sister Bay, WI 54234. Copies of reports and other supporting documentation are available for review at the Village Administrator's Office, Administration Building, 2383 Maple Drive during operating hours. (8 a.m. – 4 p.m. weekdays).

I hereby certify that I have posted a copy of this agenda at the following locations:		
<input type="checkbox"/> Administration Building	<input type="checkbox"/> Library	<input type="checkbox"/> Post Office
Name _____ / _____		Date _____

1                   VILLAGE OF SISTER BAY BOARD OF TRUSTEES MEETING MINUTES  
2                                   THURSDAY, NOVEMBER 3, 2016  
3                   SISTER BAY-LIBERTY GROVE FIRE STATION - 2258 MILL ROAD  
4                                   UNAPPROVED VERSION  
5

6 The November 3, 2016 meeting of the Village of Sister Bay Board of Trustees was called to  
7 order by Village President Dave Lienau at 6:00 P.M.

8  
9 **Present:** President Lienau and Trustees Scott Baker, Denise Bhirdo, Nate Bell, John Clove, Pat  
10 Duffy, and Kathy Enquist.

11  
12 **Staff Members:** Village Administrator Zeke Jackson, Finance Director Tasha Rass, Utilities  
13 Director Mike Schell, Jared Schmidt of Robert E. Lee & Associates, and Assistant  
14 Administrator Janal Suppanz.

15  
16 **Others:** Laddie Chapman, Ava Jackson, Judith Ross-Stevenson, Chris Schmeltz, Lon  
17 Emanuelson, Lars Johnson, Jared Schmidt, Penny Anschutz, Jill Hanley, Chad Kodanko,  
18 Jackson Parr, Chris Janisse, Cory Diltz, Britt and Sarah Unkefer, Greg Casperson, Matt  
19 Peterson, Michael Daubner, and Jody and Patsy Wuollette.  
20

21 **Approval of the Agenda as published:**

22 *A motion was made by Bhirdo, seconded by Duffy that the Agenda for the November 3, 2016 meeting of*  
23 *the Village of Sister Bay Board of Trustees be approved as presented. Motion carried – All ayes.*  
24

25 **Approval of the minutes for the October 4, 2016 meeting of the Village Board:**

26 *Bhirdo noted that she believes the sentence which begins on Line 41 – Page 1 of the October 4, 2016*  
27 *Village Board Meeting Minutes should read, “Bhirdo noted that Charlie Henriksen asked her if the*  
28 *WPS light poles which are along South Bay Shore Drive could be equipped with banner arms.”*  
29

30 *The Board members also pointed out several grammatical and typographic errors, and Suppanz took*  
31 *note of all of them.*  
32

33 *A motion was made by Baker, seconded by Bell that the minutes for the October 4, 2016 meeting of the*  
34 *Village Board be approved as corrected. Motion carried – All ayes.*  
35

36 **Comments and correspondence:**

37 Lienau asked if anyone wished to comment regarding a non-agenda item. No one responded.  
38 He then noted that the following correspondence had been received, and requested that  
39 Jackson read all of those documents aloud:  
40

- 41       • A letter from Tim Jorgenson. (In his letter Mr. Jorgenson compliments Village officials  
42       on all the improvements which have been made downtown and thanks the Village  
43       Board members for “enhancing Door County’s endowment of beauty.”)
- 44       • The response Jackson sent to Tim Jorgenson.
- 45       • An e-mail from Paul Soper. In his e-mail Mr. Soper requests that he be removed from  
46       the Zoning Board of Appeals as he is no longer a resident of the Village.
- 47       • A letter from Sharon Doerschling in which she voices opposition to construction of a  
48       fuel dock at the Sister Bay Marina.

1 **Item No. 11. Consider a motion to convene into executive session pursuant to Wis. Stats.,**  
 2 **§19.85(1)(g) to confer with legal counsel for the governmental body who is rendering oral**  
 3 **or written advice concerning strategy to be adopted by the body with respect to litigation**  
 4 **in which it is or is likely to become involved, and Wis. Stats., §19.85(1)(e) to deliberate or**  
 5 **negotiate the purchase of public properties, the investment of public funds, or conduct**  
 6 **other specified public business, whenever competitive or bargaining reasons require a**  
 7 **closed session:**

8 *At 6:02 P.M. a motion was made by Lienau, seconded by Bhirdo that the Village Board convene into*  
 9 *executive session pursuant to Wis. Stats., §19.85(1)(g) to confer with legal counsel for the*  
 10 *governmental body who is rendering oral or written advice concerning strategy to be adopted by the*  
 11 *body with respect to litigation in which it is or is likely to become involved, and Wis. Stats., §19.85(1)(e)*  
 12 *to deliberate or negotiate the purchase of public properties, the investment of public funds, or conduct*  
 13 *other specified public business, whenever competitive or bargaining reasons require a closed session. A*  
 14 *roll call vote was taken on that motion and the Board members voted in the following fashion:*

15 *Baker – Aye; Bell – Aye; Bhirdo – Aye; Clove – Aye; Duffy – Aye;*  
 16 *Enquist – Aye; Lienau – Aye*

17 *Motion carried.*

18 **Item No. 12. Consider a motion to reconvene into open session:**

19 *At 7:06 P.M. a motion was made by Lienau, seconded by Bhirdo that the Village Board reconvene into*  
 20 *open session. Another roll call vote was taken, and the Board members voted in the following fashion:*

21 *Baker – Aye; Bell – Aye; Bhirdo – Aye; Clove – Aye; Duffy – Aye;*  
 22 *Enquist – Aye; Lienau – Aye*

23 *Motion carried.*

24 **Item No. 13. Consider a motion to take action if required:**

25 *A motion was made by Clove, seconded by Baker that Jared Schmidt of Robert E. Lee & Associates shall*  
 26 *be instructed to solicit bids for water, sanitary sewer, and storm sewer work, as well as limited sight*  
 27 *grading and sidewalks for Lots 2 through 8 on the Sister Bay Marketplace Property. Motion carried –*  
 28 *All ayes.*

29 *Lienau noted that Jill Hanley and Chris Schmeltz, who have submitted Offers To Purchase for lots in*  
 30 *Sister Bay Marketplace were present, and asked if they were amenable to having the previously*  
 31 *mentioned work done. They both replied that they didn't have any objections to those actions being*  
 32 *taken.*

33 **Item No. 1. Discussion on an award of contracts for Marina commercial vendor services;**  
 34 **consider an appropriate motion for action:**

35 *A copy of an RFP which was released for commercial vendors wishing to do business out of*  
 36 *the Sister Bay Marina as well as a draft of an applicable multi-year contract were included in*  
 37 *the meeting packets, and the Board members jointly reviewed those documents. Proposals*  
 38 *were received from Sister Bay Boat Rentals, Sister Bay Scenic Boat Tours, Sail Door County,*  
 39 *Shoreline Charters Water Taxi and Beacon Marine, and the Marina Committee has*  
 40 *recommended that all the proposals except the Shoreline Charters Water Taxi proposal be*  
 41 *accepted. (At the October 20, 2016 meeting of the Marina Committee Jim Robinson of*  
 42 *Shoreline Charters Water Taxi requested that his proposal be withdrawn from consideration.)*  
 43 *Lienau noted that since there will be a change of intensity of use by Sister Bay Scenic Boat*  
 44 *Tours this issue will have to be referred to the Plan Commission.*

1 *A motion was made by Clove, seconded by Duffy that the Village Board authorizes the Village President*  
 2 *to execute multi-year contracts which contain all the provisions delineated in the draft document which*  
 3 *was included in the meeting packets with representatives of Sister Bay Boat Rentals, Sister Bay Scenic*  
 4 *Boat Tours, Sail Door County and Beacon Marine. Motion carried – All ayes.*

5  
 6 **Item No. 2. Discussion regarding parking and traffic ordinances, parking facilities, traffic**  
 7 **control signage/policies, and transportation and parking issues related to the movement of**  
 8 **persons, property and goods in and around the Village; Consider an appropriate motion**  
 9 **for action:**

10 Now that work has been completed on the Bay Shore Drive and Waterfront Redevelopment  
 11 Projects it's become apparent that traffic and congestion has increased considerably. The  
 12 Village has a number of tools at its disposal to address parking and transportation related  
 13 issues throughout the community, but some items which should be considered are the  
 14 provisions of the Village's Ordinances, current parking assets, existing private parking,  
 15 Spring Road parking, what will happen with Post Office Lane, utilization of the Dahlstrom  
 16 Property, utilization of the Fire Station property, utilization of the Sports Complex/Marina  
 17 long term parking areas, employee parking, Mill Road parking, creation of satellite lots,  
 18 parking policies, parking revenues, bicycle parking, creation of a restaurant/hotel shuttle,  
 19 utilization of Village owned parking lots, utilization of a trolley, RV, boat/trailer and large  
 20 vehicle parking, and dual use parking.

21  
 22 Lienau noted that the determination has been made that a study which identifies the required  
 23 parking for all businesses in the Village should be conducted. When the parking study is  
 24 conducted applicable Zoning Code amendments will also be considered. He anticipates that a  
 25 Parking Ad Hoc Committee will be created to address some of the applicable issues, and  
 26 asked if anyone wished to volunteer to serve on that Committee. Britt Unkefer and Chad  
 27 Kodanko replied affirmatively.

28  
 29 Jackson noted that he met with the SBAA Board of Directors this morning. They informed  
 30 him that they believe it would help if a gravel parking lot were to be created on a portion of  
 31 what is commonly referred to as the Dahlstrom Property.

32  
 33 Lars Johnson pointed out that people typically don't like to walk any distance to get to a  
 34 business, and suggested that Village officials consider tearing the Parks Maintenance Shop  
 35 down and utilizing that land for parking.

36  
 37 Chris Janisse noted that the Village is getting busier all the time, and suggested that Village  
 38 officials treat parking as a priority.

39  
 40 Lon Emanuelson pointed out that employee parking has always been a problem in the  
 41 Village.

42  
 43 *A motion was made by Bhirdo, seconded by Baker that a Parking Ad Hoc Committee shall be created.*  
 44 *That Committee shall consist of two Trustees, two business owners and one member of the SBAA Board*  
 45 *of Directors. Motion carried – All ayes.*

46  
 47  
 48

**Item No. 7. Consider a motion to discuss and confirm President Lienau's appointments:**

Lienau recommended that Denise Bhirdo, Nate Bell, Chad Kodanko, Britt Unkefer and a member of the SBAA Board of Directors be appointed to serve on the Parking Ad Hoc Committee. He also recommended that Bhirdo be appointed Chair of that Committee.

*A motion was made Clove, seconded by Duffy that Denise Bhirdo, Nate Bell, Chad Kodanko, Britt Unkefer and a member of the SBAA Board of Directors shall be appointed to the Village's Parking Ad Hoc Committee. The Chair of that Committee shall be Bhirdo. Motion carried – All ayes.*

**Item No. 3. Discussion regarding Marina Fest; consider an appropriate motion for action:**

Clove clarified that the Marina Committee has no intention of discontinuing Marina Fest. In accord with Marina Committee's directives the Marina is willing to contribute \$10,000.00 toward expenses related to Marina Fest, 2017, Marina employees and Marina Committee members will still solicit and accept Marina Fest donations, and they will plan and organize the entire event.

**Item No. 4. Discussion on the 2017 draft budget for the Village of Sister Bay; consider a motion to approve Resolution No. 342 adopting the 2017 Budget, CIP and fee schedule:**

The Village budget for 2017 was presented at a public hearing which was conducted on October 4, 2016, but the Board tabled final budget discussions until tonight in order to provide all Trustees adequate opportunities to carefully review that document.

Rass noted that the budget has been examined by the various oversight committees, and pointed out the following significant budgetary items:

**General Revenues and General Government, Including Parks**

- Marina Fest: The Marina Committee recommended that the Marina Fund transfer \$10,000 to the General Fund to cover some of the expenses related to Marina Fest. The remainder of the expenses and all revenues are borne by the General Fund.
- Trolley Service: In an attempt to alleviate some traffic flow problems in the Village, a trolley service has been included in the 2017 Budget. Planning associated with the trolley service is in its preliminary stages. Revenues associated with the service, which are included in general revenues, are budgeted to come from sponsorships and route advertising. Expenses related to the service, which are included in the Parks Budget, are due to employee costs, marketing, leasing, fuel, insurance, and maintenance.
- Recreation Equipment and Supplies: The increase in the 2017 Budget for recreation equipment is related to the need to replace some playground equipment throughout the Village.
- Storm Drainage System: The Village's storm drainage system requires significant improvements. The \$25,000 which was budgeted in 2017 will cover some small road repairs. It is expected that increased expenditures will continue to occur in subsequent years.

1 Special Revenue Funds

2 Beginning in 2017, the Ice Rink Fund will be the only remaining special revenue fund. The  
3 budgeted fund balance in 2017 is expected to be \$6,137. The Marketing and Skate Park Funds  
4 are being closed as they are no longer used.

5 Debt Service

- 6 • Stony Ridge Development: In 2016, the Village entered into a Development  
7 Agreement with Stony Ridge Development which states that the Village would  
8 facilitate a loan to the Developer, and in turn the Village would receive interest  
9 income for this service. The Debt Service Fund reflects the proceeds of this loan  
10 in 2016 and 2017, the associated interest income, and the transfer of loan proceeds  
11 to the TID to cover the expenditures of the development.
- 12 • Braun Property Debt: Proceeds from sales of lots on the Braun property will be  
13 used for additional payments on the debt. Using the proceeds from the sales, the  
14 life of the debt is shortened by five years.

15

16 Capital Improvement Fund

17 The Capital Improvement Fund is funded almost entirely by transfers from the General Fund.  
18 Budgeted allocations in 2017 are:

- 19 • \$22,000 for capital expenses at the Sister Bay-Liberty Grove Fire Department;
- 20 • \$90,000 for street resurfacing and storm water work;
- 21 • \$10,000 to increase the reserve allocation for a Parks Building;
- 22 • \$25,000 to replace a Parks vehicle;
- 23 • \$7,000 to purchase a utility vehicle for the Parks Department;
- 24 • \$25,000 to increase the reserve allocation for improvements and air conditioning  
25 at the Village Hall;
- 26 • \$5,000 for information technology upgrades;
- 27 • \$35,000 to complete improvements to Canterbury Lane, Maple Drive, and  
28 Applewood Road; and
- 29 • \$10,000 for the sledding hill, which satisfies an over-expenditure in that item of  
30 approximately \$5,000 and allows additional funds to be expended for a snow  
31 machine.

32 The Parks and Finance Committee also approved the 2017 outlays of capital funds from  
33 Various Parks Projects reserves for a lawn mower, a Tarzan boat, and a slide on the swim  
34 dock.

35 Tax Increment District #1

36 Tax Increment is expected to increase in 2017. Although final values for increment will not be  
37 available until 2017, estimated values are based on an increase in TID value of \$2,076,200,  
38 which is a 4% increase over 2015.

- 39 • Braun Property: As was previously stated, proceeds from sales of lots on the  
40 Braun property will be used for additional payments on the debt. There are also  
41 budgeted outlays in 2017 for improvements on the Braun property, including a  
42 parking lot, engineering, and utility work.

- 1           • Stony Ridge Development: As was previously stated, the TIF Budget reflects the  
2           interest income as a result of this agreement.  
3

4    Marina Enterprise Fund

- 5           • Revenues: Public charges and commercial revenues were increased as a result of  
6           a rate increase approved by the Marina Committee.  
7           • Marina PILOT: The calculation of the PILOT payment was based on the net asset  
8           value as shown in the Village's 2015 financial statements rather than the  
9           insurance replacement values which were used in previous years. The current  
10          calculation mirrors the calculation for the Water Fund.  
11

12   Utility Funds

13   Revenues and expenses in the Utility Funds were maintained at levels similar to 2016. The  
14   following capital expenditures in the Utility Funds were budgeted for 2017:

- 15          • Replacement of the 2001 Ford F350 at a cost of \$45,000 from operating funds;  
16          • Replacement/repair of a flow line and a manhole at Sister Bluff Estates at a cost of  
17          \$40,000 from replacement funds;  
18          • Replacement/Repair of a flow line and a manhole at Pheasant Court at a cost of  
19          \$6,000 from replacement funds;  
20          • Maintenance on the main lift station generator at a cost of between \$100,000 and  
21          \$400,000 from replacement funds; and,  
22          • Replacement of the valve operating wrench at a cost of \$6,239 from operating  
23          funds.  
24

25   **Changes from the October 4, 2016 Presentation:**

26   Under General Revenues, State Road Aids are expected to be \$66,713 based on information  
27   provided by the Wisconsin DOR, which is a \$23,204 increase over 2016.

28   State Computer Aids are expected to be \$758, which is a \$657 decrease from 2016.  
29

30   **Fiscal Impact:**

31   Property tax revenues are budgeted to be \$2,267,001, which is an increase of 1.94% over 2015.

32   The assessed value of the Village is expected to be \$413,082,407. This is a decrease of  
33   \$11,277,694 from 2015.

34   The mill rate will be \$5.49 per \$1000. This is an increase of 4.72% over last year's mill rate and  
35   will equate to a property tax increase of \$.25 per \$1,000 of valuation.  
36  
37  
38  
39

Sample Home Value	Property Tax		Difference
	2016	2017	
\$100,000	\$524.04	\$548.80	\$24.76
\$200,000	\$1,048.08	\$1,097.60	\$49.52
\$300,000	\$1,572.12	\$1,646.40	\$74.28

1

2 Based on this budget, the following fund balances are estimated:

- 3           • General Fund: \$633,154 (fund balance percentage - 27.35%)  
4           • Ice Rink: \$6,137  
5           • Capital: \$1,165,068  
6           • TID #1: \$90,161  
7           • Debt Service: \$2,094

8

9 **For Comparison:**

Municipality	Mill Rate (per \$1000)	Tax Levy
Village of Sister Bay	\$5.49	\$2,267,001
City of Sturgeon Bay	\$8.14	\$6,877,715
City of Green Bay	\$9.02	\$56,002,954
Village of Ephraim	\$2.86	\$991,415
Village of Egg Harbor (2016)	Unknown	\$593,027

10

11 A Budget Policies Declaration was incorporated into the 2017 Budget, and the Board members  
12 jointly reviewed that document. During the review process Lienau noted that he has issues  
13 with Budget Policy 002-110316 as he believes the matters referred to in that section must be  
14 addressed by the Village Board. He suggested that Policy 002-110316 be revised in such  
15 fashion that it reads:

16 Budget Policy 002-110316:

17 *"A Committee Chair may transfer up to \$5,000 within his or her Department's budget,*  
18 *but if any transfers in excess of that amount are required a referral shall be made to the*  
19 *Village Board. Any emergency expenditures of funds in excess of \$5,000 will require*  
20 *the approval of the Village President and the Village Administrator, as well as*  
21 *notification of the Chair of the affected Committee and the Chair of the Finance*  
22 *Committee, and the Village Board shall be notified that said actions were taken at their*  
23 *next meeting.*

24 *Rass described the budget amendments which will be required in order to show net Marina Fest*  
25 *expenses of \$10,000.00, and it was the consensus that all those amendments are acceptable.*

26 *A motion was made by Bhirdo, seconded by Clove that the Village Board accepts the recommendation of*  
27 *the Finance Committee and the various standing committees and approves the 2017 Annual Budget for*  
28 *the Village of Sister Bay which was reviewed at this meeting as amended. Motion carried - All ayes.*

1 *A motion was made by Lienau, seconded by Duffy that the Village Board passes and adopts Resolution*  
 2 *No. 342, which adopts the 2017 Budget and Capital Improvement Program for the Village of Sister Bay*  
 3 *as presented. Motion carried – All ayes.*

4 *At 8:29 P.M. a brief recess was taken and the Board members reconvened at 8:39 P.M.*  
 5

6 **Item No. 6. Review of plans and the Development Agreement for a commercial renovation**  
 7 **of the building at 10716 N. Bay Shore Drive which is commonly referred to as “The**  
 8 **Boathouse”;** Consider a motion to recommend approval:

9 The Plan Commission has recommended that the plans and Development Agreement for a  
 10 commercial renovation of the building at 10716 N. Bay Shore Drive which is commonly  
 11 referred to as “The Boathouse” be approved, and a draft of all those documents was included  
 12 in the meeting packets. The Board members jointly reviewed all the previously mentioned  
 13 documents, and it was the consensus that Section 6 of the Development Agreement should be  
 14 revised to read,

15

16 *“6. The Village is in the process of developing a Village-wide Parking Plan, and the*  
 17 *Developer will be compelled to comply with the terms and conditions of that plan once it*  
 18 *is fully approved, adopted and implemented by the Village.”*  
 19

20 *A motion was made by Duffy, seconded by Clove that the Village Board accepts the recommendation of*  
 21 *the Plan Commission and approves the plans and Development Agreement for a commercial renovation*  
 22 *of the building at 10716 N. Bay Shore Drive which is commonly referred to as “The Boathouse” as*  
 23 *presented but amended at this meeting. Motion carried – All ayes.*  
 24

25 **Continuation of Item No. 11. Consider a motion to convene into executive session pursuant**  
 26 **to Wis. Stats., §19.85(1)(g) to confer with legal counsel for the governmental body who is**  
 27 **rendering oral or written advice concerning strategy to be adopted by the body with**  
 28 **respect to litigation in which it is or is likely to become involved, and Wis. Stats.,**  
 29 **§19.85(1)(e) to deliberate or negotiate the purchase of public properties, the investment of**  
 30 **public funds, or conduct other specified public business, whenever competitive or**  
 31 **bargaining reasons require a closed session:**

32 *At 8:50 P.M. a motion was made by Lienau, seconded by Bell that the Village Board convene into*  
 33 *executive session pursuant to Wis. Stats., §19.85(1)(g) to confer with legal counsel for the*  
 34 *governmental body who is rendering oral or written advice concerning strategy to be adopted by the*  
 35 *body with respect to litigation in which it is or is likely to become involved, and Wis. Stats., §19.85(1)(e)*  
 36 *to deliberate or negotiate the purchase of public properties, the investment of public funds, or conduct*  
 37 *other specified public business, whenever competitive or bargaining reasons require a closed session. A*  
 38 *roll call vote was taken on that motion and the Board members voted in the following fashion:*

39 *Baker – Aye; Bell – Aye; Bhirdo – Aye; Clove – Aye; Duffy – Aye;*  
 40 *Enquist – Aye; Lienau – Aye*

41 *Motion carried.*

42 **Continuation of Item No. 12. Consider a motion to reconvene into open session:**

43 *At 10:07 P.M. a motion was made by Lienau, seconded by Baker that the Village Board reconvene into*  
 44 *open session. Another roll call vote was taken, and the Board members again voted in the following*  
 45 *fashion:*

1 Baker – Aye; Bell – Aye; Bhirdo – Aye; Clove – Aye; Duffy – Aye;  
2 Enquist – Aye; Lienau – Aye

3 Motion carried.

4 **Continuation of Item No. 13. Consider a motion to take action if required:**

5 A motion was made by Duffy, seconded by Bell that the Village Board amends Resolution No.  
6 337-080916 in such fashion that it reflects concordance with the information contained in the  
7 Development Agreement which was reviewed at this meeting, and re-authorizes the sale of Lots 7 and 8  
8 of the Sister Bay Marketplace PUD to JACO Management, LLC. Motion carried – All ayes.

9  
10 A motion was made by Baker, seconded by Bell that the Village Board approves the WB40 Amendment  
11 to Offer To Purchase dated August 3, 2016 which was accepted on October 25, 2016 for the purchase  
12 and sale of Lots 7 and 8 in the Sister Bay Marketplace PUD, but amends that document in such fashion  
13 that a fourth bullet point is added which states, “Strike the contingency which states that the Village  
14 will raise the canopy of the trees on the northwest corner of Mill Road and Bay Shore Drive to increase  
15 the site lines to the water from the Sister Bay Marketplace Development. Motion carried – All ayes.

16  
17 A motion was made by Duffy, seconded by Clove that the Village Board hereby resolves to pass and  
18 adopt Resolution No. XXX-110316 which reauthorizes the sale of Lots 7 and 8 of the Sister Bay  
19 Marketplace PUD to JACO Management, LLC. (The language for Resolution No. XXX-110316 will be  
20 substantially similar to that contained in Resolution No. 337-080916 which was updated in accord with  
21 Board action taken at this meeting. Motion carried – All ayes.

22  
23 **Item No. 5. Review of plans and the Development Agreement for a commercial**  
24 **development to be constructed by JACO Management on Lots 7 and 8 of the Sister Bay**  
25 **Marketplace PUD; consider a motion to recommend approval:**

26 The Plan Commission has recommended that the plans and the Development Agreement for  
27 a commercial development to be constructed by JACO Management on Lots 7 and 8 of the  
28 Sister Bay Marketplace PUD be approved, and a draft of all those documents was included in  
29 the meeting packets. During the review process some edits were suggested and Jackson took  
30 note of all of them.

31  
32 It was the consensus that a fifth bullet point shall be added to the WB40 Amendment to Offer To  
33 Purchase which states that the developer will be credited for the costs of rough-site grading.

34  
35 A motion was made by Duffy, seconded by Enquist that the Village Board accepts the recommendation  
36 of the Plan Commission and approves the plans and Development Agreement with JACO Management,  
37 LLC with respect to Lots 7 and 8 of the Sister Bay Marketplace PUD as amended at this meeting.  
38 Motion carried – All ayes.

39  
40 **Item No. 10. Report by the staff on Village activities and projects:**

41  
42 **Mike Schell, the Utilities Director, gave the following oral report:**

- 43 • There are only four wells requiring permits which have not been addressed yet.
- 44 • Two quotes were received for replacement of the swamp pump and controls;
- 45 • Employees from Robert E. Lee & Associates are working on the Generator Project.
- 46 • A Focus on Energy Grant Application has been submitted for variable frequency drives
- 47 at the #1 Well.

- 1 • Sewer and water has been installed across Highway 57 for the Garot Expansion Project.
- 2 • The discharge permit to the bay was amended slightly but it shouldn't create any
- 3 issues.
- 4 • E-Coli testing will now have to be done on a weekly basis.
- 5 • Smoke testing was performed, and several issues were identified inside private
- 6 properties.

7

8 **Jackson gave the following oral report:**

- 9 • Staff members from Schenck were on site last week to begin work on the 2016 audit.
- 10 • The Parks Department employees are working diligently to close the Marina for the
- 11 season.
- 12 • Work is ongoing on the following development projects:

13

14 Harbor View- Engineering work is complete. It is his understanding that a first round of

15 bidding has taken place; but he has not received word as to the success of the first round of

16 bids.

17 Stony Ridge- Construction is actively under way. The Plan Commission has granted

18 architectural approval of the multifamily units. The utility connection under STH 57 is now

19 complete.

20 Silverbirch Gifts - Architects are working to complete plans and hope to submit "preliminary

21 as final" plans soon. This project is proposed to be a retail space on the Braun Site.

22 JJ Johnson's Project: Architects have completed the architectural renderings, and are working

23 on site plans and associated documents. This development is intended to consist of three

24 mixed use commercial spaces with three rental residential units above.

25 Stabur - Al Johnson's continues to move forward with kitchen expansion, storage

26 enhancement and outdoor bar improvements. Groundbreaking on the storage site is

27 anticipated yet this fall.

28 DC Ice Cream Factory - Preliminary plans have been approved by the Plan Commission for a

29 restaurant on the Frisoni property downtown.

30 Mill Rd. West - Al Gokey expects to break ground as soon as State approvals are in hand;

31 hopefully this will occur before it freezes.

32 Braun Site - At the moment this project is consuming the vast majority of his time. Given the

33 topography there are a number of complexities that arise from developing the site in the

34 dense fashion that Village officials have chosen. Re-engineering has been substantially

35 completed.

36 **A written report was received from Steve Mann, the Village's Facilities Manager, and the**

37 **Board members jointly reviewed that document.**

38 During the review process Jackson noted that to date twenty-three new bench pads have been

39 installed. He also noted that to prevent ice damage approximately 190 4" X 8" wood bumpers

40 on "A" Dock were cut off. All seasonal Village owned buildings have been winterized and

41 Port-A-Pier has removed the slips from the Marina.

42

43

1 **Item No. 9. Review of the financial statements and consideration of a motion to approve**  
 2 **the monthly bills:**

3 Revenues Compared to Budget reports for the ten month period ending October 31, 2016 as  
 4 well as financial reports for the period October 1, 2016 through October 26, 2016 were  
 5 included in the meeting packets and the Board members jointly reviewed all of those  
 6 documents.

7  
 8 *A motion was made by Duffy, seconded by Baker that the monthly bills depicted on the reports which*  
 9 *were included in the meeting packets totaling \$647,690.91 are all approved. Motion carried – All ayes.*

10

11 **Continuation of Item No. 11. Consider a motion to convene into executive session pursuant**  
 12 **to Wis. Stats., §19.85(1)(g) to confer with legal counsel for the governmental body who is**  
 13 **rendering oral or written advice concerning strategy to be adopted by the body with**  
 14 **respect to litigation in which it is or is likely to become involved, and Wis. Stats.,**  
 15 **§19.85(1)(e) to deliberate or negotiate the purchase of public properties, the investment of**  
 16 **public funds, or conduct other specified public business, whenever competitive or**  
 17 **bargaining reasons require a closed session:**

18 *At 10:25 P.M. a motion was made by Lienau, seconded by Baker that the Village Board convene into*  
 19 *executive session pursuant to Wis. Stats., §19.85(1)(g) to confer with legal counsel for the*  
 20 *governmental body who is rendering oral or written advice concerning strategy to be adopted by the*  
 21 *body with respect to litigation in which it is or is likely to become involved, and Wis. Stats., §19.85(1)(e)*  
 22 *to deliberate or negotiate the purchase of public properties, the investment of public funds, or conduct*  
 23 *other specified public business, whenever competitive or bargaining reasons require a closed session. A*  
 24 *roll call vote was taken on that motion and the Board members voted in the following fashion:*

25 *Baker – Aye; Bell – Aye; Bhirdo – Aye; Clove – Aye; Duffy – Aye;*  
 26 *Enquist – Aye; Lienau – Aye*

27 *Motion carried.*

28 **Continuation of Item No. 12. Consider a motion to reconvene into open session:**

29 *At 11:35 P.M. a motion was made by Lienau, seconded by Baker that the Village Board reconvene into*  
 30 *open session. Another roll call vote was taken and the Board members voted in the following fashion:*

31 *Baker – Aye; Bell – Aye; Bhirdo – Aye; Clove – Aye; Duffy – Aye;*  
 32 *Enquist – Aye; Lienau – Aye*

33 *Motion carried.*

34 **Continuation of Item No. 13. Consider a motion to take action if required:**

35 *No formal action was taken.*

36

37 **Committee Reports:**

38 *A motion was made by Bhirdo, seconded by Baker that review of Committee Reports shall be tabled until*  
 39 *the next meeting of the Village Board. Motion carried – All ayes.*

40

41 **Item No. 14. Discussion regarding matters to be placed on a future agenda or referred to a**  
 42 **Committee, official or employee:**

43 *It was the consensus that:*

- 44 • *Sister Bay Scenic Boat Tours' change in intensity of use shall be referred to the Plan Commission.*

1       • *Committee Reports will be given at the next meeting of the Village Board.*

2

3       *A motion was made by Bhirdo, seconded by Baker that the quarterly support for the SBAA shall be*  
4       *released ASAP. Motion carried – All ayes.*

5

6       **Adjournment:**

7       *A motion was made by Bhirdo, seconded by Baker to adjourn the meeting of the Village Board at 11:38*  
8       *P.M. Motion carried – All ayes.*

9

10      Respectfully submitted,



11

12      Janal Suppanz,

13      Assistant Administrator

14



## Village of Sister Bay BOARD REPORT

Meeting Date 11/16/2016

Item No.: 1

**Recommendation:**

None, this is informational only.

**Background:** The Village Board adopted the Door County Hazard Mitigation Plan back in June. At that time, the Board asked that I line up someone from the county to do a brief presentation on the topic at a future meeting. Tonight, Becky Kerwin, lead staff for the creation of the plan, and a staff person at Door County Planning will present the highlights of the plan and answer questions you may have.

**Fiscal Impact:** None

Respectfully submitted,

Zeke Jackson  
Village Administrator

# Door County Hazard Mitigation Plan

Adopted by the Door County Board of Supervisors on \_\_\_\_\_, 2016

Door County Planning Department

Door County Government Center

421 Nebraska Street

Sturgeon Bay, WI 54235

Phone: (920) 746-2323

FAX: (920) 746-2387

Web site: <http://map.co.door.wi.us/planning/>

**DRAFT SUBMITTED TO WISCONSIN EMERGENCY MANAGEMENT**

**May 25, 2016**

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# **Door County Hazard Mitigation Plan**

## **Chapter 1: Introduction**

In 2000, the U.S. Congress passed the Disaster Mitigation Act, intended to reduce public and private expenses associated with disasters and to speed up response time to and reduce recovery time from disasters. The purpose of this act, and the Door County Hazard Mitigation Plan, is “to reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters.” An additional purpose of the Door County Hazard Mitigation Plan is to address similar issues resulting from non-natural disasters.

The Disaster Mitigation Act included a new requirement for local governments to prepare hazard mitigation plans in order to be eligible for funding from the Federal Emergency Management Administration (FEMA) for mitigation activities, both pre- and post-natural disaster, through the Pre-Disaster Mitigation Assistance Program and the Hazard Mitigation Grant Program. Addressing manmade/technological hazards is encouraged, but not required. Without a FEMA-approved and adopted plan, governments cannot utilize funding through the Pre-Disaster Mitigation Grant Program. In order for a local government without a FEMA-approved and adopted plan to be eligible to receive funding through the Hazard Mitigation Grant Program, they would have to agree to prepare a hazard mitigation plan within one year after a disaster occurs.

In 2014, the Door County Planning and Emergency Services Departments partnered to develop the Door County Hazard Mitigation Plan in compliance with FEMA requirements and as a multi-jurisdictional plan. The county’s five incorporated municipalities (City of Sturgeon Bay and Villages of Egg Harbor, Ephraim, Forestville, and Sister Bay) agreed to participate in the development of this plan, as well as other county departments and outside agencies with an interest in disaster management. Representatives from these agencies, departments, and municipalities formed the Planning Team that guided the development of this plan, a list of which is provided later in this chapter.

## **PLANNING PROCESS**

*Note: The grant approval letter, press releases, requests for input, meeting agendas and minutes described below can be found in Appendix A.*

In June of 2014, FEMA approved a grant application from Door County in the amount of \$33,000 for the development of a county hazard mitigation plan. FEMA provided 75% (\$24,750), Wisconsin Emergency Management provided 12.5% (\$4,125), and Door County provided the remaining 12.5% (\$4,125). The grant timeframe began on June 10, 2014 and ends on June 10, 2017. The draft plan was due to FEMA by January 31, 2016, with the final plan to be completed and approved by FEMA on or before July 31, 2016.

The Door County Hazard Mitigation Plan was developed following guidelines in the “Local Mitigation Planning Handbook” published by FEMA. The handbook covers Title 44 Code of Federal Regulations §201.6 for FEMA approval and eligibility to apply for FEMA hazard mitigation assistance programs. Listed below is a timeline and description of the steps taken to develop the Plan.

- **Grant Application Approved** (June 10, 2014). A letter from FEMA to Wisconsin Emergency Management was sent, approving the application for a Local Multi-Jurisdictional Hazard Mitigation Plan.
- **Pre-Planning Meetings**
  - Meeting with Planning and Emergency Services Department to discuss scope of services to be provided by the Planning Department (June 26, 2014).
  - Meeting with Planning and Emergency Services Departments to plan kick-off meeting (July 10, 2014).
  - Meeting with Planning and Emergency Services Departments to discuss planning process outline (August 13, 2014).

- **Planning Team Press Release and Meetings**
  - **Kick-Off meeting** (September 30, 2014). An invitation to attend a Planning Team kick-off meeting was sent to county departments, incorporated municipalities, and other agencies with an interest in hazard mitigation planning on August 20<sup>th</sup>, 2014. At the meeting, Planning Team participants reviewed the hazard mitigation plan development process, responsibilities, and timeline. Participants also reviewed the Memorandum of Agreement and the “capabilities” worksheet.
  - **Press Release** (December 12, 2014). A press release was sent to local media contacts announcing the hazard mitigation planning process.
  - **Planning Team Meeting** (January 29, 2014). Planning Department staff members presented research on natural hazards, discussed local capabilities worksheet, and handed out base maps and instructions for asset/infrastructure identification.
  - **Planning Team Meeting** (April 28, 2015). Planning Department staff members presented research on non-natural hazards, discussed DNR redevelopment and remediation information, and discussed asset/infrastructure and hazardous materials/sites maps.
- **Input Requests**
  - **Draft Risk Assessment Chapter** (July 8, 2015). Planning Department staff members emailed the Planning Team notice that the draft risk assessment chapter was posted to the Planning Department’s Web site for their review. Comments requested by July 31st.
  - **Draft Mitigation Strategies Chapter** (July 29, 2015). Planning Department staff members emailed the Planning Team notice that the draft mitigation strategies chapter was posted to the Planning Department’s Web site for their review. Comments requested by August 14th.
  - **Draft Risk Assessment and Mitigation Strategies Chapters** (August 14, 2015). Planning Department staff members sent an email reminding the Planning Team to submit comments regarding the draft risk assessment and mitigation strategies chapters. Comments requested by August 18<sup>th</sup>.
- **Open House Meetings** (September 21<sup>st</sup>, 28<sup>th</sup>, and 29<sup>th</sup>). Planning Department staff members issued/sent a press release/invitation on August 19<sup>th</sup>, 2015 regarding open house meetings being hosted by the Planning and Emergency Management Services Departments in late September to review the draft risk assessment and mitigation strategies chapters. Three open house meetings were held in Northern Door, Southern Door, and the City at which the draft risk assessment and mitigation strategies chapters were presented and input was gathered from meeting participants. Note that the meeting minutes in Appendix A list the input received and what the Planning Department did with the input.
- **Input Request** (November 2015). Planning Department staff members issued a press release and emailed the Planning Team, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, and neighboring communities regarding a final opportunity to review and comment on the draft plan prior to submittal to FEMA. The email described where to view the draft chapters on-line and how to offer input in writing by faxing, emailing, or mailing the Planning Department. Comments requested by November 25<sup>th</sup>, 2015.
- **Plan Submittal to Wisconsin Emergency Management** (January 12<sup>th</sup> and March 17<sup>th</sup>, 2016). Planning Department staff members submitted the final plan draft to Wisconsin Emergency Management for their review and comment.
- **Municipal Adoption Request** (2016). Planning Department staff members emailed incorporated municipalities the conditionally approved plan along with a request for official adoption by the municipality.
- **Approval/Adoption by Door County Resource Planning Committee/Board of Supervisors** (2016). The Resource Planning Committee voted to approve recommendation of the plan by the

Door County Board of Supervisors on \_\_\_\_\_. The Door County Board of Supervisors adopted the plan on \_\_\_\_\_.

## PLANNING TEAM

The following Door County departments, municipalities, and agencies were invited to participate on the Planning Team:

- Door County Departments
  - Administrator – Maureen Murphy, Administrator (since resigned)
  - Airport – Keith Kasbohm, Director
  - Building and Grounds – Wayne Spritka, Director
  - Emergency Management Services – Dan Williams, Director, and Anthony Luchini, Deputy Director (since resigned)
  - Highway – John Kolodziej, Director
  - Human Services – Joe Krebsbach, Director
  - Land Information Office – Tom Haight, Land Information Officer
  - Parks – Erik Aleson, Parks Director
  - Planning – Mariah Goode, Director, and Becky Kerwin, Planner
  - Public Health – Rhonda Kolberg, Director
  - Sanitarian – John Teichtler, Director
  - Sheriff's – Steve Delarwelle, Sheriff
  
- Municipalities
  - City of Sturgeon Bay, Mayor and Administrator – Thad Birmingham, Mayor, and Steve McNeil, Administrator (since resigned)
  - City of Sturgeon Bay, Community Development – Marty Olejniczak, Director
  - Village of Forestville, President and Administrator – Terry McNulty, President, and Mary Ann Salmon, Clerk
  - Village of Egg Harbor, President and Administrator – Joe Smith, President, and Lynn Ohnesorge, Clerk-Treasurer
  - Village of Ephraim, President and Administrator – Mike McCutcheon, President and Charity Buhr, Clerk (since resigned). Also, Andrea Collak, Clerk, and Brent Bristol, Zoning Administrator
  - Village of Sister Bay, President and Administrator – Dave Lienau, President, and Zeke Jackson, Administrator
  
- Other agencies
  - U.S. Coast Guard – John Sehn, Senior Chief
  - Wisconsin Public Service – Larry Schlies, General Manager
  - American Red Cross – Travis Waack, Regional Director
  - Ministry Door County Medical Center – Steve Schwenke, Safety Manager (since resigned)

## PARTICIPATING JURISDICTIONS

Door County and all incorporated municipalities participated in the development of the hazard mitigation plan. Agreement by the municipalities to participate was formalized with a signed Memoranda of Agreement that outlined specific responsibilities, as listed below. The complete Memorandum of Agreement signed by Door County and the signature page of the municipal Memoranda of Agreement can be found in Appendix B. Also provided below is a description of each municipality's specific participation.

- Develop/approve the Schedule of Tasks with the Planning Team.
- Attend regular meetings of the Planning Team and any applicable sub-county meetings.
- Assist the Planning Team with developing and conducting an outreach strategy to involve other stakeholders and the public in order to appropriately represent the Jurisdiction.
- Provide data and feedback to develop the risk assessment and mitigation strategy, including a specific mitigation action plan for the Jurisdiction.
- Submit drafts of plan to the Jurisdiction for review.
- Work with the Planning Team to incorporate Jurisdiction comments into the draft plan.
- Submit the draft plan to their respective governing body for consideration and adoption.
- After adoption, coordinate a process to monitor, evaluate, and work toward plan implementation.

### Municipal Participation

*Note that all of the municipalities filled out a capabilities worksheet and provided input in writing and/or at one of the open house meetings. A summary of the capabilities worksheets can be found in Appendix C.*

#### Door County

Memorandum of Agreement: Dan Williams, Emergency Services Director Emergency Services

Meeting Participant(s): Dan Williams, Director; Tony Luchini, Deputy Director (since resigned)

Meeting(s) attended:

- Planning Team Meetings – September 30<sup>th</sup>, 2014; January 29<sup>th</sup>, 2015; and April 28<sup>th</sup>, 2015
- Open house meetings – September 21<sup>st</sup>, 28<sup>th</sup>, and 29<sup>th</sup>, 2015

#### City of Sturgeon Bay

Memorandum of Agreement: Thad Birmingham, Mayor

Meeting Participants: Marty Olejnizak, Administrator

Meetings attended:

- Planning Team Meetings – September 30<sup>th</sup>, 2014; January 29<sup>th</sup>, 2015; and April 28<sup>th</sup>, 2015
- Open house meeting – September 28<sup>th</sup>, 2015

#### Village of Egg Harbor

Memorandum of Agreement: Joe Smith, President

Meeting Participants: Josh Van Lieshout, Administrator (since resigned); Michelle Anderson, Deputy Administrator/Deputy Clerk/Deputy Treasurer

Meetings attended:

- Planning Team Meeting – September 30<sup>th</sup>, 2014
- Open house meeting – September 29<sup>th</sup>, 2015

#### Village of Ephraim

Memorandum of Agreement: Mike McCutcheon, President

Meeting Participants: Charity Buhr, Administrator (since resigned); Brent Bristol, Zoning Administrator; Jane Olson, Trustee

Meetings attended:

- Planning Team Meeting – September 30<sup>th</sup>, 2014
- Open house meeting – September 29<sup>th</sup>, 2015

Village of Forestville

Memorandum of Agreement: Terry McNulty, President

Meeting Participants: Terry McNulty, President

Meetings attended:

- Planning Team Meeting – September 30<sup>th</sup>, 2014
- Open house meeting – September 29<sup>th</sup>, 2015

Village of Sister Bay

Memorandum of Agreement: Zeke Jackson, Administrator

Meeting Participants: Zeke Jackson, Administrator; Patrick Johnson, Operator; Michael Schell, Operations Supervisor

Meeting attended: Open house meeting – September 29<sup>th</sup>, 2015

**STAKEHOLDER AND PUBLIC INVOLVEMENT**

Three press releases/invitations were issued over the course of the planning process, as described previously and in more detail below:

- **Press Release** (December 12, 2014). A press release was sent to local media contacts announcing the hazard mitigation planning process and how to get involved.
- **Press Release/Invitation to Open House Meetings** (August 19, 2015).
  - A press release regarding the open house meetings scheduled for late September was emailed to local media contacts and the Planning Team.
  - An invitation to attend the open house meetings was mailed to local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, and neighboring communities.
  - The press release and invitation described the open house meetings as an opportunity to review the draft risk assessment and mitigation strategies chapters and offer input.
  - The press release and invitation described where to view the draft chapters on-line and how to offer input in writing by faxing, emailing, or mailing the Planning Department.
- **Press Release/Input Request** (December 2015). A press release regarding a final draft of the plan was emailed to local media contacts, the Planning Team, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, and neighboring communities. The press release described where to view the draft chapters on-line and how to offer input in writing by faxing, emailing, or mailing the Planning Department.

**REVIEW AND INCORPORATION OF OTHER DOCUMENTS**

The following plans, studies, reports, and technical information were reviewed and incorporated into the Door County Hazard Mitigation Plan:

- Natural hazard profiles:
  - *Discovery Report, Great Lakes Coastal Flood Study, Lake Michigan, Basin-Wide Report, Report Number 01, February 2013; Appendix F, Kewaunee, Door, and Brown Counties, WI, Discovery Report*
  - *State of Wisconsin Hazard Mitigation Plan, Wisconsin Emergency Management, Department of Military Affairs, October 2011*
  - *National Oceanic Atmospheric Administration (NOAA), Storm Events Database and additional drought information from the "Climate at a Glance" Web page.*
- Communicable diseases: *Center for Disease Control and Prevention*

- Roadway accidents: *Wisconsin Department of Transportation*
- Private water supply contamination, hazardous materials on roadways, and hazardous materials on waterways: *DNR Bureau of Remediation and Redevelopment*
- Groundwater Concern Areas: *Door County Greenprint modeling tool*

Additionally, county profile information can be found in the Door County Comprehensive and Farmland Preservation Plan 2035 – Volume II, including the following topics:

- Geographical Description of the County
- Population and Demographics
- Historical and Cultural Resources
- Housing
- Economic Development
- Natural Resources
- Agricultural Resources
- Transportation
- Community Facilities and Utilities
- Land Use
- Intergovernmental Cooperation

## **PLAN ORGANIZATION**

The Door County Hazard Mitigation Plan is divided into three chapters. This chapter, Chapter 1, Introduction, discusses the federal Disaster Mitigation Act of 2000, grant funding for this plan, the planning process, and a list of documents reviewed and incorporated into this plan. Chapter 2, Risk Assessment, provides profiles for natural disasters that have affected Door County, including description, location, historical occurrences, probability of occurrence, impacts, and vulnerability. Chapter 2 also provides information on non-natural hazards that have affected Door County, primarily based on information from the Wisconsin Department of Natural Resources – Bureau of Redevelopment and Remediation. Chapter 3, Mitigation Strategies and Plan Maintenance, contains the goals and action items that represent what the county and municipalities seek to achieve through mitigation plan implementation. Chapter 3 also addresses the monitoring, evaluation, and maintenance of this plan.

# **Door County Hazard Mitigation Plan**

## Chapter 2: Risk Assessment

## **INTRODUCTION**

An important component of hazard mitigation planning is conducting a risk assessment regarding the potential impacts of hazards to a community's people, economy, and built and natural environments. For the purpose of hazard mitigation planning, "risk" is the potential for damage, loss, or other impacts created by the interaction of hazards with community assets. Exposure of people, property, and other community assets to hazards can result in disaster, depending on the impacts. Impacts are the consequences or effect of the hazard on community assets. Risk assessment results provide the foundation for the rest of the planning process where action items to reduce risk are identified and prioritized.

At its April 2015 meeting, the Door County Hazard Mitigation Plan steering committee conducted a risk assessment for both natural and non-natural hazards based on a list of hazards provided by the Wisconsin Emergency Management division. For each hazard, the committee gave a separate ranking of one (low risk), two (medium risk), or three (high risk) for both frequency and probability. Specific hazards and their associated rankings for risk are listed below in order of highest ranking to lowest ranking or no ranking. All of the natural hazards, non-natural hazards with a ranking of 4 or higher, and "nuclear power plant" are described in further detail later in this chapter in the "Natural Hazard Profiles" and "Non-Natural Hazard Profiles" sections.

### **Natural Hazards**

- lightning and thunderstorms (5)
- tornado/high winds (5)
- snow/ice/blizzard storms (5)
- extreme heat (4)
- extreme cold (4)
- stormwater flooding (3)
- flash, riverine, and lake flooding (3)
- hail storms (2)
- drought (2)
- wildfire
- coastal erosion
- landslide and subsidence
- dam failure
- climate change
- dense fog
- funnel clouds and waterspouts

### **Non-Natural Hazards**

- communicable diseases (9)
- water supply contamination – private (8)
- hazardous materials – roadway (6)
- hazardous materials – waterway (5)
- loss of electrical system (5)
- transportation – roadway accidents (4)
- structural fire (4)
- loss of sewer system (4)
- nuclear power plant (3)
- contaminants (anthrax, etc.) (3)
- water supply contamination – public (3)
- transportation – airway (3)
- transportation – waterway (3)
- hazardous materials – aircraft (3)
- hazardous materials – pipeline (3)
- correction center incidence (3)
- school violence (2)
- workplace violence (2)
- terrorism (2)

Per Federal Emergency Management Agency (FEMA) requirements for hazard mitigation plan content, this chapter describes natural hazards that pose a threat to the county in terms of location, extent, previous occurrences, and probability of future occurrences. The natural hazard profiles are primarily based on information from the National Oceanic Atmospheric Administration and the state's hazard mitigation plan.

FEMA does not require non-natural hazard events to be included in a certified hazard mitigation plan, however, the Planning Team agreed to include non-natural hazard information. The non-natural hazards listed with a ranking of 4 or higher and "nuclear power plant" are discussed later in this chapter. The non-natural hazard profiles are primarily based on information from the Wisconsin Department of Natural Resources – Bureau of Redevelopment and Remediation, the state agency responsible for the investigation and cleanup of environmental contamination and the redevelopment of contaminated properties. Also included, as appropriate, is information from the Door County Comprehensive and Farmland Preservation Plan 2035.

## HAZARD MITIGATION PLANNING RISK ASSESSMENT MAPS

FEMA flood zone areas (100-year), discussed in further detail later in this chapter, are shown on a county overview map located at the end of this plan (see Appendix D, Map 2.1). Also included at the end of this plan are two sets of maps, described below, for the five incorporated municipalities and for the unincorporated areas of Door County. (See Appendix D, Maps 2.2 – 2.17.)

### “Facilities/Infrastructure and Hazardous Materials” Maps

The first map in the set of two, entitled “Facilities/Infrastructure and Hazardous Materials”, shows the features listed below. These maps were created for the purpose of identifying assets and infrastructure that could be destroyed or harmed in the event of a hazard, as well as assets and infrastructure potentially available to assist in the event of a hazard. Hazardous material storage sites are also shown on these maps in order to help assess proximity of harmful materials to human populations and because sites where there is hazardous material storage can also be part of a community’s assets, such as municipal wells and wastewater-related facilities.

- occupied buildings/vulnerable populations
  - child care centers
  - schools
  - vulnerable populations (elderly and handicapped)
- government/non-governmental organization buildings
  - administrative buildings
  - libraries
  - churches
  - post offices
  - club buildings
- emergency services
  - Coast Guard-related
  - clinic/hospital
  - emergency services stations
  - fire stations
  - police stations
- seasonal or temporary populations
  - popular beaches
  - community buildings
  - community events
  - public camping sites
  - seasonal group quarters
- utilities
  - communications-related
  - electric-related
  - propane
  - radio/television-related
  - water-related
  - power lines
  - gas lines
- transportation-related
  - airport or aircraft-related
  - boat ramp
  - ferry
  - highway shop
  - marina
  - stream-road intersections

- roads in 100-year floodplain
- hazardous materials storage
  - chemical storage (agricultural and utility-related)
  - manure storage
  - DNR open contamination sites
  - fuel storage
  - wastewater-related
  - landfill
  - solid waste storage
- Town of Forestville dam
- 100-year flood zone

### **“Contamination Sites, Hazardous Materials Storage, and Groundwater Concern Areas” Maps**

The second map in the set of two, entitled “Contamination Sites, Hazardous Materials Storage, and Groundwater Concern Areas”, shows the feature listed below. Hazardous material storage sites and DNR redevelopment and remediation sites are shown on top of groundwater concern areas on these maps in order to assess historical and potential future occurrences of contamination of soil and groundwater.

- hazardous materials storage (see above for specific features)
- contamination redevelopment and remediation sites
- groundwater concern areas

The contamination redevelopment and remediation sites are discussed in further detail in the “Non-Natural Hazard Profiles” section of this chapter. The groundwater concern areas were developed using the county’s Greenprinting modeling tool. The Greenprint model incorporates a set of targeted land use management and planning goals specific to Door County, one of which is to protect groundwater quality. Criteria used to develop the groundwater concern areas map are depth to bedrock, depth to water table, soil infiltration rates, municipal water supply zones of contribution, closed depressions and principal bedrock outlets, and fractured bedrock and Karst features. More information on the Greenprinting model and process can be found at [http://206.169.56.66/DoorCounty\\_Greenprint/](http://206.169.56.66/DoorCounty_Greenprint/).

## **NATURAL HAZARD PROFILES**

The information provided in the natural hazard profiles is primarily from the state’s hazard mitigation plan and the National Oceanic Atmospheric Administration (NOAA). In 2015, the NOAA’s former three data centers—the National Climatic Data Center, the National Geophysical Data Center, and the National Oceanographic Data Center, which included the National Coastal Data Development Center—merged to form the National Centers for Environmental Information (NCEI). NCEI’s mission is to meet the demand for high-value environmental data and information. According to NCEI they are the world’s largest provider of weather and climate data, providing access to one of the most significant archives on Earth, with comprehensive oceanic, atmospheric, and geophysical data.

NCEI provides on its Web site a Storm Events database, which is searchable by state and county. NCEI receives storm data from the National Weather Service, which in turn receives their information from a variety of sources, including county, state and federal emergency management officials, local law enforcement officials, skywarn spotters, National Weather Service damage surveys, newspaper clipping services, the insurance industry, and the general public.

In Door County there were a total of 22 event types reported, listed in Table 2.1 below from highest to lowest by average number of events per year. The Storm Events database also tracks direct and indirect deaths, direct and indirect injuries, property damage, and crop damage resulting from a storm event. For Door County, there were 2 deaths and 12 injuries related to tornado, thunderstorm wind, high wind, heavy rain, and lightening events. Damages reported for Door County were over \$8.9 million in property damage

and over \$5.2 million in crop damage. Following is a description of the 22 Storm Event types that have occurred in Door County and any injuries, deaths, or damages resulting from those events.

## PLANNING TEAM RISK ASSESSMENT RESULTS

For the purpose of this plan, all hazard events that have affected Door County are grouped into five general categories in Table 2.2: storms and/or hazardous wind events (with a “winter event” sub-category), hazardous temperatures, hazardous rain events, hail, and other hazards. Within each of these five general hazard categories, the NOAA Storm Event hazard types and associated data are listed. The left-hand column of the table shows the NOAA Storm Event hazard types, plus stormwater flooding (an event type not listed in the Storm Events database); the second to fourth columns show the total number of events, average number of events per year, and number of deaths and injuries. The NOAA Storm Event types are listed in order of highest to lowest average number of events per year (third column). In the last column, the hazard types ranked by the Planning Team are listed in the same row as the closest matching NOAA Storm Event category. Note that the NOAA Storm Event database was just released in April 2015, shortly before the April 29<sup>th</sup> Planning Team risk assessment meeting; Planning Department staff members discovered the database after this meeting took place. For future updates of this plan, hazard categories used for the risk assessment may change to be more consistent with the Storm Event categories.

The Planning Team hazard categories in the last column show the risk assessment ranking given by the Planning Team, in order from highest to lowest risk. As explained previously, the committee gave a ranking of one (low risk), two (medium risk), or three (high risk) for each of the three categories of risk (frequency, probability, and threat to public health and safety). The values assigned to each of these categories were then added together to come up with a total value or “ranking” for each hazard type. NOAA Storm Event data (number of events, average number of events per year, and number of direct deaths/injuries) is shown in columns three through five.

After Table 2.2, the five general hazard types are discussed in order of ranking from highest risk to those hazard events not ranked by the Planning Team, in terms of the specific Planning Team hazard categories. Each hazard discussion includes the NOAA Storm Events hazard descriptions/criteria and reported hazard occurrences. Descriptive and historical occurrence information from the state’s hazard mitigation plan is included, however, in some instances the two sources do not describe hazards similarly and/or the number of historical occurrences differs greatly. Also provided from the state’s hazard mitigation plan are assessments of the probability of future occurrences for all hazards and loss estimation for future occurrences of flood and tornado events.

## STORM AND/OR WIND EVENTS

The NCEI Storm Events database categories included in this section are thunderstorm wind, strong and high winds, tornados, lightning, and winter storms. The Planning Team risk assessment categories and rankings are:

- tornados: 5
- lightning & thunderstorms: 5
- snow/ice/blizzard storms: 5

### Description, Location, Historical Occurrences

#### *Thunderstorm Wind*

Although thunderstorms can occur throughout Wisconsin during any month of the year, their highest frequency is May through September. Thunderstorm wind occurs most often between 12:00 p.m. and 10:00 p.m., frequently peaking in severity between 6:00 p.m. and 7:00 p.m. Wisconsin averages around 30 thunderstorm days per year over the northeastern counties to around 42 days over the southwestern counties.

A “thunderstorm wind” event may get recorded in the Storm Events database when convective wind (rising and sinking air) reaches 58 mph or greater and occurs within 30 minutes of lightning being observed or detected. Thunderstorm winds greater than 74 mph, equivalent to estimated winds in the low-end category of the Enhanced Fujita damage (tornado intensity) scale, can cause what the NCEI considers extreme wind damage. Extreme wind can partially remove roofs, break windows, push over light trailer homes, and push automobiles off the road. Winds of any speed (including below 58 mph) that occur during a thunderstorm and produce a fatality, injury, or damage are also recorded as a thunderstorm wind event.

In Door County between 1966 and 2014 there were 90 thunderstorm wind events recorded in the Storm Events database, with eight events reaching extreme speeds (75 mph or greater); the highest wind speed reported was 128 mph. These thunderstorm wind events resulted in \$355,000 in property damages, \$500 in crop damages, and six indirect injuries. Door County averages 1.5 thunderstorm wind events per year.

**Table 2.1: Natural Hazard Events, Door County**

Event Type All events tracked between 1996 - 2014, except where noted.	Ave. # Per Year	NOAA # of Events	# Direct		
			Deaths/ Injuries	\$ Property Damage	\$ Crop Damage
Winter Storm	1.79	34	--	--	--
Thunderstorm Wind (1955 - 2014)	1.50	90	0/6	\$355,000	\$500
Heavy Snow	1.32	25	--	--	--
Hail (1955 - 2014)	1.10	66	--	--	\$3,500,000
Strong Wind	0.95	18	--	\$40,000	--
High Wind (1 direct death)	0.84	16	1/1	\$185,000	--
Dense Fog	0.53	10	--	--	--
Waterspout	0.32	6	--	--	--
Blizzard	0.32	6	--	--	--
Drought	0.32	6	--	--	--
Lightning	0.32	6	0/1	\$444,700	--
Winter Weather	0.21	4	--	--	--
Extreme Cold/Wind Chill	0.21	4	--	--	--
Funnel Cloud	0.21	4	--	--	--
Cold/Wind Chill	0.16	3	--	--	--
Heavy Rain (1 indirect death)	0.16	3	1/0	--	--
Tornado (1950 - 2014)	0.12	8	0/4	\$8,017,500	\$1,770,000
Heat	0.11	2	--	--	--
Excessive Heat	0.05	1	--	--	--
Flash Flood	0.05	1	--	\$75,000	--
Flood	0.05	1	--	--	--
Ice Storm	0.05	1	--	--	--
<b>Total</b>	--	<b>315</b>	<b>2/12</b>	<b>\$9,117,200</b>	<b>\$5,270,500</b>

Source: National Oceanic Atmospheric Administration, Storm Events - National Centers for Environmental Data, June, 2015.

**Table 2.2: Hazard Risk Assessment Results, Door County**

NOAA Storm Event Type All events tracked between 1996 - 2014, except where noted.	# of Events	Ave. # Per Year	# Direct Deaths/Injuries	Planning Team Risk Assessment: Category & Ranking
<b>Storms and/or Hazardous Wind Events</b>				
Thunderstorm wind (1955 - 2014)	90	1.50	0/6	Thunderstorms: 5
Strong wind	18	0.95	--	--
High wind (1 direct death)	16	0.84	1/1	--
Tornado (1950 - 2014)	8	0.12	0/4	Tornados: 5
Lightning	6	0.32	0/1	Lightning: 5
<b>Winter Events</b>				
Winter storm	34	1.79	--	--
Heavy snow	25	1.32	--	Snow storm: 5
Blizzard	6	0.32	--	Blizzard storm: 5
Winter weather	4	0.21	--	--
Ice storm	1	0.05	--	Ice storm: 5
<b>Hazardous Temperatures</b>				
Extreme cold/wind chill	4	0.21	--	Extreme cold: 4
Cold/wind chill	3	0.16	--	--
Heat	2	0.11	--	Extreme heat: 4
Excessive heat	1	0.05	--	--
<b>Hazardous Rain Events</b>				
Heavy rain (1 indirect death)	3	0.16	1/0	--
Flood	1	0.05	--	Flash, riverine, & lake flooding: 3
Flash flood	1	0.05	--	--
--	--	--	--	Stormwater flooding: 3
<b>Hail</b>				
Hail (1955 - 2014)	66	1.10	--	Hail: 2
<b>Drought</b>				
Drought	6	0.32	--	Drought: 2
<b>Other Hazards</b>				
Wildfire	--	--	--	
Coastal erosion	--	--	--	
Landslide and land subsidence	--	--	--	
Dam failure	--	--	--	
Climate change	--	--	--	Not Ranked
Dense fog	10	0.53	--	
Waterspout	6	0.32	--	
Funnel cloud	4	0.21	--	
<b>Total - All Hazard Events</b>	<b>315</b>	<b>--</b>	<b>2/12</b>	

Source: Door County Hazard Mitigation Planning Team, April 2015; National Oceanic Atmospheric Administration, Storm Events - National Centers for Environmental Data, June 2015.

### **Strong and High Winds**

- Strong Wind. A non-convective wind gusting less than 58 mph (typically for less than 20 seconds) may get recorded in the Storm Events database as a “strong wind” event. A non-convective wind sustained, typically for more than 20 seconds, at less than 40 mph that causes a fatality, injury, or damage may also be classified as a strong wind. In Door County, 18 strong wind events were recorded between 1996 and 2014, causing \$40,000 in property damages.
- High Wind. A non-convective wind sustained at 40 mph or greater for one hour or longer may get recorded as a “high wind” event in the Storm Events database. In Door County, 16 high wind events were recorded between 1997 and 2011, with one direct injury occurring in 1998. A total of \$205,000 in property damage from these events was recorded.

## Tornados

*Note: this section also includes NCEI Storm Event database information on funnel clouds and waterspouts. The state hazard mitigation plan addresses funnel clouds as part of its discussion on tornados and does not address waterspouts at all.*

A tornado is a violently rotating column of air extending from the base of a convective cloud (usually cumulonimbus) to the ground. Tornados can form within many environments; however, three common environments include intense squall lines, super cell thunderstorms, and the right front quadrant of land-falling hurricanes within the spiral bands of thunderstorms. Though more uncommon, tornados may also result from earthquake-induced fires, wildfires, or atomic bombs. Additionally, severe weather spotter and research videotapes of tornados in the past twenty years have shown that a tornado can be in progress with no visible “funnel cloud” at the ground level. Tornado damage severity is measured by the Enhanced Fujita Tornado Scale (EF-Scale), as shown in Table 2.3 below. A detailed description of the EF-Scale can be found online at the National Weather Service Storm Prediction Center website.

**Table 2.3: Enhanced Fujita (EF) Tornado Scale**

Category	EF-Scale Wind Speed (mph)
EF0 (weak)	65 – 85 mph
EF1 (weak)	86 – 110 mph
EF2 (strong)	111 – 135 mph
EF3 (strong)	136 – 165 mph
EF4 (violent)	166 – 200 mph
EF5 (violent)	>200 mph

*Source: NOAA National Weather Service, Milwaukee/Sullivan, WI, 2011.*

Wisconsin lies along the northern edge of the nation’s maximum frequency belt for tornados, sometimes called “tornado alley,” which extends northeastward from Oklahoma into Iowa and then across to Illinois and southern Wisconsin. Generally, the southern portion of Wisconsin has a higher frequency of tornados, although every county in Wisconsin has had tornados.

Most tornados in the United States last less than 10 minutes, but some have occurred for more than an hour. Tornado paths can range from a few hundred feet to miles and tornado widths may range from tens of yards to a mile or two. The “average” Wisconsin tornado for the period between 1982 and 2007 had a life-span of 7.1 minutes, a path length of 3.7 miles, a path width of 118 yards, and an EF rating of 0.7 (mid-way between an EF0 and EF1).

Data collected between 1950 and 2010 for Wisconsin shows that most long-track tornados (25 miles or longer) tornados in the state travel southwest to northeast. A number of the tornados moved west to east, as well as northwest to southeast; northwest to southeast moving tornados tended to occur in the later part of the warm season. Data collected between 1982 and 2010 shows that over 85% of Wisconsin’s tornados were rated as “weak” (EF0 & EF1), over 13% were “strong” (EF2 & EF3), and just under 10% were “violent” (EF4 & EF5).

In Wisconsin, June has the highest tornado frequency, followed by July, May, and August. The only month with no documented tornados in the state is February. Historically, winter, spring, and fall tornados are more likely to occur in southern parts of the state more than in northern parts. Peak hours of occurrence in the state are between 3:00 p.m. and 10:00 p.m., when 75% of the tornados occur. The busiest “spin-up hour” is between 6:00 p.m. and 7:00 p.m.

A “tornado” event may be recorded in the Storm Events database when a violently rotating column of air extends to or from a cumuliform cloud or underneath a cumuliform cloud to the ground, and is visible (but not always) as a condensation funnel. In order for a rotating column of air to be classified as a tornado, it must be in contact with the ground and extend to/from the cloud base, and there should be some semblance of ground-based visual effects such as dust/dirt rotational markings/swirls, or structural or vegetative damage or disturbance. Between 1956 and 2000, eight tornados were recorded in the Storm

Events database for Door County. (See Table 2.4.) The most serious tornado occurred in 1998, which was given an EF3 ranking and was responsible for two injuries, over \$4.7 million in property damages, and over \$1.7 million in crop damages. The second worst tornado event occurred in 1970 when two EF2 tornados occurred on the same day, causing two injuries and \$500,000 in property damages.

**Table 2.4: Tornado Events, Door County**

Date	Time	F-Scale	# Direct Injuries	\$ Property Damage	\$ Crop Damage	Length (miles)	Width (yards)
7/1/1956	12:05 p.m.	F2	0	\$250,000	\$0	10.6	50
7/25/1966	6:20 p.m.	F0	0	\$2,500	\$0	2	17
4/22/1970	9:10 p.m.	F2	2	\$250,000	\$0	2.3	500
4/22/1970	9:30 p.m.	F2	0	\$250,000	\$0	4.3	500
7/12/1973	7:30 a.m.	F1	0	\$25,000	\$0	0	100
6/8/1985	8:00 p.m.	F2	0	\$2,500,000	\$0	5	150
8/23/1998	5:30 p.m.	F3	2	\$4,740,000	\$1,770,000	5.1	1,300
7/13/2000	2:55 p.m.	F0	0	\$0	\$0	0.1	50

Source: National Oceanic Atmospheric Administration, Storm Events - National Centers for Environmental Data, June, 2015.

Relative to the rest of the state, Door County is a low density (number of tornados per square mile) area for tornados, averaging 0.12 tornados per year between 1950 and 2015, compared to 21.6 tornados per year statewide for the same time frame.

### **Lightning**

Lightning, typically a byproduct of a thunderstorm, is a sudden and violent discharge of electricity that occurs between clouds, from clouds to ground, or, if there are high structures involved, ground to clouds. The action of rising and descending air in a thunderstorm separates positive and negative charges, with lightning the result of the buildup and discharge of energy between positive and negative charge areas. Water and ice particles may also affect the distribution of the electrical charge. In only a few millionths of a second, the air near a lightning strike heats to 50,000°F, a temperature hotter than the surface of the sun. The rapid heating and cooling of air near the lightning causes a shock wave that results in thunder.

Warning signs for possible cloud-to-ground lightning strikes are high winds, rainfall, and a darkening sky. Many lightning casualties happen at the beginning of an approaching storm, however, more than half of lightning deaths occur after a thunderstorm has passed. While the threat of lightning significantly diminishes after the last sound of thunder, it may still occur up to 30 minutes later. The threat of lightning exists even when thunderstorms are in the area, but the sky is clear overhead; lightning has been known to strike more than ten miles from a storm.

A “lightning” event may be recorded in the Storm Events database when a sudden electrical discharge from a thunderstorm results in a fatality, injury, and/or damage. Between 1997 and 2011, six lightning events were recorded for Door County, including one injury and \$444,700 in property damage.

### **Winter Events**

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

- Heavy snowfall. Accumulation of six or more inches of snow in a twelve-hour period or eight or more inches in a 24-hour period.
- Blizzard. Sustained wind speeds or frequent wind gusts of at least 35 mph accompanied by heavy snowfall or large amounts of blowing or drifting snow.
- Ice storm. Rain freezing upon contact with the ground and/or exposed objects near the ground; at least ¼ inch of ice must accumulate within twelve hours.

- Freezing drizzle/freezing rain. Drizzle or rain freezes upon impact on objects with a temperature of 32°F or below.
- Sleet. Solid grains or pellets of ice formed by the freezing of raindrops or the refreezing of largely melted snowflakes; does not cling to surfaces.

Generally, the winter storm season in Wisconsin runs from October through March. According to the state's hazard mitigation plan, Wisconsin's harsh winter temperatures have become slightly milder over the past couple of decades, while the number of severe winter storms are increasing. This may be partially related to better documentation generated by the National Weather Service, but also may be related to the fact that warmer air can hold more moisture, which ultimately can fall as snow.

Much of the snowfall in Wisconsin occurs in small amounts of one to three inches per occurrence. Total snowfall per season averages between approximately 30 inches in the extreme south-central area of the state to 120 to 160 inches in the Lake Superior snowbelt (Ashland and Iron Counties). Additionally, counties closer to Lake Michigan have had a higher number of blizzard events, due in part to the strong winds off of the lake.

According to the state's hazard mitigation plan, between 1982 and 2010, Door County had 98 winter weather events, averaging 3.4 events per year, including ice storms, blizzards, winter storms, or lake effect events. Door County's average seasonal snowfall between 1971 and 2000 was between 40 and 50 inches. In December of 2000, record or near-record snow depths of 15 to 34 inches occurred in much of the southern part of Wisconsin and counties along Lake Michigan. Fourteen counties, including Door County, received a Presidential Emergency Declaration as a result. In total, these counties received \$5,483,097 in federal funds to cover costs associated with snow removal and emergency response efforts.

NCEI criteria for its six categories of severe winter weather are listed below. Listed within each category are the number of events that occurred in Door County and the first and last years of the event's occurrence.

- Winter Storm. A winter weather event which has more than one significant hazard (i.e., heavy snow and blowing snow; snow and ice; snow and sleet; sleet and ice; or snow, sleet, and ice) and meets or exceeds locally/regionally defined 12 and/or 24 hour warning criteria for at least one of the precipitation elements, on a widespread or localized basis. Normally, a winter storm would pose a threat to life or property. For Door County, 34 winter storm events were recorded between 1996 and 2014, an average of 1.8 events per year.
- Heavy Snow. Snow accumulation meeting or exceeding locally/regionally defined 12 and/or 24 hour warning criteria, on a widespread or localized basis. This could mean such values as 4, 6, or 8 inches or more in 12 hours or less; or 6, 8, or 10 inches in 24 hours or less. In some heavy snow events, structural damage, due to the excessive weight of snow accumulations, may occur in the few days following the meteorological end of the event. For Door County, 25 heavy snow events were recorded between 1996 and 2014, averaging 0.8 events per year.
- Blizzard. A winter storm which produces the following conditions for 3 hours or longer on a widespread or localized basis: (1) sustained winds or frequent gusts 35 mph or greater and (2) falling and/or blowing snow reducing visibility frequently to less than 1/4 mile, on a widespread or localized basis. For Door County, six blizzard events were recorded between 1996 and 2010, averaging 0.4 events per year.
- Winter Weather. A winter precipitation event that causes a death, injury, or a significant impact to commerce or transportation but does not meet locally/regionally defined warning criteria. A winter weather event could result from one or more winter precipitation types (snow, or blowing/drifting snow, or freezing rain/drizzle), on a widespread or localized basis. For Door County, four winter weather events were recorded between 1996 and 1997, averaging 2.0 events per year.

- Ice Storm. Ice accretion meeting or exceeding locally/regionally defined warning criteria (typical value is  $\frac{1}{4}$  or  $\frac{1}{2}$  inch or more), on a widespread or localized basis. For Door County, one ice storm event was recorded in 1996. (Note that the state's hazard mitigation plan reports three ice storms having occurred in Door County between 1982 and 2010.)

### **Probability of Occurrence, Impacts, Vulnerability, and Economic Costs**

When a thunderstorm became severe in Wisconsin during the period between 1982 and 2010, it was in the following form:

- damaging high wind 58% of the time,
- large hail 30% of the time,
- tornados 7% of the time, and
- flash floods from heavy rain 5% of the time.

Wisconsin experiences from two to five severe thunderstorm wind events per year, on average. Door County is on the low end of this range, averaging between two and three severe thunderstorm wind events per year.

Lightning occurs with most severe thunderstorms, but does not always produce damages. The probability of lightning itself occurring is quite high, due to the high number of severe thunderstorms in the state; however, the site-specific incidence of lightning is considered low because of the localized nature of the hazard.

The state's hazard mitigation plan estimates the annual probability of a tornado and associated dollar value of damage for all counties in Wisconsin. For Door County, the average loss per tornado is over \$1,002,250 million, based on eight tornados occurring in the county between 1950 and 2010 with associated damages of \$8,018,000 million. The state bases the probability of a tornado happening in the future on past occurrences, thus, the probability of a tornado occurring in Door County in any given year is 0.13115 (8 tornados/61 years). Future tornado dollar damage is projected to be at \$131,443 (0.13115 \* \$1,002,250) per year. Compared to other counties, Door County is a low-risk area for tornados; Dodge County has the highest probability at 0.93 tornados, followed by Dane County at 0.91 tornados.

Compared to the rest of the state, Door County has a lower probability of heavy snowfall, since heavy snowfalls are more likely to occur in northern Wisconsin in counties along Lake Superior. However, blizzards are more likely to occur in the eastern counties along Lake Michigan, including Door County. Door and Manitowoc Counties have the highest historical occurrences of blizzards at 6 blizzard events between 1982 and 2010. Comparing all winter weather events, Door County is in the middle of the range of occurrences, with 98 total events occurring between 1982 and 2010, compared to 60 total occurrences on the low end and 120 or more total occurrences on the high end, for the same time frame.

All municipalities in Door County are equally vulnerable to storm and/or wind events. Northern Door, however, with approximately 56% of all the housing units in the county and only one transmission line serving the area is more vulnerable to power outages. The impacts of power outages include lost economic activity due to businesses not being able to operate properly and injuries occurring during the clean-up of debris.

### **HAZARDOUS TEMPERATURES**

The NCEI Storm Events database categories included in this section are extreme summer heat and extreme cold/wind chill. The Planning Team risk assessment categories and rankings are:

- extreme cold: 4
- extreme heat: 4

## Description, Location, Historical Occurrences

### ***Extreme Summer Heat***

According to the National Weather Service, “extreme summer heat” is the combination of very high temperatures and exceptionally humid conditions. If such conditions persist for an extended period of time, it is called a heat wave. When possible, the National Weather Service warns people and agencies that extreme heat conditions are forecasted:

- **Excessive Heat Outlook.** A warning is issued when conditions for an excessive heat event may occur in the next three to seven days; provides information to those who need to plan for heat (i.e. emergency management, public health officials, utility companies).
- **Excessive Heat Watch.** A warning is issued when conditions for an excessive heat event are expected to occur in the next twelve to 48 hours.
- **Excessive Heat Warning/Advisory.** A warning is issued when an excessive heat event is expected to occur in the next 36 hours.

The National Weather Service issues an outlook, watch, or warning/advisory when the heat index (or how hot it really feels) is expected to exceed 105° F to 110° F for two consecutive days. At a heat index of 105° F or higher, the heat is extreme enough to cause disorders associated with exposure to heat and/or physical activity. Heat index is a function of the actual temperature and the relative humidity. Table 2.5 below shows the danger categories and heat disorders with their corresponding heat index values. Note that caution should be taken when the heat index value approaches 90° F.

**Table 2.5: Heat Index and Disorders**

<b>Danger Category</b>	<b>Heat Disorder</b>	<b>Heat Index Value (how hot it feels)</b>
Extreme Danger	Heatstroke or sunstroke imminent	>130°F
Danger	Sunstroke, heat cramps, or heat exhaustion <i>likely</i> ; heat stroke possible with prolonged exposure and physical activity.	105°F - 130°F
Extreme Caution	Sunstroke, heat cramps, and heat exhaustion <i>possible</i> ; heat stroke possible with prolonged exposure and physical activity.	90°F - 105°F
Caution	Fatigue possible with prolonged exposure and physical activity.	89°F - 90°F

Source: NOAA National Weather Service, 2008.

Extreme heat is the number one weather killer nationwide, killing 162 people annually, according to the ten-year average from 2000-2009 from the National Weather Service. There are different stages of heat disorders associated with exposure to heat:

- **Heatstroke.** An often fatal medical emergency occurring when the body’s responses to heat stress are insufficient to prevent a substantial rise in the body’s core temperature, typically exceeding 105°F; even with rapid cooling and treatment, the average fatality rate is 15%.
- **Heat Exhaustion.** A less serious medical condition characterized by dizziness, weakness, or fatigue; body temperatures may be normal or slightly-to-moderately elevated; with fluid treatment, prognosis is typically good.
- **Heat Syncope.** A sudden loss of consciousness, typically associated with people exercising who are not acclimated to warm temperatures; causes little or no harm to the individual.
- **Heat Cramps.** May occur in people unaccustomed to exercising in the heat.

In addition to affecting people, extreme heat puts significant stress on plants and animals. Extreme heat may reduce crop yields or contribute to crop loss. Similarly, livestock may become overheated, leading to reduced milk production and other problems.

NCEI describes “excessive heat” as a combination of high temperatures (well above normal) and high humidity. An excessive heat event occurs whenever heat index values meet or exceed locally/regionally established excessive heat warning thresholds, on a widespread or localized basis. Fatalities (directly-related) or major impacts to human health occurring during excessive heat warning conditions are reported using this event category. One excessive heat event was recorded in the Storm Events database for Door County in 2000. Note that the state’s hazard mitigation plan reports that Door County experienced 25 heat wave days and nine heat wave events between 1982 and 2010. A heat wave event is a period of abnormally and uncomfortably hot and unusually humid weather, typically lasting two or more days.

### ***Extreme Cold/Wind Chill***

The combination of extremely cold temperatures and strong winds can result in wind chills that cause bodily injury such as frostbite and death due to exposure (hypothermia). Wind chill is an apparent temperature describing the combined effect of wind and low air temperatures on exposed skin; measurement is based on the rate of heat loss from exposed skin. A temperature of 0°F combined with a 15 mph wind results in a wind chill temperature of -19°F. At this wind chill temperature, exposed skin can freeze in 30 minutes. In general, the National Weather Service regional offices issue Wind Chill Advisories for Wisconsin when wind chill values are expected to drop to -20 to -34°F with winds 10 mph or higher. Similarly, the National Weather Service issues Wind Chill Warnings when wind chill values are expected to drop to -35°F or lower with winds 10 mph or higher.

NCEI describes “extreme cold/wind chill” as a period of extremely low temperatures or wind chill temperatures reaching or exceeding locally/regionally defined warning criteria (typical value around -35°F or colder), on a widespread or localized basis. For Door County, four events were recorded in the Storm Events database, with two events occurring in the winter of 2008 and two events occurring in the winter of 2014.

NCEI describes “cold/wind chill” as a period of low temperatures or wind chill temperatures reaching or exceeding locally/regionally defined advisory (typical value is -18°F or colder) conditions, on a widespread or localized basis. A combination of seasonably cold temperatures and low wind chill values (roughly 15°F below normal) is counted as a cold/wind chill event when it is the primary cause of death, as determined by a medical examiner. For Door County, three cold/wind chill events were recorded, with two events occurring in the winter of 1996 and one event occurring in the winter of 2006.

### **Probability of Occurrence, Impacts, Vulnerability, and Economic Costs**

According to the state hazard mitigation plan, the probability of exceeding 89°F is high (“caution” category in Table 2.5), but temperatures are not the only determinant of effects that also include humidity, duration, and timing of the extreme temperature event.

All municipalities in Door County are equally vulnerable to extreme temperatures. Extreme temperatures tend to have the greatest impact on the elderly. Door County has a much larger percentage of adults aged 65 and over at 22.5% compared to 13.7% for the state. However, according to the Wisconsin Environmental Public Health Tracking System, a lower rate of people visit the emergency room due to heat-related stress at 11.3 people per 100,000 in 2013 compared to 16.5 for the state for the same year.

## HAZARDOUS RAIN EVENTS

The NCEI Storm Events database categories included in this section are heavy rain, flooding, and flash flooding. Note that there is no stormwater flooding category in the database. The Planning Team risk assessment categories and rankings are:

- flash, riverine, & lake flooding: 3
- stormwater flooding: 3

### Description, Location, Historical Occurrences

*Note: unless otherwise noted, the information on flooding below is copied from the state's hazard mitigation plan, with some minor editing.*

Flooding, as defined by the National Flood Insurance Program, is “a general and temporary condition where two or more acres of normally dry land or two or more properties are inundated by water or mudflow.” Floods specifically affect floodplains, the lowlands adjacent to water bodies. Floods are natural events that are considered hazards only when people and/or property are affected. Nationwide, hundreds of flood hazard events occur each year, making it one of the most common hazards in all 50 states and U.S. territories.

There are a number of categories of floods in the U.S, however, the most common type of flooding event is riverine flooding, also known as overbank flooding. In Wisconsin, riverine floodplains range from narrow, confined channels in the steep valleys of hilly regions, to wide, flat areas in plains and coastal regions. The amount of water in the floodplain is a function of the size and topography of the contributing watershed, the regional and local climate, geological characteristics, and land use attributes.

Much of Wisconsin's flooding on larger rivers occurs more than six hours after a causative event such as heavy rain, or rain combined with snowmelt. This kind of flooding can ultimately affect not only larger rivers, but also small streams and low areas outside of the floodplains of larger rivers. The cause of flooding in large rivers is typically prolonged periods of rainfall from weather systems covering large areas. These systems may saturate the ground and overload the rivers and/or reservoirs in numerous smaller basins that drain into larger rivers. Localized weather systems, such as thunderstorms, may cause intense rainfall over smaller areas, leading to flooding in smaller rivers and streams. These events may also lead to flooding in larger waterways, as smaller rivers and streams feed into these larger systems. Annual spring floods, due to the melting of snowpack, may affect both large and small rivers and areas.

Wisconsin is prone to experiencing flash floods, ice jam floods, local drainage floods, and high groundwater floods. The most notable of these are flash floods because they occur the quickest, with little or no warning, and tend to be accompanied by other problems. Flash floods occur within six hours of a causative event such as heavy rains, ice jams, or dam failures. They usually involve a rapid rise in water level, high velocity, and large amounts of debris, which can lead to significant damage including the tearing out of trees, undermining of buildings and bridges, scouring of new channels, and creation of sink holes. The intensity of flash flooding is a function of the intensity and duration of rainfall, steepness of the watershed, stream gradients, watershed vegetation, natural and artificial flood storage areas, and configuration of the streambed and floodplain. Flash flooding on larger rivers can transition to general river flooding that persists for days.

Though Wisconsin was not as severely affected as other states in the Midwest, the 1993 floods were one of the state's most significant disasters in terms of both damages and funds received through disaster relief programs. The total amount of disaster relief funds received by the state from all declarations prior to 1993 was \$352 million. Approximately \$300 million in disaster relief was received by the state for the 1993 Presidential Disaster Declaration alone.

While most flood events are not declared a Presidential Disaster, many get classified as a major flood event. Major flooding, as defined by the National Weather Service, involves extensive inundation of

structures and roads and significant evacuations of people and/or transfer of property to higher elevations. A Flood Warning is issued if major flooding is expected during the event. Examples of conditions that would be considered major flooding include:

- many buildings flooded, some with substantial damage or destruction
- infrastructure destroyed or rendered useless for an extended period of time
- multiple homes are flooded or moved off foundations
- everyone in threatened area is asked to evacuate
- National Guard units assist in evacuation efforts
- erosion problems are extreme
- airstrip, fuel tanks, and the generator station are likely flooded
- loss of transportation access, communication, power and/or fuel spills are likely
- fuel tanks may float and spill and possibly float downstream
- ice chunks floating through town that could cause structural damage
- high damage estimates and high degree of danger to residents

A major flood event in 1973 affected 35 counties in the state, including Door County. Estimated damages for Door County was \$24 million. Also, according to the state's hazard mitigation plan, eight flood events (non-major) occurred in Door County between 1982 and 2010.

NCEI describes a "heavy rain" event as an unusually large amount of rain which does not cause a flash flood or flood, but causes damage, e.g., roof collapse or other human/economic impact. Heavy rain resulting in urban and/or small stream flooding is also classified as a heavy rain event. For Door County, one heavy rain event was recorded in 2006 and two heavy rain events were recorded in 2008. One indirect death is attributed to a heavy rain event in 2008.

NCEI describes a "flood" event as any high flow, overflow, or inundation by water which causes or threatens damage. In general, this would mean the inundation of a normally dry area caused by an increased water level in an established watercourse, or ponding of water, generally occurring more than six hours after the causative event, and posing a threat to life or property. This can be on a widespread or localized basis.

NCEI describes a "flash flood" as a rapid and extreme flow of high water into a normally dry area, or a rapid water level rise in a stream or creek above a predetermined flood level, beginning within six hours of the causative event (e.g., intense rainfall, dam failure, ice jam-related), on a widespread or localized basis. Ongoing flooding can intensify to flash flooding in cases where intense rainfall results in a rapid surge of rising flood waters. Flash floods typically only exist for a day or two.

One flood event in 1996 and one flash flood event in 2014 (September 4<sup>th</sup>) were recorded in the Storm Events database for Door County. The flash flood occurred in the Village of Ephraim and was reported to cause \$75,000 in damages. The narrative recorded in the Storm Events database for this event is provided below:

*"Thunderstorms developed in a moist and unstable air mass ahead of an approaching cold front. Clusters of storms with torrential rain caused flooding and flash flooding. Rainfall totals were mainly in the 1 to 3 inch range, with locally higher amounts. The heaviest rainfall was across northern Door County where more than 6 inches of rain fell in the Baileys Harbor area, flooding basements and campgrounds and washing out the shoulders of roads. The flooding caused damage to some documents at the Ephraim Historical Society. Isolated storms produced large hail and wind damage.*

*Heavy rainfall flooded basements, resorts, and campgrounds, and damaged roads in the Sister Bay, Fish Creek, and Baileys Harbor areas. In excess of 6 inches of rain in Baileys Harbor caused nearly every home there to sustain a backup from the sewage disposal plant. Flood waters damaged documents at the Ephraim Historical Society. The flooding also washed out shoulders of several roads in the area."*

The flash flood event that was recorded for the Village of Ephraim could also be described as surface water runoff flooding. A description of surface water runoff flooding from FEMA and anecdotal impacts of the September 4<sup>th</sup>, 2014 flooding event are described below.

### **Surface Water Runoff Flooding**

*Note: The surface water runoff flooding description provided below is a slightly modified excerpt from a FEMA document on types of flood and floodplains.*

When rainfall reaches the Earth's surface, it will either evaporate, infiltrate into the soil, or run over the surface (surface water runoff). The type of ground cover greatly influences the proportions of these events. Surface water runoff occurs when the rainfall intensity exceeds the evaporation rate and infiltration capacity of the soil. It also occurs when rainfall falls on impervious surfaces, such as buildings, roadways, and other paved areas. Water that flows along the surface may become trapped in depressions where it will either evaporate back into the air, infiltrate into the ground, or spill out of the depression as it fills. If local drainage conditions are inadequate to accommodate rainfall through a combination of evaporation, infiltration into the ground, and surface runoff, accumulation of water in certain areas may cause localized flooding problems.

Flooding problems resulting from runoff of surface water generally increase as areas become more urbanized. Greater population density generally increases the amount of impervious areas and reducing the amount of pervious areas that can absorb rainfall. Reduction in the amount of natural ground that can absorb rainfall results in an increase in the amount of surface runoff generated. Uncontrolled, this runoff may be channeled to areas that cause flooding of structures and roadways. This may be especially true where the predevelopment land surface had a gently sloping surface with no defined channels. Such areas are subject to shallow sheet flooding during storms, but urbanization and other development speeds up the accumulation of floodwater.

According to local reporting of the September 4, 2014 flooding event, parts of the county received seven to eight inches of rain within 24 hours, causing mostly surface runoff flooding and some sewer backup flooding. At least some of the sewer backup flooding was due to the fact that the power was out for approximately 12 hours. Both types of flooding primarily affected basements, where the large majority of the damage occurred. Door County Emergency Management Services received claims from 61 residents and businesses located in the Villages of Ephraim, Egg Harbor, and Sister Bay and the Towns of Baileys Harbor, Gibraltar, and Liberty Grove. Damages claimed ranged in value from a few thousand to a couple hundred thousand dollars.

### **Probability of Occurrence, Impacts, Vulnerability, and Economic Costs**

Historical records are used to determine the probability of occurrence for different extents of flooding, expressed in percentages. The percentage describes the chance that the level of flood water will exceed a certain height, on average in any given year. The most widely adopted design and regulatory standard for floods in the United States is the one-percent annual chance flood (base flood or 100-year flood), which has a one-percent chance of occurring in any particular year. This measure is a simple and general way to express the statistical likelihood of a flood; actual recurrence periods vary from place to place.

Smaller floods occur more often than larger, deeper, and more widespread floods. Thus, a "10- year" flood has a greater likelihood of occurring than a "100- year" flood. Table 2.6 below shows a range of flood recurrence intervals and their probabilities of occurrence.

**Table 2.6: Flood Recurrence Intervals**

Occurrence	Annual Percent Chance of
10-year	10.0%
50-year	2.0%
100-year	1.0%
500-year	0.2%

Source: *Federal Emergency Management Administration*

It is important to note that risk of a flood event occurring changes over time. Since natural hazards, like floods, do not affect a particular location every single year, the focus is on the overall probability of the event occurring over a selected time horizon. Assuming that most hazard events are independent outcomes, the probability of a 100-year flood occurring at any given time is 1/100 or 0.01. However, the probability of a 100-year flood occurring at least once over the next 100 years is  $1-(0.99)^{100}=0.634$ .

The state's hazard mitigation plan includes results from a flood risk assessment conducted using Hazard USA (HAZUS), a FEMA-developed software tool used to estimate damages from wind, floods, and earthquakes, among other natural disasters. Loss estimates produced by HAZUS are based on current scientific and engineering knowledge of the effects of hurricane winds, floods, and earthquakes. HAZUS takes into account various impacts of a hazard event, including the following:

- physical damage to residential and commercial buildings, schools, critical facilities, and infrastructure
- economic loss, including lost jobs, business interruptions, and repair and reconstruction costs
- social impacts and impacts to people, including requirements for shelters and medical aid

HAZUS uses Geographic Information System software to map and display hazard data and the results of damage and economic loss estimates for buildings and infrastructure. HAZUS provides for three levels of analysis, with the basic level using a nationwide database to provide rough estimates. The assessment conducted by the Wisconsin Emergency Management Division was done at the basic level, with the addition of Digital Flood Information Rate Maps where available. The state also included essential facilities data, including schools, hospitals, fire stations, Emergency Operation Centers, and police stations. Lastly, U.S. Census housing data was used to estimate construction dates.

The HAZUS default inventory data includes the following:

- general building stock
- essential facilities
- demographic information
- transportation lifeline systems
- utility lifeline systems
- high potential loss facilities
- hazardous materials facilities

The HAZUS model delineates a stream network for every square mile within a county and then performs an area weighted assessment of flood damage. The number of grid cells at a given depth is counted and then divided by the total number of cells within a census block. The result is used to "weight" damage at that flood depth for each building occupancy class. Buildings are considered a total loss once the 50% damage threshold is reached. The software analyzes building stock by occupancy and type to estimate:

- building losses
- full replacement value and depreciated replacement value
- shelter requirements
- building, content, and inventory losses

Essential facilities are not weighted, but evaluated for losses at their specific location. This evaluation is based on building and content losses, restoration time to 100% functionality, lifeline losses (for selected components), and losses to structures and equipment.

The HAZUS flood risk assessment results for Door County are listed below:

- Total damaged buildings: 305
- Total economic loss: \$58,146,000
- Building loss: \$30,818,000
- Short term shelter (population in need of): 354
- Moderately damaged essential facility buildings: 1 fire building

Map 2.1, Floodplains, illustrates Door County areas mapped by FEMA as being potentially located in the 100-year floodplain. Table 2.7 below shows the number of buildings located within the floodplain, total improved value, and average improved value for each municipality and the Northern and Southern Door unincorporated areas. Table 2.7 also lists if a municipality is participating in the National Flood Insurance Program (NFIP) and the number of repetitive loss structures. The City is the only municipality with a repetitive loss structure and the Village of Sister Bay is the only municipality not participating in the NFIP program.

**Table 2.7: Number and Value of Buildings in the Floodplain**

Municipality	# of Buildings in Floodplain	Total Improved Value	Ave Improved Value	NFIP Participation	# Repetitive Loss Structures
Northern Door (uninc. areas)	961	\$187,926,900	\$195,553	Yes	0
Southern Door (uninc. Areas)	855	\$95,788,300	\$112,033	Yes	0
City	257	\$60,097,200	\$233,841	Yes	1*
Village of Egg Harbor	39	\$9,940,300	\$254,879	Yes	0
Village of Ephraim	59	\$17,187,100	\$291,307	Yes	0
Village of Forestville	0	\$0	\$0	No**	0
Village of Sister Bay	17	\$7,039,000	\$414,059	No**	0

Source: Door County Real Property, August 2015.

\*Single-family home

\*\*Flooding is not perceived to be a major risk.

## HAIL

Hail is only the only NCEI Storm Events database category included in this section. The Planning Team risk assessment ranking for hail is 2.

### Description, Location, Historical Occurrences

Hail can develop within thunderstorms when strong currents of rising air, known as updrafts, carry water droplets high within the storm, exposing these droplets to cold air and freezing them. As the frozen droplets begin to fall toward the ground, rising currents within the storm lift them again. The hailstones gain an ice layer and grow increasingly larger with each ascent. Eventually the hailstones become too heavy for the updraft to support, and they fall to the ground.

Although hail typically accompanies severe thunderstorms, all strong thunderstorms have the potential to produce hailstones of small diameter (less than 0.75 inches). The size of hailstones varies and is a direct consequence of the severity and size of the thunderstorm; greater instability in the atmosphere causes stronger updrafts. Stronger updrafts can keep hailstones suspended for longer periods of time, resulting in larger hailstones at ground level. Severe hail is considered 0.75 inches in diameter (the size of a penny) or greater. Hailstorms can occur throughout the year, however, most hail events occur between April and October.

Hail can cause extensive crop and property damage, particularly during the months May through September when approximately 85% of hailstorms occur. This timeframe coincides with the growing and

harvesting seasons for many of Wisconsin's crops, causing economic losses and damages for the agriculture industry.

NCEI describes hail as frozen precipitation in the form of balls or irregular lumps of ice. Hail that is 0.75 inches or larger may be recorded as an event; hail that is smaller in size which causes property and/or crop damage, or casualties, may also be recorded as a hail event. Between 1963 and 2014, 66 hail events were recorded for Door County, with one event in 2014 causing \$3.5 million in crop damage. The largest hail size recorded for the county was in 1998 at 2.75" in diameter.

### Probability of Occurrence, Impacts, Vulnerability, and Economic Costs

According to the state's hazard mitigation plan, the average land area affected by an individual hail event is about 225 square miles or a diameter of 17 miles surrounding the center of the storm. Hail risk at a single point or over an area is a function of the target at risk (property or crop) and the hail frequency and intensity. The annual probability of hail occurring somewhere in the state is quite high. However, the site-specific incidence of hail is lower, due to the localized nature of the hazard.

All municipalities in Door County are equally vulnerable to hail, however, the impact is greatest in the unincorporated areas due to large areas of agricultural use. Table 2.8 below shows agriculturally assessed land area and value for the Northern and Southern Door areas. Although Southern Door has approximately one-third more agricultural land, its per acre average is \$8 less than Northern Door's per acre average. Assuming the proportion of crops to livestock is the same in both Northern and Southern Door, a hail event in Northern Door is likely to cause slightly greater crop damage due to its higher per acre average value.

**Table 2.8: Agriculturally Assessed Land Area and Value**

Area	Agricultural		
	\$	Acres	Per Acre Average
Northern Door	\$7,413,900	42,424	\$175
Southern Door	\$10,532,200	62,945	\$167
<b>Door County</b>	<b>\$17,999,300</b>	<b>105,717</b>	<b>\$170</b>

Source: Door County Real Property Listing, May 2013.

## DROUGHT

Drought is the only NCEI Storm Events database category included in this section. The Planning Team risk assessment ranking for drought is 2.

### Description, Location, Historical Occurrences

Due to its multi-dimensional nature, drought is a complex and difficult hazard to define in exact terms, partly because of the ways it differs from other natural hazards:

- The onset and end of a drought are difficult to determine due to slow accumulation and lingering effects after its apparent end.
- The lack of an exact and universally accepted definition adds to the confusion of existence and severity.
- The impact of drought is less obvious and may be spread over a larger geographic area.

Drought is the result of a natural decline in expected precipitation over an extended period of time, and occurs in virtually every climate on the planet, including areas of high and low precipitation. A drought's severity depends on its duration, intensity, geographic extent, and water supply demands for both human use and vegetation. The severity of a drought can be aggravated by other climatic factors, such as

prolonged high winds and low relative humidity. The following four definitions are commonly used to describe drought:

- Meteorological drought: degree of dryness, expressed as a departure of actual precipitation from expected average or normal amount, based on monthly, seasonal, or annual time scales
- Hydrological drought: effects of precipitation shortfalls on streamflows, reservoir, lake, and groundwater levels
- Agricultural drought: soil moisture deficiencies relative to water demands of crop life
- Socioeconomic drought (or water management drought): demand for water exceeds the water supply, resulting in a water shortage

Wisconsin is most vulnerable to agricultural drought. The state has approximately 15.2 million acres of farmland on 78,000 farms and was ranked ninth in the country in overall farm receipts in 2010 (National Agricultural Statistics Service). Even small droughts of limited duration can significantly reduce crop growth and yields, adversely affecting farm incomes and local economies. Droughts also significantly increase the risk of forest fires and wildfires. Additionally, the loss of vegetation in the absence of sufficient water can result in flooding, even from average rainfall, following drought conditions.

During the 20th century, seven notable drought events occurred in Wisconsin, as described below. These droughts affected NOAA Climate Division 6, which includes Door County.

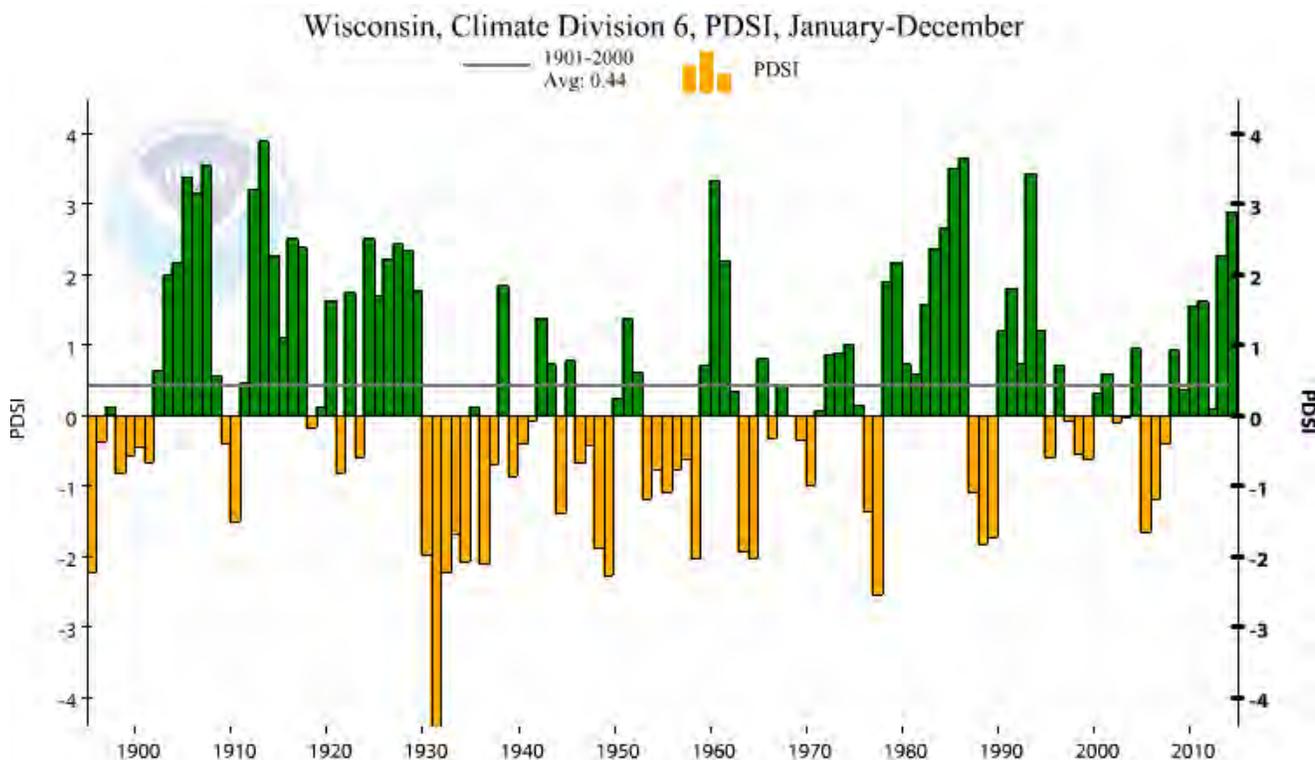
- **1929-1934:** The drought of 1929-1934 was probably the most significant in Wisconsin history, due to its duration and severity. In some parts of the state, the drought continued with somewhat decreased effect until the early 1940s.
- **1948-1950:** The 1948-1950 drought was most significant in the northern part of the state.
- **1955-1959:** This drought affected all areas of the state, but less so in the northwestern corner.
- **1976-1977:** During this drought, the federal government declared 64 Wisconsin counties as drought areas, deeming them eligible for assistance under the 1988 Disaster Relief Act. Federal assistance was used to help communities drill new wells to obtain new water supplies. State agricultural losses due to this drought were valued at \$624 million.
- **1987-1988:** Some believe the 1987-1988 drought to be the most severe ever experienced in Wisconsin and much of the Midwest. It was characterized by below normal precipitation, persistent dry air, and above normal temperatures. Its effects were most severe in north-central and northeastern Wisconsin. Crop losses statewide were between 30% and 60%, valued at \$1.3 billion. A combination of state and federal drought assistance programs helped Wisconsin farmers recover a portion of their losses.
- **2003:** In August 2003, drought conditions affected parts of south-central and southeast Wisconsin.
- **2007:** Between January and July of 2007, drought gradually affected most of Wisconsin, spreading from north to south. Summer temperatures averaged one to three degrees above normal, and eventually moderate to extreme drought covered 85% of the state. Only the southern tier counties had normal to abnormally dry conditions.

In addition to these seven droughts, a brief moderately severe drought occurred in Division 6 in 1963 and 1964. Figure 2.1 below shows the Palmer Drought Severity Index (PDSI) between 1895 and 2015 for Division 6. The PDSI, devised in 1965, was the first drought indicator to comprehensively assess moisture status. It uses temperature and precipitation data to calculate water supply and demand, incorporates soil moisture, and is considered most effective for unirrigated cropland. The PDSI primarily reflects long-term drought and has been used extensively to initiate drought relief. The index values are categorized as follows:

- -4.0 or less, extreme
- -3.0 to -3.9, severe
- -2.0 to -2.9, moderate

- -1.9 to +1.9, near normal
- +2.0 to +2.9, unusually moist
- +3.0 – +3.9, very moist

**Figure 2.1: Palmer Drought Severity Index, Door County**



Source: <http://www.ncdc.noaa.gov/cag/>.

Note that the NCEI Storm Events database shows only six drought events occurring between 1999 and 2007; one drought was reported in 1999, two in 2005, and three in 2007.

### Probability of Occurrence, Impacts, Vulnerability, and Economic Costs

According to the state hazard mitigation plan, the future incidence of drought is highly unpredictable, and may also be localized, making it difficult to determine probability with any accuracy. NOAA is improving its methodology to accurately forecast drought conditions using a combination of current and historical precipitation, streamflow, ground water, and crop data to perform short-term and long-term forecasts.

All municipalities in Door County are equally vulnerable to drought, however, the impact is greatest in the unincorporated areas due to large areas of agricultural use. Table 2.8 shows agriculturally assessed land area and value for the Northern and Southern Door areas. A drought is likely to have the same impact on both areas since it would be widespread and the average value per acre is similar, with Southern Door at \$167 per acre and Northern Door at \$175 per acre.

## HAZARDS NOT ASSESSED

### Wildfire

Note that “wildfire” is a category within the NCEI Storm Events database, however, there are no recorded wildfire events for Door County.

Chapter 26.01(2) of the Wisconsin State Statutes defines forest fires as any “uncontrolled, wild, or running fires burning in forest, marsh, field, cutover, or other lands or involving farm, city, or village property and

improvements incidental to the uncontrolled, wild, or running fires occurring on forest, marsh, field, cutover, or other lands.” Forest fires often begin unnoticed, spread quickly, and are usually signaled by dense smoke that may fill the area for miles around. Wildfires in Wisconsin are primarily human-caused through acts such as burning yard debris, arson, or campfires. They can also be caused by natural events such as lightning.

According to the Wisconsin Department of Natural Resources (DNR), an average of over 1,500 wildfire events occur annually in Wisconsin, causing thousands of dollars of damage to property and destroying natural resources. While most of the wildfire starts in Wisconsin are quickly contained and kept to less than ten acres in size, Wisconsin has experienced catastrophic fires throughout its history. The most disastrous fire in the state’s history is the Peshtigo Fire, when more than 1.5 million acres of forest burned in northeastern Wisconsin, mainly in Oconto, Marinette, Shawano, Brown, Kewaunee, Door, and Manitowoc Counties. The fire killed an estimate 1,152 people, displaced an estimated 3,000 people, and left another 350 people missing. Although this event represents the greatest single loss of human life by fire in American history, the Great Chicago Fire, which occurred at the same time, received much more publicity than the Peshtigo fire.

NCEI describes a “wildfire” event as any wildland-urban interface fire or forest, grassland, or rangeland fire that causes one or more fatalities, one or more injuries, and/or property damage (including equipment damaged in fighting the fire). In general, forest fires smaller than 100 acres, grassland or rangeland fires smaller than 300 acres, and wildland use fires not actively managed as wildfires are not recorded. There are no recorded wildfire events for Door County in the NCEI Storm Event database.

### ***Probability of Occurrence***

In 2011, in cooperation with federal and tribal partners, the DNR finished a statewide wildfire assessment to identify communities-at-risk. The three factors used to assess potential wildfire damage are as follows:

- Hazard: the relative likelihood that an ignited wildfire will achieve sufficient intensity to threaten life or property based on land cover type, and historic fire regime (pattern, frequency, intensity).
- Wildland-Urban Interface (WUI): the relative vulnerability of each 2000 census block to wildfire damage based on housing density and spatial relationships with undeveloped vegetation in the area. Wisconsin’s WUI was layered with a weighted vegetation layer to accentuate proximity to flammable vegetation.
- Ignition Risk: the relative likelihood of a wildfire ignition within a given area based on historic fire occurrence, population density, and proximity to a potential ignition source.

Each of Wisconsin’s 1,864 towns, villages, and cities were defined as a “community” and assigned one of five threat levels: very low, low, moderate, high, and very high. Communities determined to have a high or very high threat of wildfire are considered at-risk. Statewide, 337 communities were determined to be at-risk, including the Town of Liberty Grove.

### **Coastal Erosion**

*Note that “coastal erosion” is not a category within the NCEI Storm Events database.*

Coastal erosion is defined as the wearing away of land and the loss of or displacement of lands along coastlines, beaches, or dune material over a period of time as a result of natural coastal processes or human influences. Natural processes and human influences affecting coastal erosion are listed below.

Natural processes:

- lake level change
- currents
- tides
- waves and storm surges

- winds
- flooding
- orientation of shoreline
- sediment influx
- littoral processes
- ice floes
- overwash

Human influences:

- dredging
- jetty and groin construction
- hardening shorelines with seawalls
- revetments
- beach nourishment
- boat wakes
- construction of harbors
- construction of sediment-trapping dams in the river tributaries

Rates of bluff and dune erosion along the shores of the Great Lakes vary from no erosion to tens of feet per year due to annual variability in wave climate and lake levels. Times of high water or wave action accelerate the erosion process, with bluff erosion more likely to occur during major storm events as a result of increased wave action on the shoreline. The effects of wave-induced erosion are usually greater during periods of high water-levels. Other significant factors contributing to shoreline erosion involve the movement of beach sediments for navigational improvements and shoreline structures and some dredge-material disposal practices that deplete both tributary and shoreland sources of sediment.

The state's hazard mitigation plan describes all of Wisconsin's 15 coastal counties as experiencing bluff erosion, coastal flooding, fluctuating water levels, and damage to shoreline structures. Additionally, the Wisconsin Coastal Management Program's "Needs Assessment and Strategy, 2011-2015" describes the 185 miles of shoreline from southern-most Kenosha County to the Sturgeon Bay Canal as being the most vulnerable, as well as the northeastern part of Brown County. The report describes erosion along the remainder of the Lake Michigan shore (from the Sturgeon Bay Canal in Door County to Green Bay) as limited to smaller segments of bays and clay banks.

### ***Probability of Occurrence***

According to the Wisconsin Initiative on Climate Change Impacts report, the state's coastal regions will face unique challenges due to lower water levels, with Lake Michigan's average water level predicted to decrease by about a foot by the end of the century. Additionally, reduced ice cover due to warmer temperatures, combined with an increase in wind strength, will expose shorelines to larger waves for longer periods of time, resulting in shoreline erosion. Predicted immoderate rain events will make shorelines exceedingly vulnerable to erosion as the soil will retain moisture more of the time, making it unstable and inordinately prone to erosion. Shoreline erosion eventually leads to shoreline recession, the change in distance from a shoreline feature's original position to the eroded position, the most visible aspect of erosion. However, recession does not immediately follow erosion and can take years to occur. Shoreline damage can also occur with fluctuating water levels and excessive wave impact. As waves down-cut the lakebed during low-water times, shoreline erosion happens more quickly; then when water levels rise again, waves can reach further inland and lead to shoreline damage.

The state's hazard mitigation plan includes a risk assessment that estimates losses from coastal erosion. The assessment used HAZUS default data from the 2000 Census to determine the number and types of structures subject to low- and high-risk erosion. The erosion risk zones are based on distance in miles from coastal water, with the high-risk erosion zone defined as  $\frac{1}{4}$  mile from coastal water and the low-risk erosion zone defined as  $\frac{1}{4}$  to  $\frac{1}{2}$  mile from coastal water. The replacement values of structures were

estimated based on structure type and dimensions, with the replacement value assumed to be equal to the total loss of the structure.

Table 2.9 shows the HAZUS loss estimation for the high-risk and low-risk erosion zones. Door County has a total of 7,956 structures subject to high-risk erosion, valued at about \$254 million. Within the low-risk erosion zone, Door County has a total of 9,747 structures, valued at \$604,386,720. The state's hazard mitigation plan ranks both low- and high-risk erosion zones as "high" risk for potential losses in Door County.

**Table 2.9: Coastal Erosion Zone Loss Estimation, Door County**

Door County	Number of Structures				Loss Estimation			Risk
	Res.	Com.	Gov.	Total	Res.	Com.	Gov.	
High-Risk Erosion Zone	7,889	66	1	7,956	\$252,104,420	\$2,074,860	\$14,140	High
Low-Risk Erosion Zone	9,654	92	1	9,747	\$598,461,600	\$5,896,840	\$28,280	High

Source: State of Wisconsin Hazard Mitigation Plan, 2011.

### Landslide and Land Subsidence

*Note: Neither "landslide" nor "land subsidence" is a category within the NCEI Storm Events database.*

Landslides, the downward and outward movement of slopes, refers to various kinds of events, including mudflows, mudslides, debris flows, rock falls, rockslides, debris avalanches, debris slides, and earth flows. Landslides may include any combination of natural rock, soil, or artificial fill, and are classified by the type of movement and the type of material, as described below:

- Slides are downward displacements along one or more failure surfaces of soil or rock. The material may be a single intact mass or a number of pieces. The sliding may be rotational (turning about a point) or translational (movement roughly parallel to the failure surface). The most common type of slide is called a slump. A slump is a rotational slide occurring when a portion of a hillside moves downslope under the influence of gravity.
- Flows are a form of rapid mass movement by loose soils, rocks, and organic matter, together with air and water that form a rapidly downhill flowing slurry mixture. Flows are distinguished from slides by high water content and velocities that resemble those of viscous liquids.
- Lateral spreads are large movements of rock, fine-grained soils (i.e., quick clays), or granular soils, distributed laterally. Liquefaction may occur in loose, granular soils, and can occur spontaneously due to changes in pore-water pressure or due to earthquake vibrations.
- Falls and topples are masses of rocks or material that detach from a steep slope or cliff that free-fall, roll, or bounce. Movements typically are rapid to extremely rapid. Earthquakes commonly trigger rock falls.

Land subsidence occurs when subsurface supports (i.e., bedrock or soils) fail, causing a loss of surface elevation. This hazard is primarily caused by human activities in relation to mining and drainage of soils, but can also be caused by geologic conditions. In certain parts of the state, sinkholes are more likely to be caused by human activity, such as abandoned mines or storm sewers. In other areas, such as Door County, sinkholes are caused from Karst formations, prevalent in areas where carbonate rocks, such as limestone or dolomite, are present. As the limestone rock under the soil dissolves over time from rainfall or flowing groundwater, a hollow area may form underground into which surface soil can sink.

### Probability of Occurrence

Landslide probability is highly site-specific, and cannot be accurately characterized on a statewide basis, except in the most general sense. Statewide analyses for karst potential have been performed by the US

Geological Survey and the Wisconsin Geological and Natural History Survey. Most areas at greatest risk of shallow karst potential (less than five feet below surface) are found in the far western and southwestern portions of the state, however, Door County makes up the majority of an outlying area. Deeper karst potential (five to 300 feet below ground surface) is found largely in the eastern portion of the state, along the Fox River and into southeastern Wisconsin. In Door County, deeper karst potential is found in the southeast and southwest parts of the county.

According to the state's hazard mitigation plan, areas of Door County have had "moderate" landslide incidences. These areas are shown along the coast in contiguous stretches in the Towns of Brussels and Union, the Towns of Sturgeon Bay and Clay Banks, and the Towns of Liberty Grove (west coast) and Gibraltar. Although these areas have been designated as "moderate incidence" areas, they have not been given a "susceptibility" designation. As such, these moderate incidence areas do not seem to pose any significant threat at this time.

## **Dam Failure**

*Note that "dam failure" is not a category within the NCEI Storm Events database.*

A dam is a barrier, typically constructed of earth, rock, concrete, or mine tailings, used to store, control, or divert water. The water impounded behind a dam is referred to as the reservoir and its volume is measured in acre-feet, with one acre-foot being the volume of water that covers one acre of land to a depth of one foot.

A dam failure is the collapse, breach, or other failure of a dam that causes downstream flooding. Dam failures usually occur when the spillway capacity is inadequate and water overtops the dam or when internal erosion through the dam foundation occurs (also known as piping). If internal erosion or overtopping causes a full structural breach, a high-velocity, debris-laden wall of water is released and rushes downstream, damaging or destroying whatever is in its path. Dam failures may result due to one or more the following:

- prolonged periods of rainfall and flooding (the cause of most failures)
- inadequate spillway capacity which causes excess overtopping flows
- landslides into reservoirs
- high winds
- improper maintenance
- internal erosion erosions due to embankment or foundation leakage or piping
- improper design
- negligent operation
- failure of upstream dams
- earthquakes

For emergency planning purposes, dam failures are categorized as one of the following:

- **Rainy Day Failures.** Rainy day failures involve periods of excessive precipitation leading to unusually high runoff. This high runoff increases the reservoir level, and if not controlled, the overtopping of the dam or excessive water pressure can lead to dam failure. Normal storm events can also lead to rainy day failures if water outlets are plugged with debris or otherwise made inoperable.
- **Sunny Day Failures.** Sunny day failures occur due to poor dam maintenance, damage/obstruction of outlet systems, or vandalism. This is the worst type of failure and can be catastrophic because the breach is unexpected and there may be insufficient time to properly warn downstream residents.

The DNR has records on 23 dams located in Door County; most are private dams, classified as "small" dams, except for the one "large" dam located in the Town of Forestville, owned and operated by Door County. The reservoir associated with this dam is 72 acres in size and 7 feet deep.

### ***Probability of Occurrence***

The direct economic impact of a dam or levee failure includes, but is not limited to, the cost of repair of the dam or levee, the flood damage resulting from the failure, and loss of income due to displaced businesses or workers. Though there have been very few dam failures in Wisconsin resulting in major damages or loss of life, many existing dams are starting to need more frequent repairs. The DNR administers the Dam Safety program, authorized under Ch. 31, Wis. Stats., which regulates all dams and bridges affecting navigable waters in the state. DNR administrative code NR333 mandates that an Inspection, Operation, and Maintenance (IOM) Plan be approved by the DNR in accordance with the following situations:

- when a new dam is being designed and constructed
- within ten years of performing a hazard analysis on an existing dam
- when an existing dam is reconstructed
- after a dam failure analysis is approved by the DNR
- when a dam is referred to in an adopted floodplain zoning ordinance
- when the DNR issues a department directive ordering a dam safety inspection

Under NR 333, the DNR assigns hazard ratings to large dams in the state. Two factors are considered when assigning hazard ratings: existing land use and land use controls (zoning) downstream of the dam. Dams are classified in one of three categories that identify the potential hazard to life and property:

- high hazard – failure of dam would probably result in loss of life
- significant hazard – failure of dam could result in appreciable property damage
- low hazard – failure would result in only minimal property damage and loss of life is unlikely

In 2012, the Town of Forestville dam was reassigned by the DNR from “significant hazard” to “low hazard” per a substantiated formal request made by the Door County Airport and Parks Department.

### **Climate Change**

*Note that “climate change” is not a category within the NCEI Storm Events database.*

NOAA defines climate change as a non-random change in climate that is measured over several decades or longer. The change may be due to natural or human-induced causes. The Wisconsin Initiative on Climate Change Impacts (WICCI) has been researching effects of climate change specific to Wisconsin. WICCI is a partnership between the University of Wisconsin, DNR, and other state agencies and institutions. The group was formed in 2007 as a response to a bi-partisan state legislative committee wanting to better understand the potential effects of climate change within the state.

In its preliminary work, WICCI found that Wisconsin’s climate has changed in a pattern that is consistent with well-documented global trends. The WICCI analysis was based on daily weather data recorded between 1950 and 2006 at 176 weather stations from throughout the state. The key findings from this analysis are as follows:

- There was a statewide increase in annual average temperature of 1.1°F, with peak warming in the northwest portion of Wisconsin.
- The observed average temperature increase in the state has been highest for winter; statewide winter temperatures have increased 2.5°F since 1950, with 3.5°F to 4.5°F increases in the northwest portion of the state.
- Wisconsin experiences fewer nights below 0°F than in 1950. Specifically, most of the state experiences between two and six fewer nights, while the extreme northwestern portion of the state experiences between 18 and 24 fewer nights below 0°F.
- Statewide, the average growing season lasts 12 days longer than it did in 1950. In other words, the “spring thaw” comes sooner, and the “fall freeze” comes later.
- Wisconsin has experienced a 10% increase in average annual precipitation over the 56-year period from 1950 to 2006. This is an annual average of about three more inches of precipitation than in

the 1950s. Noteworthy is the additional precipitation, as much as seven inches, in areas with high population density, such as near Madison (Dane County), Milwaukee (Milwaukee County), Eau Claire (Eau Claire County), and Hudson (Saint Croix County).

According to the state hazard mitigation plan, Door County experienced the following temperature changes between 1950 and 2006:

- 1.0 – 1.5 degree increase in average temperature;
- 1.0 – 1.5 degree increase in average winter temperature; and
- 1.5 – 3.5 inch increase in average annual precipitation.

### ***Probability of Occurrence***

Historical temperature and precipitation data for Wisconsin have shown that the state has become warmer and wetter since 1950. According to WICCI, between 1950 and 2006, Wisconsin's average annual temperature rose by 1.1 degrees Fahrenheit and average annual precipitation has increased by 3.1 inches. Circulation models predict that this warming trend will continue and increase, with future precipitation also likely to increase. More precipitation is likely to occur in the form of rain and freezing rain during the winter, as well as increasing in both frequency and intensity during the spring and fall. By 2050, temperatures for the state are predicted to warm between 6° and 7° Fahrenheit.

The combination of warmer temperatures, more precipitation, and more intense precipitation will have a critical impact on the quantity and quality of the state's water resources, natural habitats, agriculture, and the social and built environment. The state's coastal regions will face unique challenges in the form of shoreline erosion and recession and threats to coastal wetlands due to lower water levels, with Lake Michigan's average water level predicted to decrease by about a foot by the end of the century.

According to the state's hazard mitigation plan, the future is uncertain with regard to climate change, with varying models predicting a range of outcomes. It is unknown how much the climate will change and at what speed it will change. As further research is performed, better models to predict the effects of climate change will become available.

### **Dense Fog**

NCEI describes a "dense fog" event as water droplets suspended in the air at the Earth's surface, over a widespread or localized area, reducing visibility to values equal to or below locally/regionally established values for dense fog (usually ¼ mile or less) and impacting transportation or commerce. A dense fog event is also reported anytime an accident or injury occurs due to fog. Between 1996 and 2000, ten dense fog events were recorded for Door County, with six of those events recorded in 1996.

### **Funnel Clouds and Waterspouts**

NCEI describes a "funnel cloud" as a rotating, visible, extension of a cloud pendant from a convective cloud with circulation not reaching the ground. It includes cold-air funnels which typically form in a shallow, cool air mass behind a cold front. The funnel cloud should be large, noteworthy, or create strong public interest to be reported. Between 1999 and 2009, four funnel clouds were recorded for Door County.

NCEI describes a "waterspout" event as a rotating column of air, pendant from a convective cloud, with its circulation extending from cloud base to the water surface of an area assigned as a Marine Forecast Zone, including the Great Lakes. A condensation funnel may or may not be visible in the vortex. Between 1998 and 2001, six waterspouts were recorded for Door County.

## **NON-NATURAL HAZARD PROFILES**

The non-natural hazards described in this section are as follows:

- communicable diseases
- private water supply contamination
- hazardous materials – roadway
- hazardous materials – waterway
- loss of electrical system
- transportation – roadway accidents
- structural fire
- loss of sewer system
- nuclear power plant

The data provided below regarding communicable diseases comes from the Center for Disease Control and Prevention. The roadway accident information comes from the Wisconsin Department of Transportation. The private water supply contamination, hazardous materials on roadways, and hazardous materials on waterways come from the DNR's Remediation and Redevelopment Program, which oversees the investigation and cleanup of environmental contamination and the redevelopment of contaminated properties. The Bureau for Remediation and Redevelopment Tracking System (BRRTS) is the DNR's on-line database that provides information about contaminated properties and other activities related to the investigation and cleanup of contaminated soil or groundwater in Wisconsin for both state and federal cleanup programs. The database includes (but is not limited to) the following contamination data:

- investigations and cleanups of contaminated soil and/or groundwater
- spills
- Superfund sites
- DNR funding assistance

The BRRTS divides the data into groups of activities, as listed below:

- Abandoned container. An abandoned container with potentially hazardous contents has been inspected and recovered. No known discharge to the environment has occurred. If the container discharged a hazardous substance, a "Spills" activity is created at this location (see "Spills" below).
- Leaking Underground Storage Tank (LUST). A LUST site has soil and/or groundwater contaminated with petroleum, which includes toxic and cancer causing substances. However, given time, petroleum contamination naturally breaks down in the environment (biodegradation). Some LUST sites may emit potentially explosive vapors.
- Environmental Repair Program (ERP). ERP sites are sites other than LUSTs that have contaminated soil and/or groundwater. Examples include industrial spills (or dumping) that need long term investigation, buried containers of hazardous substances, and closed landfills that have caused contamination. The ERP module includes petroleum contamination from above-ground (but not from underground) storage tanks.
- Spills. A discharge of a hazardous substance that may adversely impact, or threaten to impact, public health, welfare, or the environment. Spills are usually cleaned up quickly. A spill is reportable to the DNR if there is an impact to human health; to the environment; there is a fire, explosion or safety hazard; or the spill has been cleaned up immediately. Spills more than the quantities listed below must be reported to the DNR:
  - Petroleum compounds
    - petroleum product spilled and completely contained on an impervious surface
    - less than 1 gallon of gasoline or light grade petroleum product spilled onto a pervious surface or which runs off an impervious surface
    - less than 5 gallons of medium or heavy grade petroleum products spilled onto a pervious surface or which runs off an impervious surface

- Agrichemical compounds
  - less than 250 pounds dry fertilizer
  - less than 25 gallons of a liquid fertilizer
  - pesticides that would cover less than 1 acre of land if applied according to label instructions
- General Property Information. This consists of records of various milestones related to liability exemptions, liability clarifications, and cleanup agreements that have been approved by the DNR to clarify the legal status of a property.
- Voluntary Party Liability Exemption (VPLE). VPLEs are an elective process in which a property owner conducts an environmental investigation and cleanup of an entire property and then receives limits on future liability for that contamination under s. 292.15, Wisconsin Statutes. An individual, business, or unit of government can receive the liability exemption after a completed cleanup is approved.
- No Action Required. There was, or may have been, a discharge to the environment and, based on the known information, DNR has determined that the responsible party does not need to undertake an investigation or cleanup in response to that discharge.

## COMMUNICABLE DISEASES

The Planning Team assigned communicable diseases a total of nine points out of a possible nine points for level of risk.

- **Meningitis** (3 occurrences reported in Door County between 1997 and 2014). Meningitis is an inflammation of the membranes (meninges) surrounding the brain and spinal cord. The swelling associated with meningitis often triggers the "hallmark" signs and symptoms of this condition, including headache, fever, and a stiff neck. Most cases of meningitis in the U.S. are caused by a viral infection, but bacterial and fungal infections also can lead to meningitis. Depending on the cause of the infection, meningitis can get better on its own in a couple of weeks or it can be a life-threatening emergency requiring urgent antibiotic treatment.

It's easy to mistake the early signs and symptoms of meningitis for the flu (influenza). Meningitis signs and symptoms may develop over several hours or over one or two days. The signs and symptoms that may occur in anyone older than the age of two include:

- sudden high fever
  - severe headache that isn't easily confused with other types of headache
  - stiff neck
  - vomiting or nausea with headache
  - confusion or difficulty concentrating
  - seizures
  - sleepiness or difficulty waking up
  - sensitivity to light
  - lack of interest in drinking and eating
  - skin rash in some cases, such as in meningococcal meningitis
- **Tuberculosis** (7 TB and 34 latent TB occurrences reported in Door County between 1997 and 2014). Tuberculosis (TB) is a disease caused by germs that are spread from person to person through the air. TB usually affects the lungs, but it can also affect other parts of the body, such as the brain, the kidneys, or the spine. A person with TB can die if they do not get treatment. The general symptoms of TB disease include feelings of sickness or weakness, weight loss, fever, and night sweats. The symptoms of TB disease of the lungs also include coughing, chest pain, and the coughing up of blood. Symptoms of TB disease in other parts of the body depend on the area affected.

TB germs spread into the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. These germs can stay in the air for several hours, depending on the environment. Persons who breathe in the air containing these TB germs can become infected; this is called latent TB infection. People with latent TB infection have TB germs in their bodies, but they are not sick because the germs are not active. These people do not have symptoms of TB disease, and they cannot spread the germs to others, however, they may develop TB disease in the future. They are often prescribed treatment to prevent them from developing TB disease.

People with TB disease have TB germs that are active, meaning that the germs are multiplying and destroying tissue in their body and can be spread to others. They usually, but not always, have symptoms of TB disease, which include those listed below. Drugs that can treat TB disease are available.

- a bad cough that lasts three weeks or longer
  - pain in the chest
  - coughing up blood or sputum
  - weakness or fatigue
  - weight loss
  - no appetite
  - chills
  - fever
  - sweating at night
- **Cryptosporidium** (33 cases of cryptosporidiosis reported in Door County between 1997 and 2014). Cryptosporidium is a microscopic parasite that causes the diarrheal disease cryptosporidiosis. Both the parasite and the disease are commonly known as "Crypto." There are many species of Cryptosporidium that infect animals, some of which also infect humans. The parasite is protected by an outer shell that allows it to survive outside the body for long periods of time and makes it very tolerant to chlorine disinfection. While this parasite can be spread in several different ways, water (drinking water and recreational water) is the most common way the parasite spreads.

Cryptosporidium is a leading cause of waterborne disease among humans in the United States. Cryptosporidium parasites are found in every region of the United States and throughout the world. Travelers to developing countries may be at greater risk for infection because of poorer water treatment and food sanitation. In the United States, an estimated 748,000 cases of cryptosporidiosis occur each year.

Crypto lives in the intestine of infected humans or animals that shed Cryptosporidium parasites in the stool. Millions of Crypto parasites can be released in a bowel movement from an infected human or animal. Shedding begins when the symptoms begin and can last for weeks after the symptoms (e.g., diarrhea) stop. Crypto may be found in soil, food, water, or surfaces that have been contaminated with the feces from infected humans or animals. Crypto is not spread by contact with blood. Crypto can be spread by:

- putting something in the mouth or accidentally swallowing something that has come in contact with the stool of a person or animal infected with Crypto
- swallowing recreational water or beverages contaminated with Crypto
- eating uncooked food contaminated with Crypto
- touching your mouth with contaminated hands

Contaminated water may include water that has not been boiled or filtered, as well as contaminated recreational water sources. Several community-wide outbreaks of cryptosporidiosis have been linked to drinking municipal water or recreational water contaminated with Cryptosporidium. Once infected, people with decreased immunity are most at risk for severe disease, depending on a person's degree of immune suppression.

- ***E. Coli*** (5 cases of Shiga Toxin-Producing occurrences reported in Door County between 1997 and 2014). *Escherichia coli* (*E. coli*) bacteria normally live in the intestines of people and animals. Most *E. coli* are harmless and actually are an important part of a healthy human intestinal tract. Some *E. coli* are pathogenic, however, meaning they can cause illness, either diarrhea or illness outside of the intestinal tract.

In 2002, the Door County Public Health Department began an extensive effort to monitor *E. coli* in the water at many beaches around Door County, largely due to the outbreak of a gastrointestinal illness traced back to one of the county's most popular beaches. In 2003, the Door County Soil & Water Conservation Department (SWCD) began identifying *E. coli* contamination sources at 31 beaches around the county, with a final report published in 2007. The final report concluded that storm water discharge during and after rain events is one of the clear sources of *E. coli* contamination in beach water throughout the county, with the most contaminated sources originating from onshore sources. Eleven beaches in nine different municipalities throughout the county were shown to have elevated *E. Coli* levels during or after rain events, the contamination likely due to the storm water discharge pipes located on or near the beaches. Since the 2007 report, the SWCD, through its Beach Contamination Reduction program, has worked with the county, City of Sturgeon Bay, Villages of Egg Harbor, Ephraim, and Sister Bay, and the Towns of Baileys Harbor, Gibraltar, Jacksonport, and Liberty Grove to develop construction plans to reduce stormwater contamination in public beach water.

- **Pneumonia.** Pneumonia can be caused by viruses, bacteria, and fungi. In the United States, common causes of viral pneumonia are influenza and respiratory syncytial virus, and a common cause of bacterial pneumonia is *Streptococcus pneumoniae* (pneumococcus).
- **Norovirus.** Norovirus is very contagious, transmitted from an infected person, contaminated food or water, or by touching contaminated surfaces. The virus causes the stomach or intestines or both to get inflamed (acute gastroenteritis), leading to stomach pain, nausea, diarrhea, and vomiting. It is the most common cause of acute gastroenteritis in the United States. Norovirus illness can be serious, especially for young children and older adults. Each year, it causes 19-21 million illnesses and contributes to 56,000-71,000 hospitalizations and 570-800 deaths. Norovirus is also the most common cause of foodborne-disease outbreaks in the United States. The best way to help prevent norovirus is to practice proper hand washing and general cleanliness.
- **Influenza** (3 hospitalizations between 1996 and 2014)
  - Seasonal Flu. A contagious respiratory illness caused by influenza (flu) viruses occurring every year. It affects an average of 5 percent to 20 percent of the U.S. population by causing mild to severe illness, and in some instances can lead to death.
  - H1N1 Influenza (swine flu; 18 cases in 2009). H1N1 influenza is a respiratory disease of pigs caused by type A influenza viruses that cause regular outbreaks in pigs. People do not normally get H1N1 influenza, but human infections can and do happen. H1N1 influenza viruses have been reported to spread from person-to-person.
  - Avian Influenza. Commonly known as bird flu, this strain of influenza virus is naturally occurring in birds. Wild birds can carry the virus and may not get sick from it; however, domestic birds may become infected by the virus and often die from it.

## WATER SUPPLY CONTAMINATION – PRIVATE

The Planning Team assigned private water supply contamination a total of eight points out of a possible nine points for level of risk.

Many of the soils in Door County are very shallow, especially in the northern two-thirds of the county. Across most of the county, soils are less than five feet in depth to bedrock; 22% of the soil is less than 18 inches in depth and another 17% is between 18 to 36 inches in depth. The soils in the northern two-thirds of the county are rough and/or shallow, with much of the land cover remaining in woodland or wetland.

The soils in the southern one-third of the county are deeper, smoother, and predominantly farmed. The largest acreage of the county's wetlands are also found in this region.

Since the county's groundwater is recharged from water that infiltrates through a land surface consisting of thin soils and bedrock formations, Door County has one of the highest risks of surface water pollution to groundwater of any county in Wisconsin. The dolostone bedrock contains many karst features that provide for large water-holding capacity and lateral flow, but also allow water and accompanying contaminants to quickly and directly enter the dolostone aquifer.

As development in an area increases, so does the impervious surface area, such as roofs, driveways, and parking lots. This affects the amount and quality of water that infiltrates to the groundwater due to the changes to vegetative cover, slope, soil composition, and soil depth. Groundwater may be contaminated by construction and agricultural runoff events, which can lead to contamination of private wells, fish kills, and an influx of nutrients into surface waters, causing algal blooms. Additionally, leaking private septic system tanks, usually made out of steel, or other malfunctioning portions of private septic systems, are primary contributors of bacteria such as fecal coliform and *E. coli* to groundwater.

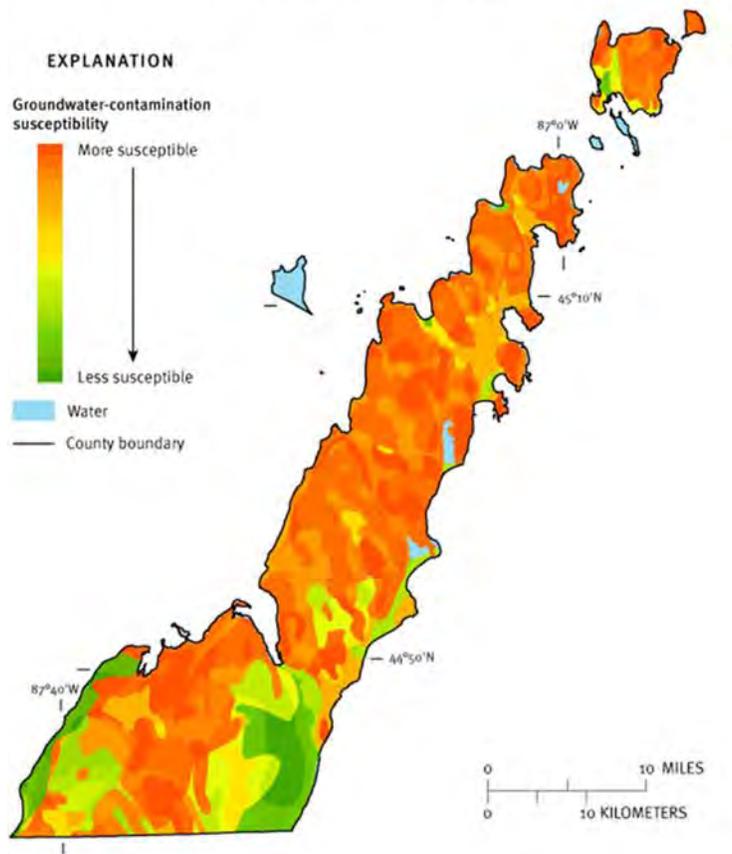
Figure 2.2 is a groundwater contamination susceptibility map, created by the DNR in partnership with the United States Geological Survey, University of Wisconsin-Extension, and Wisconsin Geological and Natural History Survey. Five physical resource characteristics were identified as important in determining how easily a contaminant can be carried through overlying materials to the groundwater. These characteristics are depth to bedrock, type of bedrock, soil characteristics, depth to water table, and characteristics of surficial deposits (glacial deposits lying between bedrock and soil).

Municipal wells serve approximately one-third of the county's households, while private wells serve approximately two-thirds of the county's households. Only the City of Sturgeon Bay, the Villages of Forestville and Sister Bay, and Maplewood (Town of Forestville) have municipal water. The Village of Sister Bay also serves some households located in the Town of Liberty Grove. The City of Sturgeon Bay and the Villages of Forestville and Sister Bay have mapped their "zones of contribution," the surface area on the land that contributes rain and snowfall to the groundwater for a particular well site. Subsequent to mapping their zones of contributions, the City of Sturgeon Bay, Town of Liberty Grove, and the Village of Sister Bay have adopted wellhead protection ordinances.

Due to Door County's high risk for groundwater contamination, the county has requirements above and beyond the typical state requirements for well-drilling in place, such as additional casing requirements. The well casing is a steel or plastic pipe that lines the well, keeping it from caving in and protecting contamination of the ground water by surface water. In 1971, based on the findings of a study conducted by the Wisconsin Geological Survey of the county's groundwater, the county set casing depths for two different "zones," with minimum requirements of 100 feet and 170 feet depending upon which zone the well was located within. (State-wide, wells constructed prior to 1957 were required to have a uniform minimum casing of 40 feet; between 1957 and 1971, a uniform minimum casing of 100 feet was required. Currently, state-wide requirements vary depending on site conditions.) Since 2006, the transition areas between those zones are now required to have a minimum of 140 feet of casing. In some situations, the DNR grants variances for construction and/or usage of a well with less than the minimum required casing amounts. The DNR may also recommend more casing based on known contamination in an area.

While municipal wells are routinely tested for contaminants, proper monitoring of contaminants in private wells often does not occur. Known problems for private wells are primarily bacterial contamination and nitrates. Copper and lead can also be present in groundwater, but usually come from plumbing/piping and sometimes from pesticides or herbicides. Lead can also be present in groundwater because of the county's past agricultural practice of using lead arsenic for controlling diseases in orchards.

**Figure 2.2: Groundwater Contamination Susceptibility Analysis, Door County**  
 Door County – Groundwater-Contamination  
 Susceptibility Analysis



This groundwater-contamination susceptibility map is a composite of five resource characteristic maps, each of which was derived from generalized statewide information at small scales, and cannot be used for any site-specific purposes.

Map source: Schmidt, R.R., 1987, Groundwater contamination susceptibility map and evaluation: Wisconsin Department of Natural Resources, Wisconsin's Groundwater Management Plan Report 5, PUBL-WR-177-87, 27 p.

Figure created for the "Protecting Wisconsin's Groundwater Through Comprehensive Planning" web site, 2007, <http://wl.water.usgs.gov/gwcomp/>

Contaminants may enter the groundwater through spills and leaking underground tanks. Water supply contamination from such occurrences has been reported to the DNR 14 times between 1984 and 2009, as listed below by type:

- 2 ERP – open
- 1 LUST – open
- 1 historical Spill
- 5 closed LUST
- 5 closed Spills

The type of substances causing the contamination and number of events reported are as follows:

- petroleum: 8
- volatile organic compounds: 2
- agriculture chemicals: 2
- food: 1
- manure: 1

Note that the one manure event listed in the database occurred in 2005. Not included in the database is a manure event that occurred in 2014 when manure was spread too close to a sinkhole and ended up in the

drinking water supply of nearby homes in the Town of Jacksonport. Sixteen people became ill and one person was hospitalized, according to the Door County Department of Public Health.

## **HAZARDOUS MATERIALS – ROADWAY**

The Planning Team assigned hazardous material spills along or near a roadway a total ranking of six points out of a possible nine points.

Hazardous material spills along or near a roadway in Door County have been reported to the DNR 12 times between 1996 and 2014. The types of substances and number of events reported are listed below:

- petroleum: 8
- agriculture chemicals: 2
- sewage: 1
- anti-freeze: 1
- mineral oil: 1
- manure: 1

## **HAZARDOUS MATERIALS – WATERWAY**

The Planning Team assigned hazardous material spills in a waterway a total of five points out of a possible nine points.

Hazardous material spills resulting in surface water contamination in Door County have been reported to the DNR 193 times between 1971 and 2015. The status of all events are either “closed spill,” “historic spill,” or “closed ERP.” The types of substances and number of events reported are listed below:

- petroleum: 134
- unknown or historical spill with no substance listed: 45
- sewage: 4
- other: 4
- mineral oil: 3
- industrial chemical: 2
- volatile organic compound: 1
- animal product: 1
- food: 1
- industrial chemical: 1
- anti-freeze - 1
- manure - 1

Out of these 193 events, 163 (84%) took place in the Sturgeon Bay area, primarily taking place at the ship building/repair businesses.

## **LOSS OF ELECTRICAL SYSTEM**

The Planning Team assigned loss of electrical system a total of five points out of a possible nine points for level of risk.

According to a federal report issued by the Executive Office of the President, “Economic Benefits of Increasing Electric Grid Resilience to Weather Outages,” severe weather is the leading cause of power outages in the United States. During a power outage, the normal operation of homes, businesses, public buildings and other critical community facilities may be interrupted. The costs of outages take various forms, including lost output and wages, spoiled inventory, delayed production, inconvenience, and damage to the electric grid. Grid resilience is increasingly important as climate change increases the frequency and intensity of severe weather. Scientific research predicts more severe hurricanes, winter storms, heat waves, floods and other extreme weather events induced by climate change. Continued investment in grid

modernization and resilience will mitigate these costs over time, saving the economy billions of dollars and reducing the hardship experienced when extreme weather strikes.

In addition to the economic costs of power outages, the loss of home heating and cooling systems may lead to heat exhaustion and hypothermia. Note that there are no recorded deaths or hospitalizations in Door County due to the loss of home heating and cooling systems. Described below are the primary electric, natural gas, and other fuel sources that keep homes heated/cooled in Door County.

### **Electric Service**

Except for a few small home-based alternative energy systems, all of the county's energy for electricity is imported from outside the county. Wisconsin Public Service (WPS) supplies the majority of power to Door County's residential, agricultural, commercial, and industrial customers, except for the Sturgeon Bay Utilities service area and the Town of Washington.

Sturgeon Bay Utilities (SBU) maintains an electric distribution system that services over 8,300 customers in the City of Sturgeon Bay and the Towns of Clay Banks, Nasewaupée, Sevastopol, and Sturgeon Bay. Utility staff members are responsible for maintaining three substations with current capacity of over 98 megawatts and over 281 miles of overhead and underground transmission lines. Over 3,300 transformers regulate the voltage measured by 9,400 meters used by its customers.

SBU is customer-owned and a member of Wisconsin Public Power, Inc. (WPPI). WPPI, created to provide reliable, low-cost power and services to its member/owners, is a regional power company serving 50 customer-owned electric utilities. Through WPPI, these public power utilities share resources and own generation facilities that provide reliable, affordable electricity to more than 190,000 homes and businesses in Wisconsin, Upper Michigan, and Iowa. WPPI supplies electricity to approximately 60 percent of the load served by municipal electric systems in Wisconsin, based on energy sales.

The Washington Island Electric Cooperative Inc., a private electric service utility established in 1945, serves approximately 700 year-round residents and 1,300 seasonal residents on Washington Island.

Most electric power for the county is transmitted along high voltage electric transmission lines owned and operated by the American Transmission Company (ATC). The ATC, formed in 2001, is a transmission-only utility that owns and operates approximately 9,350 miles of transmission lines and 500 substations. It serves approximately two-thirds of Wisconsin, including Door County. Four transmission lines run through Southern Door to the City. Only one transmission line serves all of northern Door County (north of the Dunn Road station). Major transmission lines within Door County include 138 kilovolt lines. Smaller electric transmission lines (69 kilovolt) also traverse throughout the county.

The ATC publishes an annual 10-year Transmission System Assessment Summary Report that outlines systems limitations and solutions for each of their five zones in Wisconsin. The September 2014 report recommends rebuilding a 69 kilovolt line between Dyckesville and the City, to be in service by the year 2016. ATC also plans to upgrade equipment at the Canal substation.

### **Natural Gas and Other Fuels**

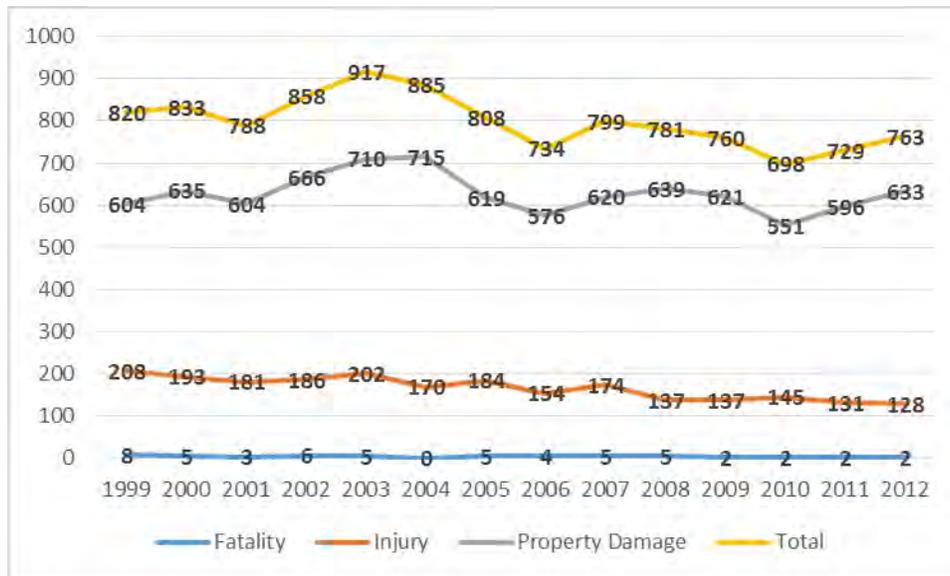
WPS provides natural gas service to the City of Sturgeon Bay and Southern and Central Door, including the Towns of Brussels, Forestville, Gardner, Nasewaupée, Sevastopol, Sturgeon Bay, and Union. County residents and businesses without natural gas service have individual on-site tanks for liquid propane or fuel oil, purchased from other private vendors. Wood stoves and pellet stoves have also become increasingly popular as energy costs rise and renewable energy sources receive greater attention in the media. Pellets are made from recycled sawdust, wood shavings, corn, walnut and peanut shells, and similar biomass wastes that are ground up, compressed, and extruded.

## TRANSPORTATION – ROADWAY ACCIDENTS

The Planning Team assigned transportation, roadway accidents, a total of four points out of a possible nine points for level of risk.

Vehicle crash reports are filed with WisDOT by county and city police departments, providing the time, location, type, and severity of the crash. The number, location, and severity of accidents often indicate problems with road and street alignments, construction, or the geometric design of the street. A variety of measures, including alterations in the street geometry, enlargement of the intersection turning radii, placement of more prominent signs, relocation of access drives, and speed changes, are often used to alleviate problem areas. Detailed crash information for Door County can be found on-line from WisDOT. Figure 2.3 below shows the most recent data available for number and severity of vehicle crashes in Door County between 1999 and 2012.

**Figure 2.3: Number and Severity of Crashes, Door County, 1999 - 2012**



Source: <http://www.dot.wisconsin.gov/safety/motorist/crashfacts/>.

## STRUCTURAL FIRE

The Planning Team assigned structural fire a total of four points out of a possible nine points for level of risk. House fires pose a health risk primarily due to smoke inhalation and burns.

## LOSS OF SEWER SYSTEM

The Planning Team assigned loss of sewer system a total of four points out of a possible nine points for level of risk. A private septic system failure can cause pooling of sewage on the ground, which kids sometimes play in and get sick. Failure of a municipal sewer system can cause structural damage, as well as pose health risks. There no recorded deaths or hospitalizations in Door County due to failure of a sewer system.

## NUCLEAR POWER PLANT

The Planning Team assigned nuclear power plant a total of three points out of a possible nine points for level of risk.

*Note: the information below is condensed from a Door County Environmental Council newsletter, sourced from Star Tribune, Power Engineering, Associated Press.*

The Nuclear Regulatory Commission defines two emergency planning zones around nuclear power plants: a plume exposure pathway zone with a radius of 10 miles, concerned primarily with exposure to, and inhalation of, airborne radioactive contamination, and an ingestion pathway zone of about 50 miles, concerned primarily with ingestion of food and liquid contaminated by radioactivity.

The Point Beach nuclear power plant is located in Two Rivers, approximately 30 miles from Door County's southern border. This plant provides approximately one-sixth of the total electric power generated for Wisconsin. The Kewaunee Nuclear Power Station, now closed, is located in Kewaunee County on the shore of Lake Michigan, 15 miles from Door County's southern border. The plant ceased operation on May 7<sup>th</sup>, 2013. As of 2015, Dominion Resources, the current owner, was seeking a waiver of this requirement, contending that the rule is outdated and overly conservative. The Nuclear Regulatory Commission's estimate of the risk each year of an earthquake intense enough to cause core damage to the reactor at Kewaunee was 1 in 83,333, according to a study they published in 2010.

# **Door County Hazard Mitigation Plan**

## **Chapter 3: Mitigation Strategies**

## **HAZARD MITIGATION GOALS AND ACTION ITEMS**

Per FEMA requirements, a hazard mitigation plan must contain goals and action items that represent what the community seeks to achieve through mitigation plan implementation. Mitigation action items are a specific action, project, activity, or process taken to reduce or eliminate long-term risk to people and property from the impact of hazards.

The goals and action items found in the chart below were prioritized by the lead and participating agencies, also identified in the chart below. All lead and participating agencies were sent an email with applicable action items high-lighted in yellow. Agency directors were asked to review the high-lighted items for confirmation of their involvement and to assign a low, medium, or high priority to each item. Directors were also asked to assign a time-frame for the implementation of each action item. The costs and benefits of each action item will be considered when looking into implementation.

### **LEGEND**

#### **Door County Departments:**

Aging and Disability Resource Center (ADRC)  
 Buildings and Grounds (Buildings and Grounds)  
 Emergency Management Services (EMS)  
 Highway (Highway)  
 Human Services (Human Services)  
 Information Systems (IS)  
 Land Information Office (LIO)  
 Parks (Parks)  
 Planning (Planning)  
 Public Health (Public Health)  
 Sheriff's (Sheriff's)  
 Soil and Water Conservation (SWCD)

#### **Local Municipalities:**

City of Sturgeon Bay  
 Villages of Egg Harbor, Ephraim, Forestville, and Sister Bay

#### **Other agencies/committees:**

Communications Advisory Technical Subcommittee (CATS)  
 Door County Economic Development Corporation (DCEDC) Attainable Housing Committee  
 Lakeshore Community Action Program (CAP)  
 Local Emergency Planning Committee (LEPC)

### **HAZARD MITIGATION GOALS**

1. Minimize human, economic, and environmental disruption and reduce the potential for injury and loss of life from natural and non-natural hazards.
2. Enhance public education about disaster preparedness and resilience, and expand public awareness of natural hazards.
3. Encourage and promote continued comprehensive hazard mitigation planning and implementation of the plan.
4. Support coordination and collaboration among federal, state, and local authorities and non-governmental organizations regarding hazard mitigation activities.
5. Improve the disaster resistance of buildings, structures, and infrastructure whether new construction, expansion, or renovation.

Mitigation Strategy	Priority	Project Time Frame	Lead and Participating Agencies
<b>GENERAL ACTION ITEMS</b>			
1. Maintain and enhance CodeRed as the single most important source to alert the public to a hazard.	High	On-going	EMS
2. Incorporate some hazard mitigation planning, as appropriate, into future updates of the county's comprehensive and farmland preservation plan.	Medium	Every 10 yrs; next update no later than 2025	Planning
3. Distribute hazard mitigation materials at housing workshops, trainings, and orientation sessions.	Low	On-going	EMS DCEDC Attainable Housing Committee Lakeshore CAP
4. Utilizing the Wisconsin Historical Society's GIS database on historical and archeological sites, develop a GIS layer identifying those that are located within the 100-year floodplain.	Low	10+ years	Planning
5. Continued use and further development of the county's Geographic Information System for emergency service purposes.  <i>Note: After a meeting with IS/LIO, EMS, and Planning regarding a mock-up of GIS hazard mitigation plan information, EMS decided this feature was not helpful enough to pursue finalization at this time. If up-to-date utilities information can ever be obtained on a regular basis, this action item should be re-evaluated.</i>	Low	10+ years	EMS IS/LIO Planning
6. Research/install backup power supply system for county critical facilities.	High	1 – 5 years	EMS Buildings and Grounds
7. Research alternative communication opportunities to assist overloaded dispatch capabilities due to a catastrophic event.  <i>Note: The Door County Sheriff's Department has a command vehicle that can also serve as a 911 call center. Testing of the 911 call center function will take place in 2016. In the meantime, the current 911 call center has a manual switch that will transfer calls to Brown County in the event the call center becomes overloaded.</i>	High	2016	Sheriff's CATS

Mitigation Strategy	Priority	Project Time Frame	Lead and Participating Agencies
8. Continue to add to and update information on the Sheriff's Department Web site regarding types of hazards and how to respond in the event of a hazard or potential hazard, as well as links to sites with information related to weather conditions, burning practices/regulations, hazardous material spills, etc.	Low	On-going	Sheriff's IS
<b>STORMS AND/OR HAZARDOUS WIND EVENTS</b>			
1. Continue to utilize public awareness methods such as radio and television stations and outdoor warning systems.	High (V. SB – Medium)	On-going	EMS Local municipalities
2. Investigate the feasibility of increasing the number of sirens located throughout the county. <i>(Note: the City and Village of Forestville already have outdoor warning systems.)</i>	Low	10+ years	Local municipalities
3. Continue to prepare and distribute educational materials to the public on severe weather safety procedures.	High (V. SB – Medium)	On-going	EMS
4. Inventory and investigate the feasibility of providing safe shelters and signage at state, county, and local parks and recreation areas.	Low (City – not doing)	10+ years	Parks Local parks
5. Install lightning protection devices and methods such as lightning rods and grounding on each community's communications infrastructure and other critical facilities.  <i>Notes: The City has already done this. For the county, possibly prioritize those without first vs. newer buildings.</i>	Low	10+ years	Sheriff's CATS Local municipalities IS
6. Analyze lightning grade surge protection for critical electronic equipment used for response and recovery.  <i>Note: Already done for data centers. IS follows best practices and electrical codes (i.e., proper grounding and UPS protection) when computer infrastructure is installed. Analysis is only done when the equipment does not work.</i>	Low	10+ years	Sheriff's/CATS IS
7. Promote tornado safety public information as well as other summer severe weather public awareness/educational efforts through continued partnership with the National Weather Service.	High	On-going	EMS
8. Assist personnel in schools and businesses, public facility managers, and individuals in determining "best available" tornado safety areas.	High	On-going	EMS
9. Develop and maintain a comprehensive safety plan for each publicly-owned building.	Low (V. SB – Medium)	10+ years	Airport Building and Grounds EMS

Mitigation Strategy	Priority	Project Time Frame	Lead and Participating Agencies
<ul style="list-style-type: none"> <li>Government and Senior Centers have plans and are reviewed annually.</li> <li>Library plan is in process.</li> <li>Airport and Highway Departments do not have plans.</li> </ul> <p><i>Note: the City has already done this.</i></p>			Highway Sheriff's Library Local municipalities
10. Continue efforts to improve mobile home safety in windstorms and tornadoes through public education efforts and assistance in locating safe shelter sites, the requirement of tie-downs in mobile home parks, and the installation of outdoor warning sirens.	Low (City – Medium; V. SB – N/A)	On-going	Planning Local municipalities
11. Establish/maintain intergovernmental cooperation agreements with neighboring communities and private vendors to acquire any necessary additional equipment needed for storm clean-up. <i>(Note: the City has already done this.)</i>	V. SB – High	1 – 5 years	Local municipalities
12. Establish/continue tree trimming, drainage system clearance, and other maintenance programs. For example: <ul style="list-style-type: none"> <li>Village of Egg Harbor – Public Tree Removal Ordinance</li> <li>City – annual maintenance by Public Works Department and Sturgeon Bay Utilities</li> </ul>	Medium (City – high for tree trimming & low for drainage clearance; V. SB – Low)	On-going	Highway Local municipalities
13. Encourage utility companies and development firms to bury power lines in new developments or when upgrades are made to existing lines.	Low (City – No)	On-going	EMS Planning Local municipalities
14. Work with communities to develop and/or enforce restrictions on planting large or rapidly growing trees near power lines. <i>Note: City policy exists.</i>	Medium (V. SB – High)	On-going	Highway Local municipalities
<b>WINTER STORMS (HEAVY SNOW, BLIZZARDS, ICE)</b>			
1. Continue to ensure plowing and salting/sanding equipment is operational and available to handle potential emergencies.	High	On-going	Highway Local public works
2. Continue to ensure/establish communication lines between municipalities, police, fire, EMS, hospital/clinics, and highway/street departments.	Medium (City – High; V. SB – High)	On-going	EMS Sheriff's Highway Local municipalities
3. Provide for coordination of public safety, support agencies (such as American Red Cross and United Way), and resource acquisition during emergencies through implementation of the Door County Emergency Operations Plan.	High	On-going	EMS American Red Cross United Way

Mitigation Strategy	Priority	Project Time Frame	Lead and Participating Agencies
4. Ensure/continue inclusion of driver safety strategies for severe weather events in driver education classes and materials.	Low	On-going	EMS Sheriff's Public schools
5. Collaborate with Soil and Water Conservation Department and the NRCS to expand windbreak planting, such as snow fences or "living snow fences" (rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.	Medium (City – No; V. SB – Medium)	5 – 10 years	Highway SWCD Local municipalities
<b>HAZARDOUS TEMPERATURES</b>			
1. Encourage the county's human service entities and energy providers to continue to expand programs to assist at-risk populations in paying their utility bills and in acquiring appliances to mitigate extreme weather conditions.	Low	On-going	Public Health Human Services United Way
2. Work with the local community and social service agencies such as the Door County Aging and Disability Resource Center to establish and maintain a "friendly visitor" program designed to have volunteers call vulnerable individuals during temperature advisory situations.	Medium	5 – 10 years	Public Health Human Services/ADRC United Way
3. Establish/maintain agreements with such entities as local malls, libraries, and schools to serve as heating and cooling centers.	Low	On-going	Public Health
<b>HAZARDOUS RAIN EVENTS</b>			
1. Provide sewer back-flow prevention information and other floodproofing measures to communities through public information programs.	City – Low V. SB – Low	10+ years	Local municipalities
2. Encourage sewer utilities to provide back-up power sources at lift stations to help prevent sewer back-flow flooding.  <i>Note: the City and Villages of Forestville &amp; Sister Bay have backup generators.</i>	Low (cost-prohibitive)	10+ years	Local municipalities
3. Prepare and maintain an evacuation plan for people and property, including dissemination of storm preparation measures and evacuation instructions to the public through the media.	High	2016	EMS
4. Continue to monitor the National Weather Service flood forecasts.	High	On-going	EMS
5. Maintain a process for the preparation of the opening and operation of congregate care facilities.	High	As-Needed	EMS

Mitigation Strategy	Priority	Project Time Frame	Lead and Participating Agencies
6. Establish/maintain protective measures such as sandbagging, protection of buildings and other structures, and emergency gas and electricity cut-off procedures.	City – Low V. SB – Low	10+ years	Local municipalities
7. Prepare, adopt, and maintain proactive land use planning methods through the county’s and municipalities’ comprehensive plans and implementation tools such as land use regulations (codes and ordinances) and stormwater management plans.	Medium (City – Medium)	On-going	Planning Local municipalities
8. Adopt/enforce land use regulations that preserve natural resources adjacent to and in defined floodplains.	Medium	On-going	Planning Local municipalities
9. Inventory and assess areas throughout both the rural and urban areas of the county that have repeated flash-flooding problems and identify activities to remediate or rectify problems at those locations.	Medium (City – No)	5 – 10 years	EMS Local municipalities
10. Utilize FEMA floodplain mapping when adopted to update existing flood maps and data sources to better determine areas and facilities susceptible to recurring flooding. <i>Note: the City has already done this.</i>	As-Needed (City – Medium)	On-going	Planning Local municipalities
11. Maintain a stormwater management plan that includes such remediation techniques as surface detention basins and in-street detention units. <i>Note: the City has already done this.</i>	V. SB – Low	10+ years	Local municipalities
12. Implement a rural drainage improvement program that would include ditch, bridge, and culvert maintenance and improvements. <i>(Note: the City has already done this.)</i>	City – Medium V. SB – Medium	On-going	Local municipalities
13. Research WisDOT’s Flood Damage Aid Program; disseminate information as appropriate.	Medium	On-going	EMS Planning
<b>HAIL</b>			
1. Continue distribution of information through the UW-Extension and other appropriate sources on various hail insurance options such as the commercial stock and mutual companies, and Federal Crop Insurance Corporation (FCIC).	TBD	TBD	UW-Extension
2. Document hail damage.	TBD	TBD	UW-Extension
3. Promote Crop Hail Insurance programs for the agricultural community.	TBD	TBD	UW-Extension

Mitigation Strategy	Priority	Project Time Frame	Lead and Participating Agencies
<b>COMMUNICABLE DISEASES</b>			
1. Continue maintenance of a community public health system with adequate numbers of medical staff and sufficient disease monitoring and surveillance capabilities to adequately protect the population from small- and large-scale epidemics.	High	On-going	Public Health
2. Continue to encourage residents to receive immunizations against communicable diseases, including annual and special-strain flu shots.	High	On-going	Public Health
3. Promote public awareness and personal preparedness.	Medium	On-going	Public Health
4. Seek guidance from the State Pandemic Preparedness Plan.	Low	On-going	Public Health
<b>PRIVATE WATER SUPPLY CONTAMINATION</b>			
1. Research/implement expanded monitoring programs.	Medium (City – No; V. SB – Low)	5 – 10 years	SWCD Public Health Local municipalities
2. Manage the impact of new development on water quality through appropriate land use designations, decisions, and conditions.	High	On-going	Planning
3. Partner with county Soil and Water Conservation and Sanitarian Departments to review and potentially update ordinances, programs, and policies in order to better protect water quality.	High	1 – 5 years	Planning
<b>HAZARDOUS MATERIALS – ROADWAY AND WATERWAY</b>			
1. Work with the Wisconsin Department of Natural Resources to develop a database of hazardous materials being transported through Door County.	Medium	On-going	EMS Highway
2. Ensure that any business which uses, stores, or manufactures hazardous material is in compliance with the Occupational Safety and Health Administration regulations detailed in 29 CFR 1910.120 (hazardous waste operations and emergency response).	Medium	On-going	EMS LEPC
3. Continue diligent the Emergency Planning and Community Right-to-Know Act program.	Medium	On-going	EMS LEPC
4. Continue to exercise with regional HAZMAT teams.	Medium	On-going	EMS Highway
5. Continue to coordinate and collaborate with private utility companies.	Low	As-Needed	EMS

Mitigation Strategy	Priority	Project Time Frame	Lead and Participating Agencies
6. Promote state enforcement of federal requirements for transporting hazardous materials.	High	On-going	EMS
<b>LOSS OF ELECTRICAL, FUEL, AND SEWER SYSTEMS</b>			
1. Develop and coordinate county and regional exercises with utility companies.	Medium	On-going	EMS
2. Research and inventory Energy Assistance Programs offered by private utility companies.	Medium	On-going	Human Services/Contracted Agency
3. Inventory backup power generation capabilities.	High	On-going	EMS
<b>TRANSPORTATION – ROADWAY ACCIDENTS</b> (from the Door County Comprehensive and Farmland Preservation Plan 2035)			
1. Require, when appropriate, safe and convenient pedestrian, bike, and walking paths, sidewalks, and crosswalks, particularly within dense or community core areas, that connect to residential and commercial areas.	Medium (City – Medium)	On-going	Planning Local municipalities
2. Address safety and efficiency issues by identifying dangerous intersections, providing adequate traffic controls, assessing lines-of-sight, providing appropriate access points, maintaining a minimum Level of Service (LOS) on all highways and roads, and other appropriate safety/efficiency methods.	High (City – High)	On-going	Planning Highway Local municipalities
<b>STRUCTURAL FIRE</b>			
1. Assess building codes and standards that apply to fire protective strategies.	Medium	On-going	Local fire departments
2. Establish/support community watch programs.	Medium	On-going	Local fire departments
3. Assess availability to high capacity wells for use in recharging response equipment during fires.	Medium	On-going	Local fire departments
4. Participate with the County Fire Chiefs Association.	Medium	On-going	Local fire departments
5. Inventory the details of existing Mutual Aid Agreements.	Medium	On-going	Local fire departments

## **POTENTIAL FUNDING SOURCES FOR MITIGATION ACTIONS**

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 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:

### **FEDERAL PROGRAMS**

#### **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 their 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 nonaffiliated 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)**

FP&S grants are part of the AFG grants 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**

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**

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.

## **PLAN MAINTENANCE**

Per the FEMA handbook guidelines, plan maintenance is the process the planning team establishes to track the plan's implementation progress and to inform the plan update. The plan must include a description of the method and schedule for monitoring, evaluating, and updating it within a 5-year cycle. These procedures help to:

- Ensure that the mitigation strategy is implemented according to the plan.
- Provide the foundation for an ongoing mitigation program in the community.
- Standardize long-term monitoring of hazard-related activities.
- Integrate mitigation principles into community official's daily job responsibilities and department roles.
- Maintain momentum through continued engagement and accountability in the plan's progress.

Plan updates provide the opportunity to consider how well the procedures established in the previously approved plan worked and then revise them as needed.

## **MONITORING, EVALUATING, UPDATING**

The Door County Emergency Services Department (EMS) is the agency responsible for monitoring, evaluating, and updating this plan. EMS will monitor the implementation of this plan by discussing it annually (approximately one year from the date of adoption) with the Emergency Services/Communications and Local Emergency Planning Committees. Within three years of the date of adoption, the plan's action items will be evaluated for effectiveness at achieving the plan's goals by contacting the agencies identified in the Mitigation Strategies chart for an update. Within five years of the date of adoption, this plan will be reviewed and revised as necessary to reflect any changes in progress or priority.

In addition to the processes described above, EMS will incorporate as appropriate any action items from the hazard mitigation plan into the Door County Emergency Operations Plan. The purpose of the Emergency Operations Plan is to:

1. Facilitate the protection of lives, property, and the environment in major disasters of any nature.
2. Coordinate response to disasters, assess damages, identify mitigation opportunities, and implement recovery efforts.

3. Describe the county's relationship in support of local units of governments during response and recovery.
4. Serve as a coordinating document for supporting inter policies and procedures.
5. Reflect information collected, decisions made, and procedures developed in the planning process and during response.
6. Provide a link between the county and municipal plans.

Lastly, the Door County Hazard Mitigation Plan will be posted on both the Planning and Emergency Management Services Departments' Web sites along with contact information for providing input.

# **Door County Hazard Mitigation Plan**

## Appendix A





**STATE OF WISCONSIN**  
**DEPARTMENT OF MILITARY AFFAIRS**  
 DIVISION OF EMERGENCY MANAGEMENT

Brian M. Satula  
 Administrator

Scott Walker  
 Governor

June 17, 2014

Dan Williams, Director  
 Door County Emergency Management  
 319 S. 18<sup>th</sup> Avenue  
 Sturgeon Bay, WI 54235

Dear Dan,

I am pleased to inform you that the Federal Emergency Management Agency (FEMA) has approved funding for the Door County Hazard Mitigation Grant Program planning grant application submitted under Disaster Declaration FEMA-4141-DR-WI declared August 8, 2013. The grant is approved in the amount of \$33,000.00 for the development of a countywide all-hazards mitigation plan. FEMA provides 75% of the funding or \$24,750.00; Wisconsin Emergency Management (WEM) provides 12.5% or \$4,125.00; and the remaining \$4,125.00 is the community's required 12.5% local match.

Enclosed are two originals of the State-Local Hazard Mitigation Grant Program Assistance Agreement. Please carefully review the agreement and sign both copies. Keep one for your files and return the other to this office. **This agreement must be signed before funds can be drawn on the grant.** The grant performance period began on June 10, 2014 and will end on June 10, 2017. Per the work schedule in your application, the draft plan will be due in our office by January 31, 2016, with the final plan completed and approved by FEMA by July 31, 2016. All costs must be incurred during the performance period. Grant funds may be used for those items identified in the County's approved application and may not be used for any other purposes. A budget summary (enclosed) was developed based on the budget in your approved application.

The County may request reimbursements of planning expenses up to 90% of the federal and state shares of the grant, or \$25,987.50, as work progresses on the development of the updated plan. The remaining funds will not be paid until the plan update is completed and approved by FEMA. **Recoupment of all funds will be pursued if the County fails to complete a FEMA-approved updated all-hazards mitigation plan.** In order to receive reimbursement of expenses you will need to complete and submit to this office a Request for Reimbursement of Expenses, DMA Form 167 (enclosed) along with supporting documentation (copies of invoices and payments). Advancement of funds requires prior approval from this office and will only be made in extraordinary circumstances. The final request for reimbursement is due 30 days after plan approval.

Mr. Williams  
June 17, 2014  
Page 2

Per the agreement you are required to submit Quarterly Status Reports, DMA Form 168 (enclosed) within 15 days of the end of each quarter (October 15, January 15, April 15, and July 15).

You should refer to the **Assurances for Non-Construction Projects**, DMA Form 1017A, which was signed and submitted with the application for other state and federal laws and program requirements relating to the grant which are to be adhered to.

In developing the plan, please refer to the new "Local Mitigation Planning Handbook" dated March 2013 and the "Local Mitigation Plan Review Guide" dated October 1, 2011. When the draft updated plan is completed, submit one copy along with a completed "Local Mitigation Plan Review Tool" to this office for review. Both documents can be downloaded from FEMA's website <http://www.fema.gov/mitigation-planning-laws-regulations-guidance>. We will need one electronic copy of the draft plan for review and one electronic copy of the final plan.

If you have any questions, please call me at 608-242-3222 or Roxanne Gray, Mitigation Section Supervisor, at 608-242-3211.

Sincerely,



Katie Sommers  
State Hazard Mitigation Officer  
Wisconsin Emergency Management

Enclosures:

- FEMA approval letter dated June 10, 2014
- State-Local Hazard Mitigation Grant Program Assistance Agreement (two copies)
- Budget Summary Form
- Request for Reimbursement, DMA Form 167
- Quarterly Report, DMA Form 168

Cc: Steve Fenske, East Central Regional Emergency Management Director  
Becky Powers, East Central Regional Office Operations Associate  
Angela Pierce, Bay-Lake Regional Planning Commission



## COUNTY OF DOOR

### Planning Department

County Government Center  
421 Nebraska Street  
Sturgeon Bay, WI 54235  
Phone: (920) 746-2323  
FAX: (920) 746-2387  
Website: [map.co.door.wi.us/planning](http://map.co.door.wi.us/planning)

### Emergency Services

Emergency Services Building  
319 South 18th Avenue  
Sturgeon Bay, Wisconsin 54235  
Phone: (920) 743-5461  
FAX: (920) 743-4917

August 20, 2014

### Re: Your Invitation to the Door County Hazard Mitigation Planning Team

Greetings!

The Door County Emergency Services and Planning Departments are partnering to facilitate the development of a hazard mitigation plan in compliance with Federal Emergency Management Agency's (FEMA) guidelines. It is our goal that this plan will be adopted by Door County and each of its five incorporated municipalities, making the county and these municipalities eligible for future disaster relief and mitigation project funds from FEMA. We are forming a planning team consisting of the county, incorporated municipalities, and other agencies with an interest in disaster management in order to guide the hazard mitigation plan development process. (See attached list of "Planning Participants.") **You or a representative from your agency are invited to participate on this team, starting with attendance at a kick-off meeting, as described below, being held to go over the plan purpose, responsibilities, and project scope/schedule.** Including this kick-off meeting, the team will meet approximately 4 times between now and January 2016. (See attached "Schedule of Tasks.")

#### Door County Hazard Mitigation Plan - Planning Team Kick-Off Meeting

**5:30 – 7:00 p.m., Tuesday, September 30<sup>th</sup>**

Peninsula Room, 1<sup>st</sup> Floor, Door County Government Center  
421 Nebraska Street, Sturgeon Bay, WI 54235

Topics: Purpose of hazard mitigation plan, planning team responsibilities, project scope/schedule

In 2000, the U.S. Congress passed the Disaster Mitigation Act intending to reduce public and private expenses associated with disasters, and to speed up response time to and reduce recovery time from disasters. This Act included a new requirement for local governments to prepare hazard mitigation plans in order to be eligible for funding from FEMA for mitigation activities. FEMA has created guidelines for developing hazard mitigation plans, the two main components of which are conducting a risk assessment and developing mitigation strategies. The Planning Team's risk assessment will involve an evaluation of the county's potential exposure to natural hazards such as tornadoes, floods, wild fires, and severe thunderstorms. The Planning Team could also potentially evaluate man-made disasters, such as hazardous material spills or airplane accidents. Using this risk assessment, the Planning Team and participants at smaller area meetings will develop countywide and jurisdictional mitigation strategies. Issues such as incompatible land uses, protection of critical facilities, and reduction of community and taxpayer costs associated with disasters will be addressed during development of the mitigation strategies.

Please feel free to contact Becky Kerwin at (920) 746-2327 or [rkerwin@co.door.wi.us](mailto:rkerwin@co.door.wi.us) with any questions.

**Door County Hazard Mitigation Plan**  
Planning Team Kick-Off Meeting  
Tuesday, September 30, 2014  
5:30 – 7:00 p.m.

Peninsula Room, First Floor  
Door County Government Center  
421 Nebraska Street  
Sturgeon Bay, Wisconsin

**Agenda**

1. Open meeting/introductions
2. Review hazard mitigation plan development process, responsibilities, and timeline
3. Review Memorandum of Agreement
4. Review “capabilities” worksheet
5. Set next meeting date
6. Adjourn

## Door County Hazard Mitigation Plan

Planning Team Meeting Minutes

Tuesday, September 30, 2014

### 1. Open meeting/introductions.

The first Planning Team meeting for the development of the Door County Hazard Mitigation Plan was held in the Peninsula Room, Door County Government Center, 421 Nebraska Street, Sturgeon Bay, Wisconsin, on Tuesday, September 30, 2014. The meeting started at approximately 5:30 p.m. Note that all documents referred to below are posted to the Hazard Mitigation Planning Web site at <http://map.co.door.wi.us/planning/Hazard-Mitigation-Plan.htm>.

#### Present:

- Door County
  - Maureen Murphy, County Administrator
  - Keith Kasbohm, Director, Airport
  - Wayne Spritzka, Director, Building and Grounds
  - Emergency Services
    - Dan Williams, Director
    - Tony Luchini, Deputy Director
  - Joe Krebsbach, Director, Human Services
  - Tom Haight, Land Information Officer, Information Systems
  - Planning
    - Mariah Goode, Director
    - Becky Kerwin, Planner II
  - Rhonda Kolberg, Director, Public Health
  - John Teichtler, Director, Sanitarian
  - Terry Vogel, Sheriff
  - David Enigl, Supervisor, District #17
- City of Sturgeon Bay Community Development – Marty Olejniczak, Director
- Village of Egg Harbor – Josh Van Lieshout, Administrator
- Village of Ephraim
  - Charity Carey, Administrator
  - Jane Olson, Trustee
- U.S. Coast Guard
  - John Sehn, Senior Chief
  - Stan Rittner
  - Jake Timmons
- Wisconsin Public Service – Dale Swanson, Manager
- American Red Cross – Judy Gregory, Regional Director, Northeast WI
- Ministry Door County Medical Center – Steve Schwenke, Safety Manager

Director Williams opened the meeting with a few comments explaining why Emergency Medical Services is embarking on a hazard mitigation planning process.

- ### 2. Review hazard mitigation plan development process, responsibilities, and timeline.
- Planner Kerwin gave a presentation regarding hazard mitigation planning benefits, requirements, responsibilities, and timeline. The Planning Team reviewed and approved the draft Schedule of Tasks, which outlines what needs to be done and when. The Planning Team also agreed that the process and final plan will include discussion on man-made hazards.

3. **Review Memorandum of Agreement.** The jurisdictions reviewed the draft Memorandum of Agreement and asked for specific names to be removed, keeping only titles, in the event that an individual cannot participate in the future.
4. **Review “capabilities” worksheet.** The Planning Team reviewed the capabilities worksheet and agreed on a due date of January 9<sup>th</sup>, 2015 for the worksheet to be returned to the Planning Department.
5. **Set next meeting date.** 5:30 p.m., Thursday, January 29<sup>th</sup>, 2015.
6. **Adjourn.** The meeting adjourned at 6:08 p.m.

Reported by:

Rebecca Kerwin, Planner II

DRAFT



## COUNTY OF DOOR

### Planning Department

County Government Center  
421 Nebraska Street  
Sturgeon Bay, WI 54235  
Phone: (920) 746-2323  
FAX: (920) 746-2387  
Website: [map.co.door.wi.us/planning](http://map.co.door.wi.us/planning)

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Sturgeon Bay, Wisconsin 54235  
Phone: (920) 743-5461  
FAX: (920) 743-4917

FOR IMMEDIATE RELEASE

#### CONTACT:

Rebecca Kerwin  
Door County Planning Department  
421 Nebraska Street  
Sturgeon Bay, WI 54235  
(920) 746-2323

Door County Planning and Emergency Services Departments Kick-Off the Door County Hazard Mitigation Plan

Sturgeon Bay, WI, December 12, 2014 – Door County recently kicked-off a multi-jurisdictional hazard mitigation planning process, headed up by the Door County Emergency Services and Planning Departments. The plan will be developed in compliance with Federal Emergency Management Agency (FEMA) guidelines for a multi-jurisdictional hazard mitigation plan. The county's five incorporated municipalities (City of Sturgeon Bay and Villages of Egg Harbor, Ephraim, Forestville, and Sister Bay) have agreed to participate in the development of this plan, as well as other county departments and outside agencies with an interest in disaster management. This planning team will evaluate and assess risk from both natural and human-induced disasters and develop countywide mitigation strategies. Smaller area meetings will also be held to include unincorporated areas, at which participants will develop jurisdictional mitigation strategies, if needed. Issues such as incompatible land uses, protection of critical facilities, and reduction of community and taxpayer costs associated with disasters will be addressed during development of mitigation strategies.

Door County is one of only two counties in the state that does not have a hazard mitigation plan in place. Having such a plan enables municipalities to apply for both pre- and post-disaster hazard mitigation funding from FEMA. Earlier this year, Emergency Services applied for and received grant funding from FEMA to develop a plan and subsequently selected the Planning Department to draft it. Per terms of the grant, Door County is required to have a final draft submitted to FEMA by the end of January 2016. More information regarding the plan may be found on the Planning Department's Web site at <http://map.co.door.wi.us/planning/Hazard-Mitigation-Plan.htm>.

Please contact Becky Kerwin at (920) 746-2327 or [rkerwin@co.door.wi.us](mailto:rkerwin@co.door.wi.us) with any questions or inquiries regarding how to get involved in the planning process.

-END-

**Door County Hazard Mitigation Plan**  
Planning Team Meeting  
Thursday, January 29, 2015  
5:30 – 7:00 p.m.

Peninsula Room, First Floor  
Door County Government Center  
421 Nebraska Street  
Sturgeon Bay, Wisconsin

**Agenda**

1. Open meeting
2. Review state hazard mitigation goals and hazard profiles
3. Discuss local capabilities
4. Handout base maps and discuss asset identification
5. Set next meeting date
6. Adjourn

## Door County Hazard Mitigation Plan

Planning Team Meeting Minutes

Thursday, January 29, 2015

### 1. Open meeting/introductions.

The second Planning Team meeting for the development of the Door County Hazard Mitigation Plan was held in the Peninsula Room, Door County Government Center, 421 Nebraska Street, Sturgeon Bay, Wisconsin, on Thursday, January 29th, 2015. The meeting started at approximately 5:30 p.m. Note that the agenda, Powerpoint presentation, and summary of municipal capabilities are posted to the Hazard Mitigation Planning Web site at <http://map.co.door.wi.us/planning/Hazard-Mitigation-Plan.htm>.

#### Present:

- Door County
  - Keith Kasbohm, Director, Airport
  - Tony Luchini, Deputy Director, Emergency Services
  - Tom Haight, Land Information Officer, Information Systems
  - Planning
    - Mariah Goode, Director
    - Becky Kerwin, Planner II
  - Rhonda Kolberg, Director, Public Health
- City of Sturgeon Bay, Community Development – Marty Olejniczak, Director
- U.S. Coast Guard – Brian O’Neil
- Ministry Door County Medical Center – Steve Schwenke, Safety Manager

2. **Review state hazard mitigation goals and hazard profiles.** Planner Kerwin gave a Powerpoint presentation regarding the state’s hazard mitigation plan goals and historical natural hazard events identified in this plan that occurred in Door County.
3. **Discuss local capabilities.** Meeting participants received a summary of the capabilities worksheets, with individual municipal worksheets attached. All municipalities, except for the Village of Ephraim, completed and returned a worksheet. The Planning Team is to review these documents and provide the Planning Department with any comments.
4. **Handout base maps and discuss asset identification.** Base maps showing countywide assets and critical infrastructure were laid out. Base maps were created for each incorporated municipality, as well as the southern, central, and northern areas of the county. Instructions for updating these maps were also handed out. Meeting participants reviewed the base maps and discussed ideas for updating and improving them. The municipalities are responsible for reviewing their maps and returning them to the Planning Department by February 27<sup>th</sup>, 2015.
5. **Set next meeting date.** 5:30 p.m., Tuesday, March 31, 2015.
6. **Adjourn.** The meeting adjourned at approximately 6:30 p.m.

Reported by:

Rebecca Kerwin, Planner II

**Door County Hazard Mitigation Plan**

Planning Team Meeting  
Tuesday, April 28th, 2015  
3:00 – 4:30 p.m.

Peninsula Room, First Floor  
Door County Government Center  
421 Nebraska Street  
Sturgeon Bay, Wisconsin

**Agenda**

1. Open meeting/introductions
2. Review/approve minutes from September 30th, 2014 and January 29th, 2015 meetings
3. Presentation on natural and human-induced hazards
4. Review/discuss DNR redevelopment and remediation information
5. Review/discuss infrastructure and hazardous materials/sites maps
6. Conduct risk assessment
7. Discuss mitigation strategies
8. Set next meeting date
9. Adjourn

## Door County Hazard Mitigation Plan

Planning Team Meeting Minutes

Tuesday, April 28th, 2015

### 1. Open meeting/introductions.

The third Planning Team meeting for the development of the Door County Hazard Mitigation Plan was held in the Peninsula Room, Door County Government Center, 421 Nebraska Street, Sturgeon Bay, Wisconsin, on Tuesday, April 28th, 2015. The meeting started at approximately 3:00 p.m. Note that the agenda and Powerpoint presentation are posted to the Hazard Mitigation Planning Web site at <http://map.co.door.wi.us/planning/Hazard-Mitigation-Plan.htm>.

#### Present:

- Door County
  - Emergency Services
    - Dan Williams, Director
    - Tony Luchini, Deputy Director
  - Tom Haight, Land Information Officer, Information Systems
  - John Teichtler, Director, Sanitarian
  - Steve Delaware, Sheriff, Sheriff's Department
  - Planning
    - Mariah Goode, Director
    - Becky Kerwin, Planner II
- City of Sturgeon Bay, Community Development – Marty Olejniczak, Director

2. **Review/approve minutes from September 30<sup>th</sup>, 2014 and January 29<sup>th</sup>, 2015 meetings.** MSC Williams/Luchini to approve minutes.
3. **Review state hazard mitigation goals and hazard profiles.** Planner Kerwin gave a PowerPoint presentation summarizing natural and non-natural hazards that have occurred in Door County. She also covered information from the State of Wisconsin Hazard Mitigation Plan and the Federal Emergency Management Agency's Discovery Report, Great Lakes Coastal Study, Lake Michigan regarding potential future property losses due to natural hazards.
4. **Review/discuss DNR redevelopment and remediation information.** During the PowerPoint presentation, planning staff members handed out information from the Wisconsin Department of Natural Resources Bureau of Redevelopment and Remediation's (BRRTS) Web site regarding definitions for activity types and all activities that have occurred in Door County since 1973. Activities are broken out by incorporated municipality, as well as for unincorporated areas, and are available on the planning department's Web site. Summaries of the top ten activity types countywide and activity types by municipality are provided in the PowerPoint presentation, also available on the Web site.
5. **Review/Discuss infrastructure and hazardous materials/sites maps.** Meeting participants reviewed the draft "Facilities/Infrastructure and Hazardous Materials" maps that were initially reviewed at the January 29<sup>th</sup>, meeting and since updated. A new set of maps entitled "Contamination Sites, Hazardous Materials Storage, and Groundwater Concerns Areas" were also reviewed and discussed.
6. **Conduct Risk Assessment.** Planning staff members handed out a risk assessment evaluation form based on the form provided within the state's "A Resource Guide to All Hazards Mitigation Planning in Wisconsin." Meeting participants decided to rank the "hazard frequency" and "hazard probability" ranking categories as a group. For hazards that received a ranking higher than "1" for future probability, planning staff members will research other ranking criteria listed within the form regarding magnitude and economic losses. The hazards that received a ranking higher than "1" for future probability are:

- lightning and thunderstorms (2)
- HazMat roadway (2)
- HazMat waterway (2)
- loss of electrical system (2)
- nuclear power plant" (2)
- water supply contamination for private systems (3)

The risk assessment worksheet responses for all hazards that were ranked at the meeting are available on the Planning Department's Web site.

7. **Set next meeting date.** Planning staff members will send out a Doodle poll to set the next meeting date.
8. **Adjourn.** The meeting adjourned at approximately 4:20 p.m.

Reported by:

Rebecca Kerwin, Planner II

DRAFT

**Kerwin, Rebecca**

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**From:** Kerwin, Rebecca  
**Sent:** Wednesday, July 08, 2015 12:25 PM  
**To:** ALESON, ERIK; Birmingham, Thad; 'Brent Bristol'; Brett Belanger; Brian O'Neil; dds swanson@wisconsinpublicservice.com; DELARWELLE, STEVE; GOODE, MARIAH; Haight, Tom; Jane Olson (Jolson@ephrain-wisconsin.com); 'john.j.sehn@uscg.mil'; 'jsmith@villageofeggharbor.org'; 'jvanlieshout@villageofeggharbor.org'; Kasbohm, Keith; KOLBERG, RHONDA; KOLODZIEJ, JOHN; KREBSBACH, JOE; Lienau, David; 'lohnesorge@villageofeggharbor.org'; Luchini, Anthony; 'MaryAnn Salmon'; McNeil, Stephen; 'Mike McCutcheon'; 'Nick Cluppert'; Olejniczak, Marty; SPRITKA, WAYNE; 'sshallow@ephrain-wisconsin.com'; TEICHTLER, JOHN; 'Terry McNulty'; WILLIAMS, DAN; 'Zeke.Jackson@sisterbaywi.gov'  
**Subject:** Door County Hazard Mitigation Plan - DRAFT Risk Assessment Chapter

Hello, Hazard Mitigation Planning Team –

The draft risk assessment chapter (text and maps) for the Door County Hazard Mitigation Plan is now posted to our Web site at <http://map.co.door.wi.us/planning/Hazard-Mitigation-Plan.htm>. Please review and email me any comments by **Friday, July 31<sup>st</sup>**. In approximately two weeks, you will be also be receiving draft mitigation strategies for your review and comment.

Please contact me with any questions.

Thank you,

Becky

**Rebecca Y. Kerwin, AICP**  
Planner II  
Door County Planning Department  
421 Nebraska Street  
Sturgeon Bay, WI 54235  
Ph: (920) 746-2323  
Email: [rkerwin@co.door.wi.us](mailto:rkerwin@co.door.wi.us)

**Kerwin, Rebecca**

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**From:** Kerwin, Rebecca  
**Sent:** Wednesday, July 29, 2015 1:40 PM  
**To:** ALESON, ERIK; Birmingham, Thad; 'Brent Bristol'; Brett Belanger; ddswanon@wisconsinpublicservice.com; DELARWELLE, STEVE; GOODE, MARIAH; Haight, Tom; Jane Olson (Jolson@ephrain-wisconsin.com); 'john.j.sehn@uscg.mil'; 'jsmith@villageofeggharbor.org'; 'jvanlieshout@villageofeggharbor.org'; Kasbohm, Keith; KOLBERG, RHONDA; KOLODZIEJ, JOHN; KREBSBACH, JOE; Lienau, David; 'lohnesorge@villageofeggharbor.org'; Luchini, Anthony; 'MaryAnn Salmon'; McNeil, Stephen; 'Mike McCutcheon'; 'Nick Cluppert'; Olejniczak, Marty; SPRITKA, WAYNE; 'sshallow@ephrain-wisconsin.com'; TEICHTLER, JOHN; 'Terry McNulty'; WILLIAMS, DAN; 'Zeke.Jackson@sisterbaywi.gov'  
**Subject:** Door County Hazard Mitigation Plan - Draft Risk Assessment and Mitigation Strategies Chapters

Hello, Hazard Mitigation Planning Team -

Just a reminder that comments regarding the draft risk assessment chapter of the Door County Hazard Mitigation Plan are due back to me this Friday, July 31st. The draft risk assessment chapter (chapter 2) is posted on the Planning Department's Web site at <http://map.co.door.wi.us/planning/Hazard-Mitigation-Plan.htm>.

Also posted to the Web site is the draft mitigation strategies chapter for your review and comment (chapter 3). These draft action items are based on hazard mitigation plans from Manitowoc, Iron, Racine, and Shawano Counties. The Manitowoc County plan was used because it is current (2014) and because of proximity to Door County. The Iron, Racine, and Shawano County plans were used because they included both natural and non-natural hazards and are also relatively current. **Please send me your comments on the mitigation strategies by Friday, August 14th.**

As always, feel free to contact me with any questions. Thank you!

Becky

**Rebecca Y. Kerwin, AICP**  
 Planner II  
 Door County Planning Department  
 421 Nebraska Street  
 Sturgeon Bay, WI 54235  
 Ph: (920) 746-2323  
 Email: [rkerwin@co.door.wi.us](mailto:rkerwin@co.door.wi.us)

**Kerwin, Rebecca**

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**From:** Kerwin, Rebecca  
**Sent:** Friday, August 14, 2015 11:12 AM  
**To:** ALESON, ERIK; Birmingham, Thad; 'Brent Bristol'; Brett Belanger; ddswanon@wisconsinpublicservice.com; DELARWELLE, STEVE; GOODE, MARIAH; Haight, Tom; Jane Olson (Jolson@ephraim-wisconsin.com); 'john.j.sehn@uscg.mil'; 'jsmith@villageofeggharbor.org'; 'jvanlieshout@villageofeggharbor.org'; Kasbohm, Keith; KOLBERG, RHONDA; KOLODZIEJ, JOHN; KREBSBACH, JOE; Lienau, David; 'lohnesorge@villageofeggharbor.org'; Luchini, Anthony; 'MaryAnn Salmon'; McNeil, Stephen; 'Mike McCutcheon'; 'Nick Cluppert'; Olejniczak, Marty; SPRITKA, WAYNE; 'sshallow@ephraim-wisconsin.com'; TEICHTLER, JOHN; 'Terry McNulty'; WILLIAMS, DAN; 'Zeke.Jackson@sisterbaywi.gov'  
**Subject:** Door County Hazard Mitigation Plan - Comments re: Draft Chapters

Hello, Hazard Mitigation Planning Team –

A last reminder to get me any comments regarding the Door County Hazard Mitigation Plan draft chapters and associated maps by **Tuesday, August 18th**. The Risk Assessment and Mitigation Strategies chapters, and associated maps, can found be on our Web site at <http://map.co.door.wi.us/planning/Hazard-Mitigation-Plan.htm>. I am in the process of finalizing these chapters in preparation for the town-level meetings, which will be held in late September. Later next week, you will receive a press release with the dates/times and locations for these meetings.

Thank you,

Becky

**Rebecca Y. Kerwin, AICP**  
 Planner II  
 Door County Planning Department  
 421 Nebraska Street  
 Sturgeon Bay, WI 54235  
 Ph: (920) 746-2323  
 Email: rkerwin@co.door.wi.us



## COUNTY OF DOOR

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Phone: (920) 743-5461  
FAX: (920) 743-4917

FOR IMMEDIATE RELEASE

#### CONTACT:

Rebecca Kerwin  
Door County Planning Department  
421 Nebraska Street  
Sturgeon Bay, WI 54235  
(920) 746-2323

### Door County Planning and Emergency Services Departments to Hold Open House Meetings Regarding the Door County Hazard Mitigation Plan

Sturgeon Bay, WI, August 19, 2015 – The Door County Planning and Emergency Services Departments are in the process of developing a multi-jurisdictional hazard mitigation plan in compliance with Federal Emergency Management Administration (FEMA) requirements. Having a hazard mitigation plan certified by FEMA enables municipalities to apply for both pre- and post-disaster hazard mitigation funding. Under the guidance of a planning team, draft risk assessment and mitigation strategies chapters have been developed to address both natural and non-natural hazards. Municipal-level meetings, described below, have been scheduled in order to present these draft chapters to and gather input from local officials, public administrators, and the general public.

- **Monday, September 21<sup>st</sup>, 4 – 6pm**, Forestville Town Hall in Maplewood, 7705 County Hwy. H
- **Monday, September 28<sup>th</sup>, 4 – 6pm**, Peninsula Room, Door County Government Center, 421 Nebraska St., Sturgeon Bay
- **Tuesday, September 29<sup>th</sup>, 4 – 6pm**, Egg Harbor Town Hall, 5242 County Hwy. I

There will be a short presentation at approximately 4:15 p.m., repeated again around 5:15 p.m. Participants will have the opportunity to review and comment on the risk assessment chapter, which describes natural and non-natural hazards that have occurred in the county in the past, and hazards that may potentially affect the county in the future. Maps associated with the risk assessment chapter showing facilities/infrastructure, hazardous material storage and contamination sites, and groundwater concern areas will be available for review and comment. Participants will also have the opportunity to review the mitigation strategies chapter, which includes specific actions, projects, activities, or processes taken to reduce or eliminate long-term risk to people and property from the impact of hazards.

These documents and maps may be found on the Planning Department's Website at <http://map.co.door.wi.us/planning/Hazard-Mitigation-Plan.htm> or viewed at the Planning Department during regular business hours (8:00 a.m. - 4:30 p.m., Monday - Friday). Comments regarding the plan may be submitted at any time by e-mail to [rkerwin@co.door.wi.us](mailto:rkerwin@co.door.wi.us), by FAX to (920) 746-2387, or by mail to Door County Planning Department, 421 Nebraska Street, Sturgeon Bay, WI 54235. Please contact Becky Kerwin at (920) 746-2323 or [rkerwin@co.door.wi.us](mailto:rkerwin@co.door.wi.us) with any questions or inquiries regarding how to get involved in the planning process.

-END-



## COUNTY OF DOOR

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### Planning Department

County Government Center  
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Sturgeon Bay, WI 54235  
Phone: (920) 746-2323  
FAX: (920) 746-2387  
Website: [map.co.door.wi.us/planning](http://map.co.door.wi.us/planning)

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Phone: (920) 743-5461  
FAX: (920) 743-4917

# YOU ARE INVITED!

## Door County

# Hazard Mitigation Plan

# Open House Meetings

**All local officials, public administrators, and the general public are encouraged to attend an open house meeting regarding the draft Door County Hazard Mitigation Plan.**

**Please see the reverse side for more details.**

- **Monday, September 21<sup>st</sup>, 4 – 6pm**, Forestville Town Hall in Maplewood, 7705 County Hwy. H
- **Monday, September 28<sup>th</sup>, 4 – 6pm**, Peninsula Room, Door County Government Center, 421 Nebraska St., Sturgeon Bay
- **Tuesday, September 29<sup>th</sup>, 4 – 6pm**, Egg Harbor Town Hall, 5242 County Hwy. I

## Door County Hazard Mitigation Plan Open House Meetings

- **Monday, September 21<sup>st</sup>, 4 – 6pm**, Forestville Town Hall in Maplewood, 7705 County Hwy. H
- **Monday, September 28<sup>th</sup>, 4 – 6pm**, Peninsula Room, Door County Government Center, 421 Nebraska St., Sturgeon Bay
- **Tuesday, September 29<sup>th</sup>, 4 – 6pm**, Egg Harbor Town Hall, 5242 County Hwy. I

### Agenda

1. Open meeting (4:00)
2. Overview: Hazard mitigation plan development process (4:15 – 4:30)
3. Public review and input regarding plan (4:30 – 5:15)
4. Overview: Hazard mitigation plan development process (5:15 – 5:30)
5. Public review and input regarding plan (5:30 – 6:00)
6. Adjourn (6:00)

**Door County Hazard Mitigation Plan**  
**Open House Meeting**  
 4 – 6pm, Monday, September 21, 2015  
 Forestville Town Hall in Maplewood, 7705 County Hwy. H

**Minutes**

**Present**

**Door County:**

- Emergency Management Services – Dan Williams, Director
- Planning
  - Mariah Goode, Director
  - Becky Kerwin, Planner

**Others:**

- Village of Forestville: Terry McNulty, President
  - Town of Forestville: Ruth Kerscher, Clerk and Dena Schmidt, Town Treasurer
    - Residents: David Gaworek and Larry Huber
  - Town of Union: Gale Guilette, Plan Commission Chair
  - Kewaunee County Emergency Management: Tracy Nollenberg
1. **Open meeting.** Planner Kerwin opened the meeting at 4:00 p.m. by welcoming everyone and inviting them to review the draft plan maps prior to the presentation starting at 4:15 p.m. The following documents were available for review or handed out at the meeting and are also posted on the Planning Department's Web site at <http://map.co.door.wi.us/planning/Hazard-Mitigation-Plan.htm>.
    - meeting agenda
    - presentation
    - summary of municipal capabilities
    - Chapter 2, Risk Assessment
    - Chapter 3, Mitigation Strategies
    - Maps for Northern Door, Central Door, Southern Door, City of Sturgeon Bay, and Villages of Egg Harbor, Ephraim, Forestville, and Sister Bay:
      - Facilities/Infrastructure, Hazardous Materials, and Flood Zone
      - Contamination Sites, Hazardous Material Storage, and Groundwater Concern Areas.
  2. **Overview: Hazard mitigation plan development process.** At 4:15 p.m., Planner Kerwin gave a presentation regarding the hazard mitigation plan development process. She then invited participants to review and comment on the draft risk assessment and mitigation strategies chapters, as well as the maps.
  3. **Public review and input regarding plan.** Participants reviewed and commented on the documents described above 1. Comments and subsequent changes made or responses from Planning Department staff members are listed at the end of these minutes.

4. **Overview: Hazard mitigation plan development process.** At approximately 5:15 p.m., Planner Kerwin gave the same presentation and invitation to review/comment on the documents provided as described above in 2.
5. **Public review and input regarding plan.** Participants reviewed and commented on the documents described above in 1. Comments and subsequent changes made or responses from Planning Department staff members are listed at the end of these minutes.
6. **Adjourn.** The meeting adjourned at approximately 6:00 p.m.

#### Comments:

- Drain field behind Holy Name of Mary Church, Co. H, is not identified on map. Ruth Kerscher. *Note: Since the Maplewood wastewater treatment plant is identified and other drainfields around the county have not been identified, this change was not made.*
- Add communications warning siren @ fire station for Village of Forestville; Map 2.14. Terry McNulty. *Note: A "communications-related" symbol for the siren was added to the map.*
- Village of Forestville "vulnerable population" is now a privately owned apartment complex; Map 2.14. Terry McNulty. *Note: The "vulnerable population" symbol for this apartment complex was deleted.*
- Should fuel storage be noted @ NW corner of CTH J + STH 42? Terry McNulty. *Note: A "fuel storage" symbol was added for this property.*
- Add a fireworks storage site in Maplewood. Larry Huber. *Note: completed.*
- The Southern Door Map 2.3, Contamination Sites, Hazardous Materials Storage, and Groundwater Concern Areas, needs a blow-up of the Maplewood area. *Note: completed.*
- The mitigation action items need to be numbered. *Note: completed.*
- Chapter 2, Risk Assessment, should include a description noting that the groundwater concern areas are due to physical features of the land, not the land use occurring on the surface. *Note: The criteria used for developing groundwater concern areas is described in Chapter 2.*

*Respectfully Submitted,*

*Rebecca Kerwin*

## Door County Hazard Mitigation Plan Open House Meeting

4 – 6pm, Monday, September 28, 2015

Peninsula Room, Door County Government Center, 421 Nebraska St., Sturgeon Bay

### Minutes

#### Present

##### Door County:

- Emergency Management Services – Dan Williams, Director
- Information Systems – Tom Haight, Land Information Officer
- Planning
  - Mariah Goode, Director
  - Becky Kerwin, Planner

##### Others:

- City of Sturgeon Bay: Marty Olejnzak, Community Development Director
- Town of Egg Harbor: David Enigl, County and Town Board Supervisor
- Town of Forestville: Roy Englebert, County Board Supervisor and Town Board Chair; Monica Nelson, Plan Commission Chair
  - Resident: David Gaworek
- Town of Gardner: Bob Batal, Plan Commission Chair; Wally Butz, Plan Commission Member

1. **Open meeting.** Planner Kerwin opened the meeting at 4:00 p.m. by welcoming everyone and inviting them to review the draft plan maps prior to the presentation starting at 4:15 p.m. The following documents were available for review or handed out at the meeting and are also posted on the Planning Department's Web site at <http://map.co.door.wi.us/planning/Hazard-Mitigation-Plan.htm>.
  - meeting agenda
  - presentation
  - summary of municipal capabilities
  - Chapter 2, Risk Assessment
  - Chapter 3, Mitigation Strategies
  - Maps for Northern Door, Central Door, Southern Door, City of Sturgeon Bay, and Villages of Egg Harbor, Ephraim, Forestville, and Sister Bay:
    - Facilities/Infrastructure, Hazardous Materials, and Flood Zone
    - Contamination Sites, Hazardous Material Storage, and Groundwater Concern Areas.

2. **Overview: Hazard mitigation plan development process.** At 4:15 p.m., Planner Kerwin gave a presentation regarding the hazard mitigation plan development process. She then invited participants to review and comment on the draft risk assessment and mitigation strategies chapters, as well as the maps.
3. **Public review and input regarding plan.** Participants reviewed and commented on the documents described above 1. Comments and subsequent changes made or responses from Planning Department staff members are listed at the end of these minutes.
4. **Overview: Hazard mitigation plan development process.** At approximately 5:15 p.m., Planner Kerwin gave the same presentation and invitation to review/comment on the documents provided as described above in 2.
5. **Public review and input regarding plan.** Participants reviewed and commented on the documents described above in 1. Comments and subsequent changes made or responses from Planning Department staff members are listed at the end of these minutes.
6. **Adjourn.** The meeting adjourned at approximately 6:00 p.m.

**Comments:**

- Incorrect WPS gas line shown in industrial park – it now follows Neenah Ave from new WPS regulator station north. *Note: A current GIS shapefile was requested from WPS on 10/01/2015.*
- Remove “cable network” symbol from assets and infrastructure map. *Note: completed.*
- Landfills are missing in the Town of Egg Harbor. *Note: An enlarged map of the Town of Egg Harbor was sent to Dave Enigl on 9/30/2015 for him to identify the landfills so that the Planning Department can map them.*

*Respectfully Submitted,*

*Rebecca Kerwin*

**Door County Hazard Mitigation Plan**  
**Open House Meeting**  
4 – 6pm, Tuesday, September 29, 2015  
Egg Harbor Town Hall, 5242 County Hwy. I

**Minutes**

**Present**

**Door County:**

- Emergency Management Services – Dan Williams, Director
- Planning
  - Mariah Goode, Director
  - Becky Kerwin, Planner

**Others:**

- Village of Egg Harbor: Michelle Anderson, Deputy Clerk
- Village of Ephraim: Brent Bristol, Zoning Administrator; Jane Olson, Trustee
- Village of Sister Bay: Zeke Jackson, Administrator; Patrick Johnson, Operator; Michael Schell, Operations Supervisor
- Town of Jacksonport: Randy Halstead, County Board Supervisor and Town Board Chair
- Town of Sevastopol: Linda Wait, Clerk

1. **Open meeting.** Planner Kerwin opened the meeting at 4:00 p.m. by welcoming everyone and inviting them to review the draft plan maps prior to the presentation starting at 4:15 p.m. The following documents were available for review or handed out at the meeting and are also posted on the Planning Department's Web site at <http://map.co.door.wi.us/planning/Hazard-Mitigation-Plan.htm>.

- meeting agenda
- presentation
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2. **Overview: Hazard mitigation plan development process.** At 4:15 p.m., Planner Kerwin gave a presentation regarding the hazard mitigation plan development process. She then invited participants to review and comment on the draft risk assessment and mitigation strategies chapters, as well as the maps.
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5. **Public review and input regarding plan.** Participants reviewed and commented on the documents described above in 1. Comments and subsequent changes made or responses from Planning Department staff members are listed at the end of these minutes.
6. **Adjourn.** The meeting adjourned at approximately 6:00 p.m.

**Comments:**

- Village of Sister Bay – add hazardous chemical storage at municipal well sites. *Note: completed.*
- Town of Jacksonport – add a closed landfill site. *Note: completed.*

*Respectfully Submitted,*

*Rebecca Kerwin*

# **Door County Hazard Mitigation Plan**

## Appendix B



## MEMORANDUM OF AGREEMENT FOR A MULTI-JURISDICTIONAL DOOR COUNTY HAZARD MITIGATION PLAN

### I. Purpose

A Memorandum of Agreement (MOA) is hereby executed between the "Participating Jurisdictions", as listed below, for the development of the Door County Hazard Mitigation Plan (Plan).

- Door County
- City of Sturgeon Bay
- Village of Egg Harbor
- Village of Ephraim
- Village of Forestville
- Village of Sister Bay

The purpose of this MOA is to establish commitment from and a cooperative working relationship between all Participating Jurisdictions in the development and implementation of the Door County Hazard Mitigation Plan. In addition, the intent of this MOA is to ensure that the multi-jurisdictional hazard mitigation plan is developed in accordance with Title 44 of the Federal Code of Regulations (CFR) Part 201.6; that the planning process is conducted in an open manner involving community stakeholders; that it is consistent with each Participating Jurisdiction's policies, programs and authorities; and it is an accurate reflection of the community's values.

This MOA sets out the responsibilities and identifies the work to be performed by the Participating Jurisdictions. Planning tasks, schedules, and finished products are identified in the attached Schedule of Tasks. The Plan created as a result of this MOA will be presented for adoption to the governing body (Board of Supervisors, City Council, or Village Board) of each Participating Jurisdiction.

### II. Background

Door County has received a grant from the Federal Emergency Management Agency to prepare a multi-jurisdictional hazard mitigation plan in accordance with 44 FEMA requirements at 44.C.F.R. 201.6. Hazard mitigation plans form the foundation for a community's long-term strategy to reduce losses from disaster and to break the cycle of damage, reconstruction, and repeated damage. The Participating Jurisdictions in a mitigation planning process may benefit by:

- identifying cost effective actions for risk reduction;
- directing resources on the greatest risks and vulnerabilities;
- building partnerships by involving people, organizations, and businesses;
- increasing education and awareness of hazards and risk;
- aligning risk reduction with other community objectives; and
- providing eligibility to receive federal hazard mitigation grant funding.

### III. Planning Team Responsibilities

Door County will act as the Lead Agency. The Participating Jurisdictions authorize Door County to manage and facilitate the planning process in accordance with the attached Schedule of Tasks. The Participating Jurisdictions understand that representatives must engage in the following planning process, as more fully described in the Local Mitigation Planning Handbook (FEMA, 2012), including, but not limited to:

- Develop/approve the Schedule of Tasks with the Planning Team
- Attend regular meetings of the Planning Team and any applicable sub-county meetings.
- Assist the Planning Team with developing and conducting an outreach strategy to involve other stakeholders and the public, in order to appropriately represent the Jurisdiction.

- Provide data and feedback to develop the risk assessment and mitigation strategy, including a specific mitigation action plan for the Jurisdiction.
- Submit drafts of plan to the Jurisdiction for review.
- Work with the Planning Team to incorporate Jurisdiction comments into the draft plan.
- Submit the draft plan to their respective governing body for consideration and adoption.
- After adoption, coordinate a process to monitor, evaluate, and work toward plan implementation.

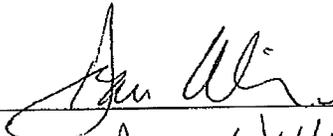
**IV. Planning Team**

The participants listed below are authorized on behalf of the governing bodies to participate as members of the Planning Team for the Door County Hazard Mitigation Plan.

- Door County
  - Emergency Services – Director, Deputy Director
  - Planning Department – Director, Planner II
- City of Sturgeon Bay – Mayor, Administrator, Director of Community Development
- Village of Egg Harbor – President, Administrator
- Village of Ephraim – President, Administrator
- Village of Forestville – President, Administrator
- Village of Sister Bay – President, Administrator

**V. MOA Implementation**

This MOA will be in effect from the date of signature by all parties, will remain in effect through the duration of the planning process, and will terminate after adoption of the final FEMA-approved mitigation plan by all participating jurisdictions, or 5 years after FEMA approval, whichever is earlier. It may be terminated prior to that time by any Participating Jurisdiction giving 30 days written notice. This MOA is to be implemented through the attached Schedule of Tasks.

Signature:  Date: \_\_\_\_\_

Name and Title: Dan Williams, Emergency Services Director

Municipality: DOOR COUNTY

**VI. Attachment**

Schedule of Tasks

- Provide data and feedback to develop the risk assessment and mitigation strategy, including a specific mitigation action plan for the Jurisdiction.
- Submit drafts of plan to the Jurisdiction for review.
- Work with the Planning Team to incorporate Jurisdiction comments into the draft plan.
- Submit the draft plan to their respective governing body for consideration and adoption.
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Signature: \_\_\_\_\_

Date: 11/14/14

Name and Title: \_\_\_\_\_

Thad Birmingham, Mayor

Municipality: \_\_\_\_\_

City of Sturgeon Bay

#### VI. Attachment

Schedule of Tasks

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Signature: \_\_\_\_\_

Date: 10-15-14

Name and Title: \_\_\_\_\_

Joe Smith, President

Municipality: \_\_\_\_\_

Egg Harbor Village

#### VI. Attachment

Schedule of Tasks

- Provide data and feedback to develop the risk assessment and mitigation strategy, including a specific mitigation action plan for the Jurisdiction.
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Signature: [Handwritten Signature] Date: 8-25-15

Name and Title: MEMCUTCHEO W D PRES. Bd OF TRUSTEES

Municipality: EPHRAIM

#### VI. Attachment

Schedule of Tasks

- Provide data and feedback to develop the risk assessment and mitigation strategy, including a specific mitigation action plan for the Jurisdiction.
- Submit drafts of plan to the Jurisdiction for review.
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Signature:  Date: 10/10/14

Name and Title: Terry McNulty, President

Municipality: Village of Forestville

#### VI. Attachment

Schedule of Tasks

- Provide data and feedback to develop the risk assessment and mitigation strategy, including a specific mitigation action plan for the Jurisdiction.
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- Village of Ephraim – President, Administrator
- Village of Forestville – President, Administrator
- Village of Sister Bay – President, Administrator

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Signature: \_\_\_\_\_

Date: 10/9/14

Name and Title: \_\_\_\_\_

ZEVE JACKSON, ADMINISTRATOR

Municipality: \_\_\_\_\_

SISTER BAY

#### VI. Attachment

Schedule of Tasks

# **Door County Hazard Mitigation Plan**

## Appendix C



## SUMMARY OF MUNICIPAL CAPABILITIES

*Note: The county and municipalities will review the Door County Hazard Mitigation Plan when updating the plans and ordinances listed below in order to identify any opportunities for integrating this plan into other planning mechanisms. The county and municipalities will also post this plan on their individual Web sites with instructions on how the public may comment.*

### Door County

#### Planning and Regulatory

##### Plans:

- Comprehensive and farmland preservation plan 2035
- Capital improvements plan (2005 – 2009)
- Economic development plan (2005)
- Local emergency operations plan (2012)
- Continuity of operations plan (Emergency Services and Public Health)
- Transportation plan (2012)
- Continuity of Operations Plan (for county buildings)

##### Land Use Planning and Ordinances

- Zoning ordinance
- Subdivision ordinance
- Floodplain ordinance, flood insurance rate maps
- Land division ordinance, stormwater runoff control for major land divisions

#### Administrative and Technical

##### Administration

- Planning commission
- Emergency Services committee, mitigation planning
- Tree trimming (highway department?)
- Mutual aid agreements (Door County Emergency Operations Plans)
- Emergency manager

##### Staff

- Floodplain zoning administrators
- Emergency manager
- Community planner
- GIS coordinator

##### Technical

- Hazard data and information
- Grant writing
- Warning systems/services (CodeRed)
- Reverse 911

**Financial** (funding resources)

- Capital improvements project funding
- Incur debt through general obligation bonds and/or special tax bonds
- Community development block grant
- Other federal funding programs
- State funding programs

**Education and Outreach**

- Door County Public Health
- Door County Sheriff's Department
- United Way
- Local Emergency Planning Committee (educates the community on hazardous materials located throughout the community)

**City of Sturgeon Bay****Planning and Regulatory**

## Plans:

- Comprehensive plan (2010)
- Capital improvements plan (2014)
- Economic development plan (2005)
- Local emergency operations plan (2014)
- Transportation plan (2000)
- Stormwater management plan (2005)
- Continuity of Operations Plan (2006)
- Port security plan (2006)

## Building Code, Permitting, and Inspections

- State building code
- ISO rating of 3
- Site plan review requirements

## Land Use Planning and Ordinances

- Zoning ordinance (includes wellhead protection standards)
- Subdivision ordinance (includes land suitability, cul-de-sac length, water main looping, and other mitigation standards; includes acquisition of land for open space and public recreation uses)
- Floodplain ordinance, flood insurance rate maps
- Stormwater management ordinance (requires new development to reduce runoff to guard against downstream flooding)
- Shoreland Wetland Zoning Code
- Property Maintenance Code

## **Administrative and Technical**

### Administration

- Planning commission
- Maintenance programs (Public Works Department and Sturgeon Bay Utilities)
- Mutual aid agreements (Door County Emergency Operations Plans)
- Mutual Aid Box Alarm System division #154 (statewide mutual aid, July 2014)

### Staff

- Chief building official
- Floodplain zoning administrator
- Community planner
- Civil engineer
- GIS coordinator
- All city staff is trained in National Incident Management System and Incident Command System 100 & 200

### Technical

- Emergency Planning and Community Right-to-Know Act reporting and Fire Department inspection records
- Grant writing
- Outdoor warning systems (six sirens)
- Cable TV warning system

### **Financial** (funding resources)

- Capital improvements project funding
- Authority to levy taxes for specific purposes
- Fees for water, sewer, gas, or electric services
- Incur debt through general obligation bonds and/or special tax bonds
- Storm water utility fee
- Incur debt through private activities
- Community development block grant
- Other federal funding programs
- State funding programs

### **Education and Outreach**

- Ham radio operators provide communications during disaster
- Civil Air Patrol and U.S. Coast Guard Auxiliary
- Fire department has ongoing fire safety, household preparedness, and weather emergency programs provided to businesses, schools, etc.
- Fire department prepares and educates schools on disaster plans

## **Village of Egg Harbor**

### **Planning and Regulatory**

#### Plans:

- Comprehensive plan (2008)
- Capital improvements plan (2015)
- Local emergency operations plan (2014)

#### Building Code, Permitting, and Inspections

- State building code
- ISO rating of 7
- Site plan review requirements

#### Land Use Planning and Ordinances

- Zoning ordinance
- Subdivision ordinance
- Floodplain ordinance, flood insurance rate maps
- Public tree removal

### **Administrative and Technical**

#### Administration

- Planning commission
- Maintenance programs
- Mutual aid agreements

#### Staff

- Chief building official (part-time)
- Floodplain zoning administrator
- Civil engineer (part-time)

#### Technical

- Hazard data and information (municipal owned/operated)
- Grant writing

### **Financial (funding resources)**

- Capital improvements project funding
- Fees for water, sewer, gas, or electric services
- Incur debt through general obligation bonds and/or special tax bonds
- Incur debt through private activities
- Community development block grant
- Other federal funding programs (beach/storm water improvement, marina repairs)
- State funding programs (marina repairs)

## **Education and Outreach**

- Ham radio operators provide communications during disaster
- Civil Air Patrol and U.S. Coast Guard Auxiliary
- Fire department has ongoing fire safety, household preparedness, and weather emergency programs provided to businesses, schools, etc.
- Fire department prepares and educates schools on disaster plans

## **Village of Ephraim**

### **Planning and Regulatory**

#### Plans:

- Comprehensive plan (2009)
- Transportation plan (currently discussing)
- Stormwater design standards (within erosion control ordinance)

#### Building Code, Permitting, and Inspections

- State building code
- ISO rating of 7

#### Land Use Planning and Ordinances

- Zoning ordinance
- Subdivision ordinance
- Floodplain zoning ordinance, flood insurance rate maps
- Erosion control ordinance with specific Niagara escarpment language
- Acquisition of land for open space and public recreation uses

### **Administrative and Technical**

#### Administration

- Planning commission
- Tree trimming and flushing storm sewers annually
- Mutual aid agreements through fire department

#### Staff

- Zoning/floodplain administrator and community planner
- Fire chief

#### Technical

- Grant writing

### **Financial (funding resources)**

- Capital improvements project funding
- Authority to levy taxes for specific purposes
- Fees for water, sewer, gas, or electric services
- Incur debt through general obligation bonds and/or special tax bonds
- Incur debt through private activities
- Community development block grant
- Other federal funding programs

- State funding programs

### **Education and Outreach**

- Ongoing public education or information programs (fire department gives presentations to Gibraltar and Peninsula Preschools, and at an annual fire station open house)

### **Village of Forestville**

#### **Planning and Regulatory**

Plans:

- Comprehensive plan (2010)
- Economic development plan (2010)
- Local emergency operations plan (2014)
- Transportation plan (2010)
- Stormwater management plan (2010)

Building Code, Permitting, and Inspections

- State building code
- ISO rating of 6
- Site plan review requirements

Land Use Planning and Ordinances

- Zoning ordinance
- Subdivision ordinance
- Floodplain zoning ordinance, flood insurance rate maps

#### **Administrative and Technical**

Administration

- Planning commission
- Mitigation planning committee
- Mutual aid agreements

Technical

- Outdoor warning siren

**Financial** (funding resources)

- Authority to levy taxes for specific purposes
- Fees for water, sewer, gas, or electric services
- Impact fees for new development
- Other federal funding programs (beach/storm water improvement, marina repairs)
- State funding programs (marina repairs)

### **Village of Sister Bay**

#### **Planning and Regulatory**

Plans:

- Comprehensive plan (2003)
- Capital improvements plan (2014)
- Economic development plan (2014)

#### Building Code, Permitting, and Inspections

- State building code
- ISO rating of 4/5 (hydrants/1,000' beyond hydrants)
- Site plan review requirements

#### Land Use Planning and Ordinances

- Zoning ordinance
- Subdivision ordinance
- Natural hazard specific ordinance (bluff protection)
- Acquisition of land for open space and public recreation uses
- Flood insurance rate maps

### **Administrative and Technical**

#### Administration

- Planning commission
- Maintenance programs
- Mutual aid agreements

#### Staff

- Chief building official (part-time)
- Community planner

#### Technical

- Limited outdoor warning capacity

#### **Financial** (funding resources)

- Capital improvements project funding
- Authority to levy taxes for specific purposes
- Fees for water, sewer, gas, or electric services
- Impact fees for new development
- Incur debt through general obligation bonds and/or special tax bonds
- Incur debt through private activities
- Community development block grant?
- Other federal funding programs
- State funding programs

#### **Education and Outreach**

- Sister Bay & Liberty Grove Fire Fighters Association
- Northern Door First Responders Association
- Open house at fire station

# **Door County Hazard Mitigation Plan**

## Appendix D

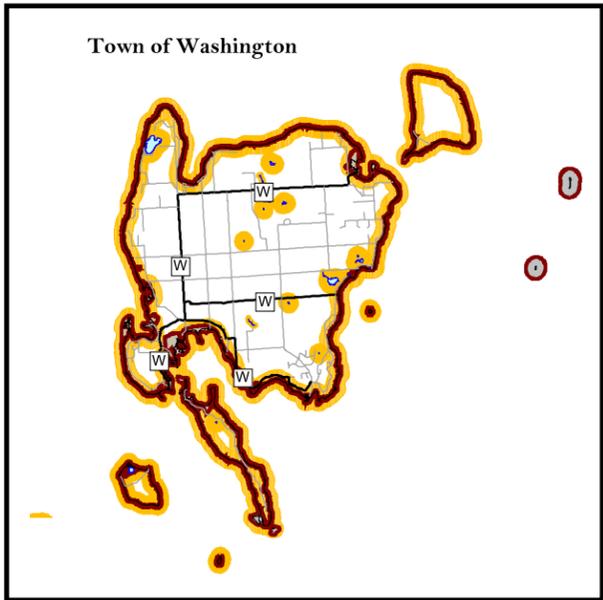




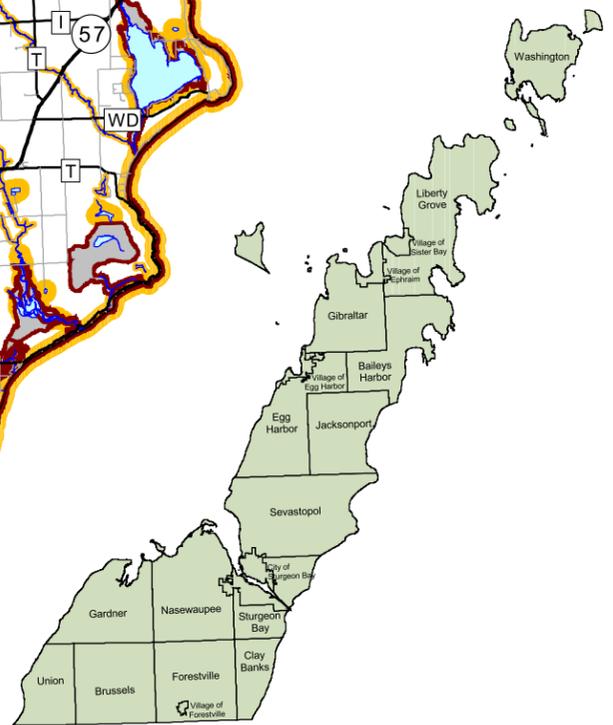
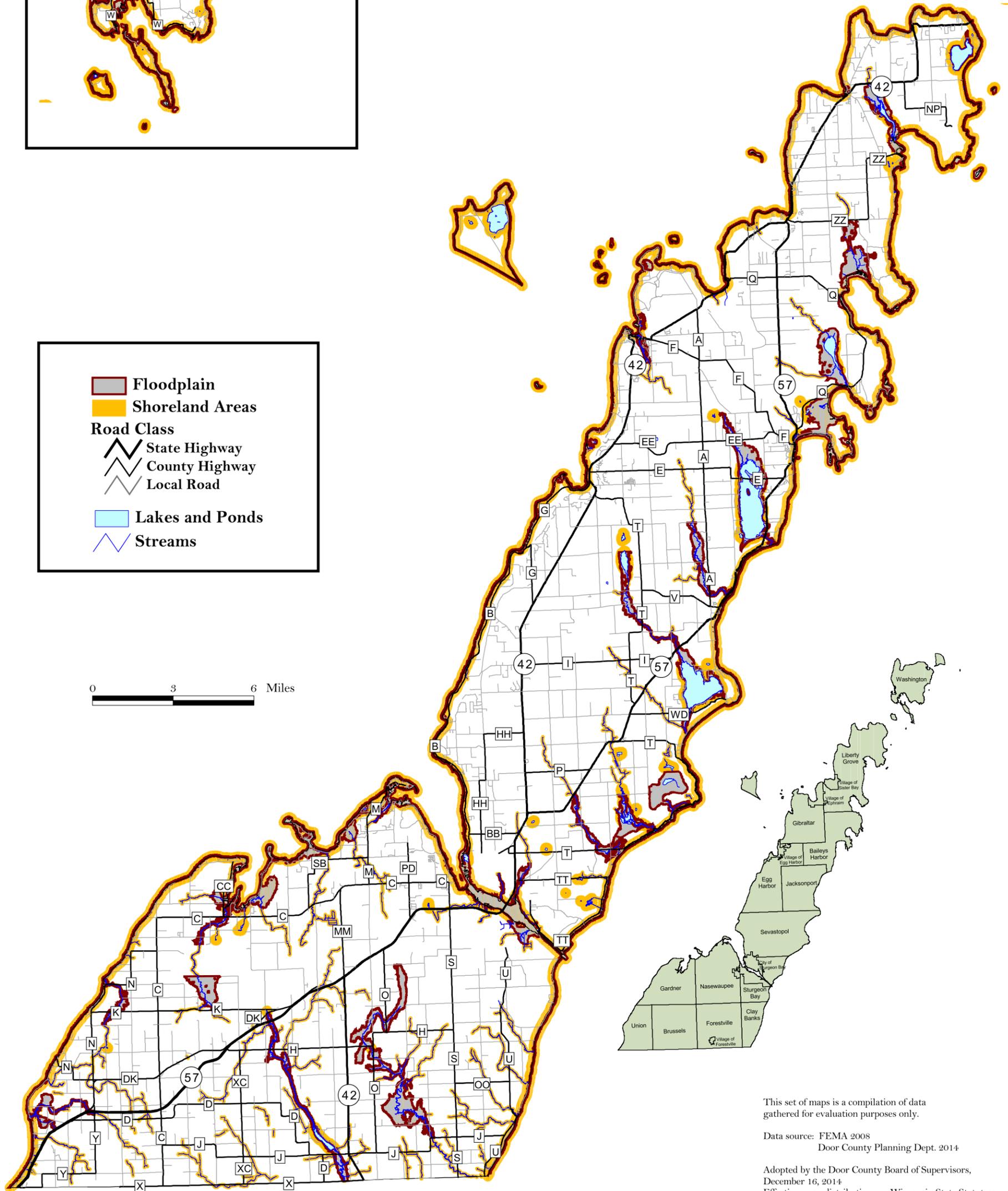
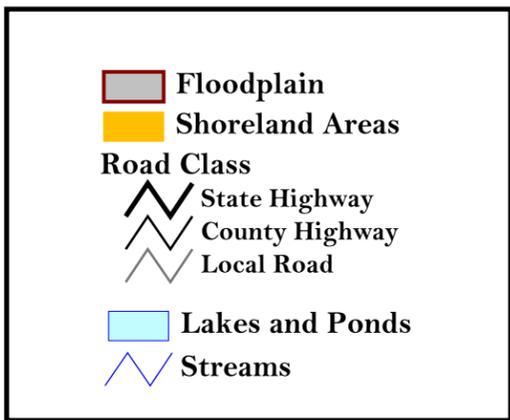
Door County Planning Dept.  
421 Nebraska Street  
Sturgeon Bay, WI 54235  
(920) 746-2323  
map.co.door.wi.us/planning

# Door County Hazard Mitigation Plan

## Map 2.1: Shoreland and Floodplain Areas



See Town of Washington Inset



This set of maps is a compilation of data gathered for evaluation purposes only.

Data source: FEMA 2008  
Door County Planning Dept. 2014

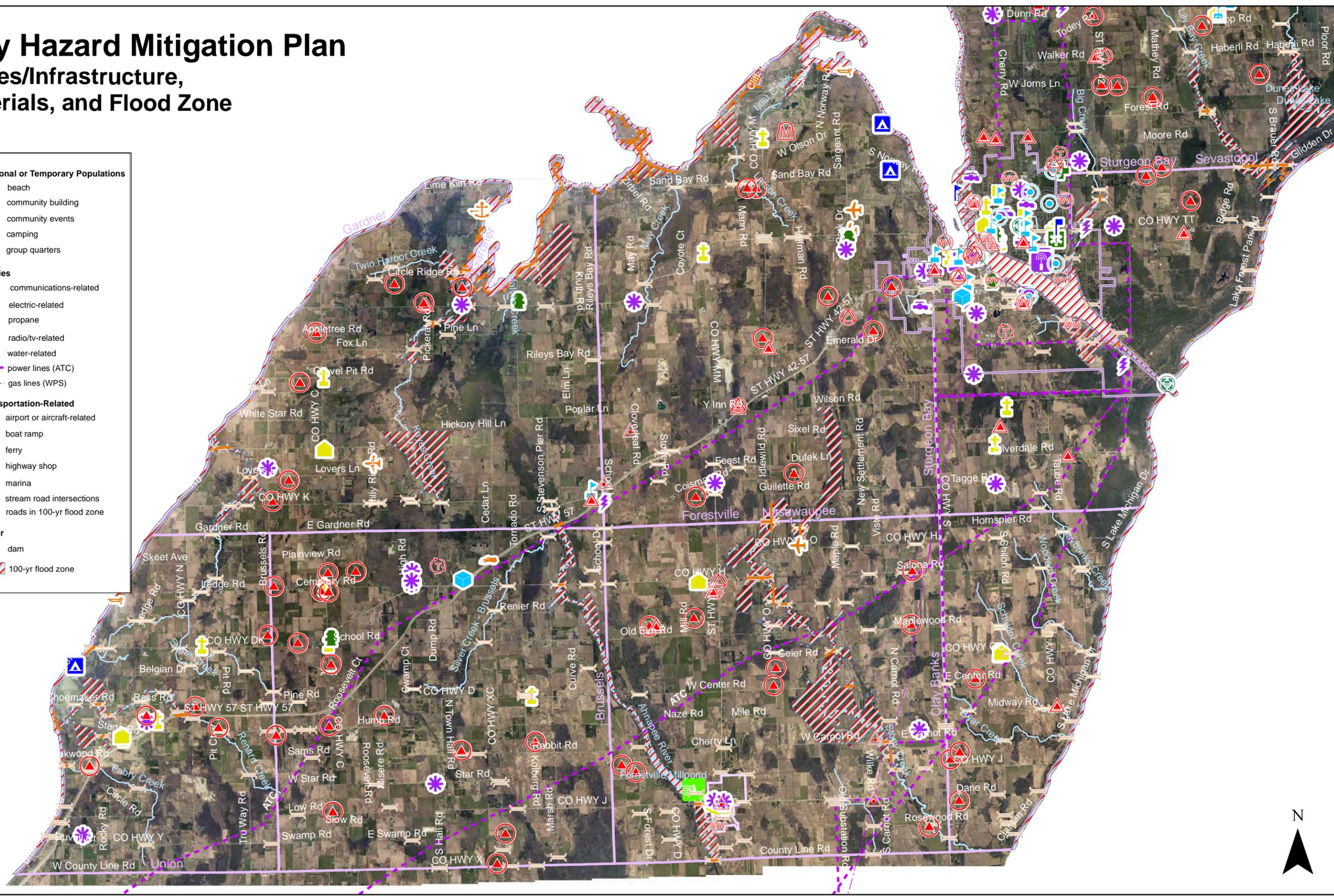
Adopted by the Door County Board of Supervisors,  
December 16, 2014  
Effective upon distribution per Wisconsin State Statutes,  
January 1, 2015

# Door County Hazard Mitigation Plan

## Map 2.2: Facilities/Infrastructure, Hazardous Materials, and Flood Zone

### Central Door

<b>Occupied Buildings/ Vulnerable Populations</b>	<b>Seasonal or Temporary Populations</b>
<ul style="list-style-type: none"> <li>child care</li> <li>school</li> <li>vulnerable population</li> </ul>	<ul style="list-style-type: none"> <li>beach</li> <li>community building</li> <li>community events</li> <li>camping</li> <li>group quarters</li> </ul>
<b>Government/NGO Buildings</b>	<b>Utilities</b>
<ul style="list-style-type: none"> <li>administrative building</li> <li>library</li> <li>church</li> <li>post office</li> <li>club buildings</li> </ul>	<ul style="list-style-type: none"> <li>communications-related</li> <li>electric-related</li> <li>propane</li> <li>radio/tv-related</li> <li>water-related</li> <li>power lines (ATC)</li> <li>gas lines (WPS)</li> </ul>
<b>Emergency Services</b>	<b>Transportation-Related</b>
<ul style="list-style-type: none"> <li>Coast Guard-related</li> <li>clinic/hospital</li> <li>emergency services</li> <li>fire station</li> <li>police station</li> </ul>	<ul style="list-style-type: none"> <li>airport or aircraft-related</li> <li>boat ramp</li> <li>ferry</li> <li>highway shop</li> <li>marina</li> <li>stream road intersections</li> <li>roads in 100-yr flood zone</li> </ul>
<b>Hazardous Materials</b>	<b>Other</b>
<ul style="list-style-type: none"> <li>chemical storage</li> <li>manure storage</li> <li>open contamination site</li> <li>fuel storage</li> <li>wastewater related</li> <li>landfill</li> <li>solid waste</li> </ul>	<ul style="list-style-type: none"> <li>dam</li> <li>100-yr flood zone</li> </ul>

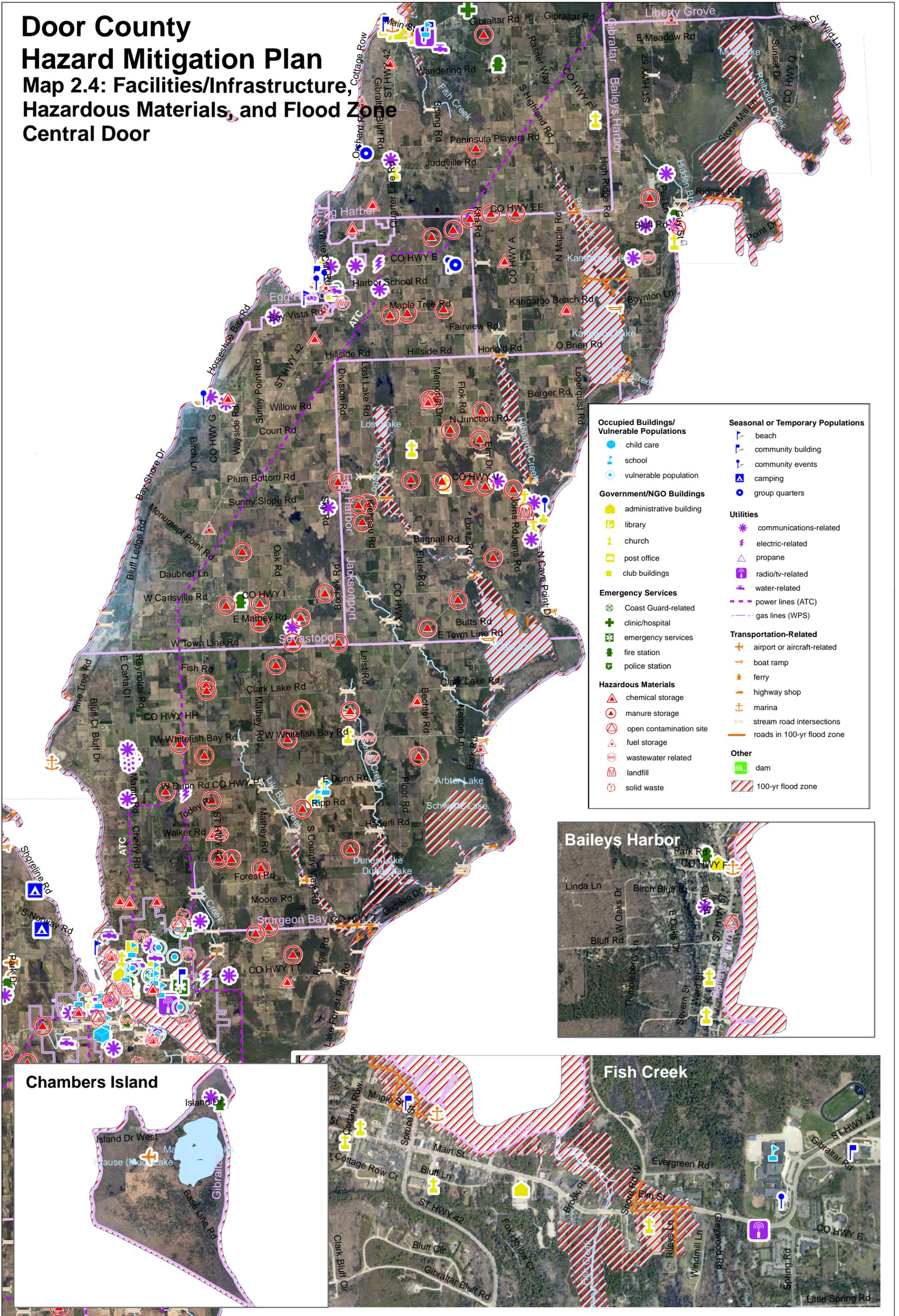




# Door County Hazard Mitigation Plan

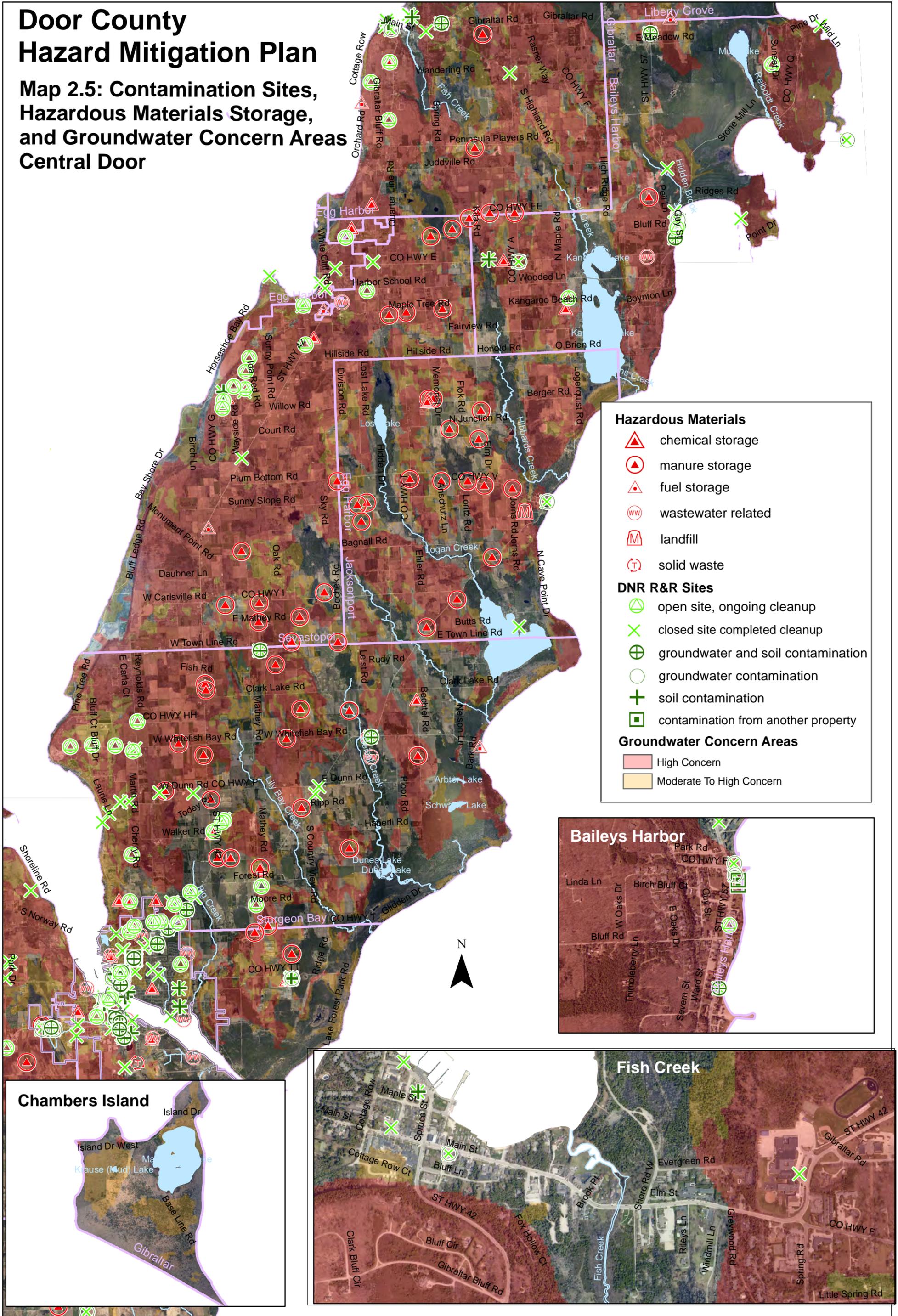
## Map 2.4: Facilities/Infrastructure, Hazardous Materials, and Flood Zone

### Central Door



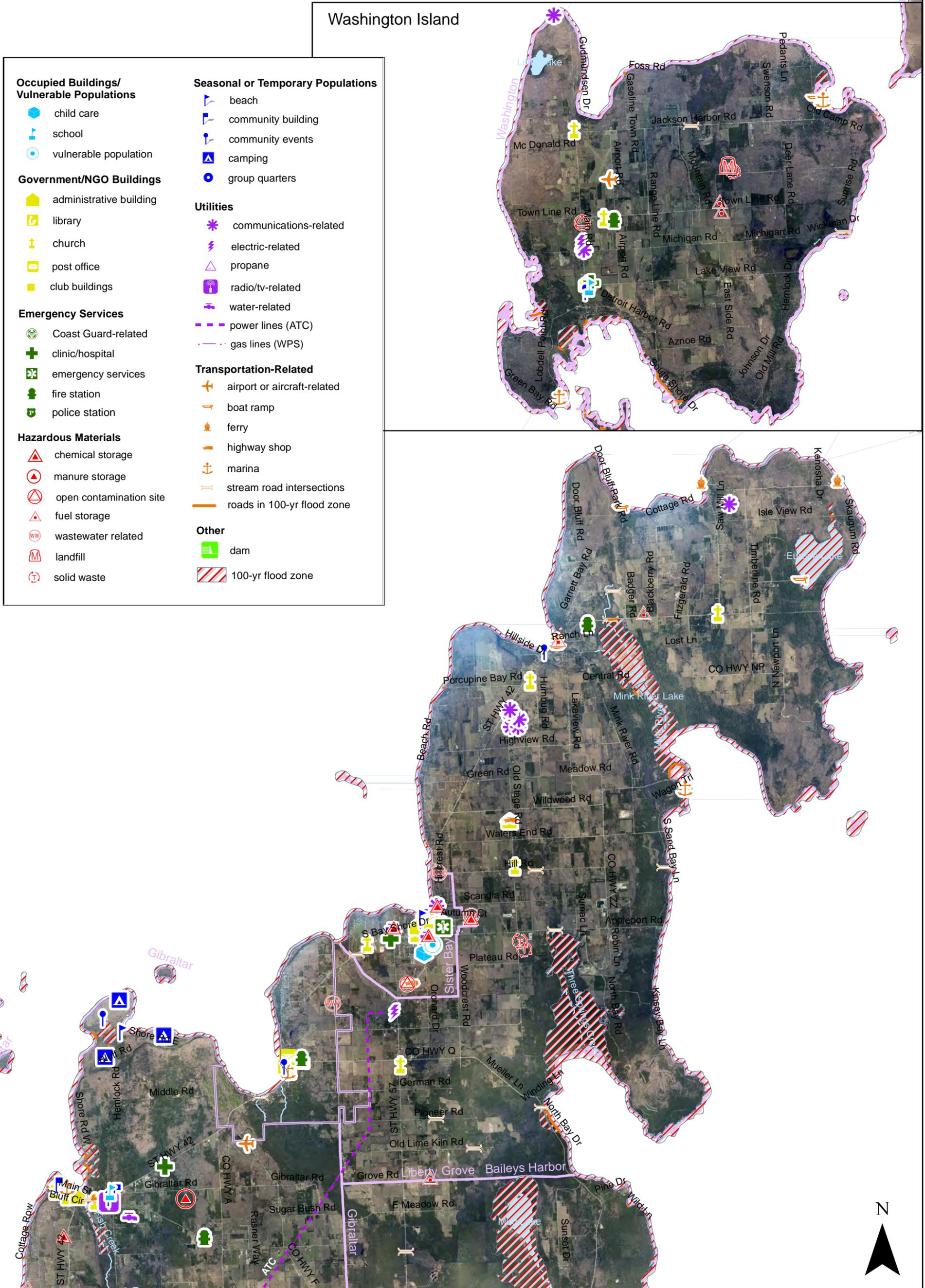
# Door County Hazard Mitigation Plan

## Map 2.5: Contamination Sites, Hazardous Materials Storage, and Groundwater Concern Areas Central Door



# Door County Hazard Mitigation Plan

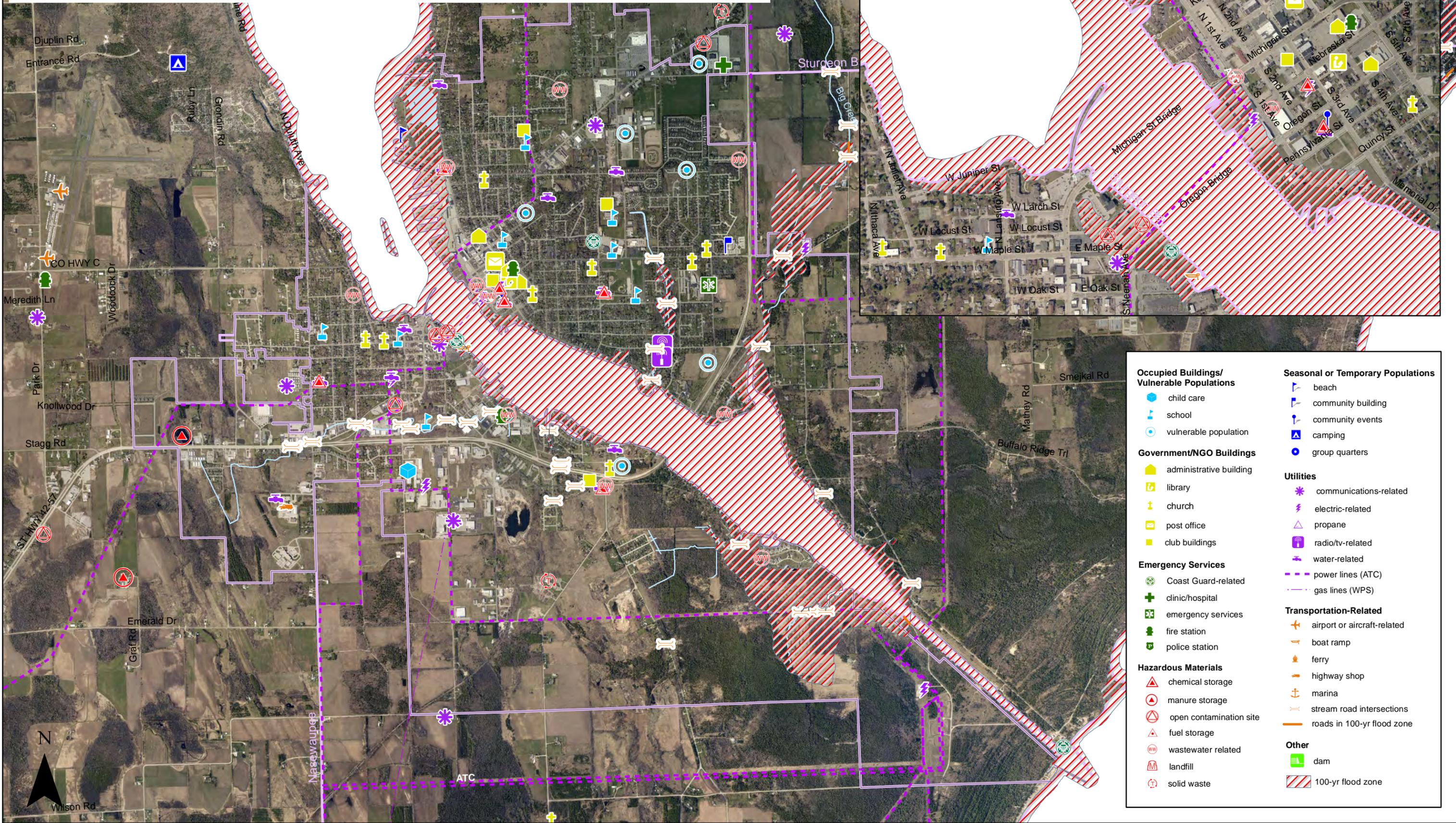
## Map 2.6: Facilities/Infrastructure, Hazardous Materials, and Flood Zone Northern Door





# Door County Hazard Mitigation Plan

## Map 2.8: Facilities/Infrastructure, Hazardous Materials, and Flood Zone City of Sturgeon Bay



<p><b>Occupied Buildings/ Vulnerable Populations</b></p> <ul style="list-style-type: none"> <li> child care</li> <li> school</li> <li> vulnerable population</li> </ul> <p><b>Government/NGO Buildings</b></p> <ul style="list-style-type: none"> <li> administrative building</li> <li> library</li> <li> church</li> <li> post office</li> <li> club buildings</li> </ul> <p><b>Emergency Services</b></p> <ul style="list-style-type: none"> <li> Coast Guard-related</li> <li> clinic/hospital</li> <li> emergency services</li> <li> fire station</li> <li> police station</li> </ul> <p><b>Hazardous Materials</b></p> <ul style="list-style-type: none"> <li> chemical storage</li> <li> manure storage</li> <li> open contamination site</li> <li> fuel storage</li> <li> wastewater related</li> <li> landfill</li> <li> solid waste</li> </ul>	<p><b>Seasonal or Temporary Populations</b></p> <ul style="list-style-type: none"> <li> beach</li> <li> community building</li> <li> community events</li> <li> camping</li> <li> group quarters</li> </ul> <p><b>Utilities</b></p> <ul style="list-style-type: none"> <li> communications-related</li> <li> electric-related</li> <li> propane</li> <li> radio/tv-related</li> <li> water-related</li> <li> power lines (ATC)</li> <li> gas lines (WPS)</li> </ul> <p><b>Transportation-Related</b></p> <ul style="list-style-type: none"> <li> airport or aircraft-related</li> <li> boat ramp</li> <li> ferry</li> <li> highway shop</li> <li> marina</li> <li> stream road intersections</li> <li> roads in 100-yr flood zone</li> </ul> <p><b>Other</b></p> <ul style="list-style-type: none"> <li> dam</li> <li> 100-yr flood zone</li> </ul>
--	---

# Door County Hazard Mitigation Plan

## Map 2.9: Contamination Sites, Hazardous Materials Storage, and Groundwater Concern Areas

### City of Sturgeon Bay

#### Hazardous Materials

- chemical storage
- manure storage
- fuel storage
- wastewater related
- landfill
- solid waste

#### DNR R&R Sites

- open site, ongoing cleanup
- closed site completed cleanup
- groundwater and soil contamination
- groundwater contamination
- soil contamination
- contamination from another property

#### Groundwater Concern Areas

- High Concern
- Moderate To High Concern

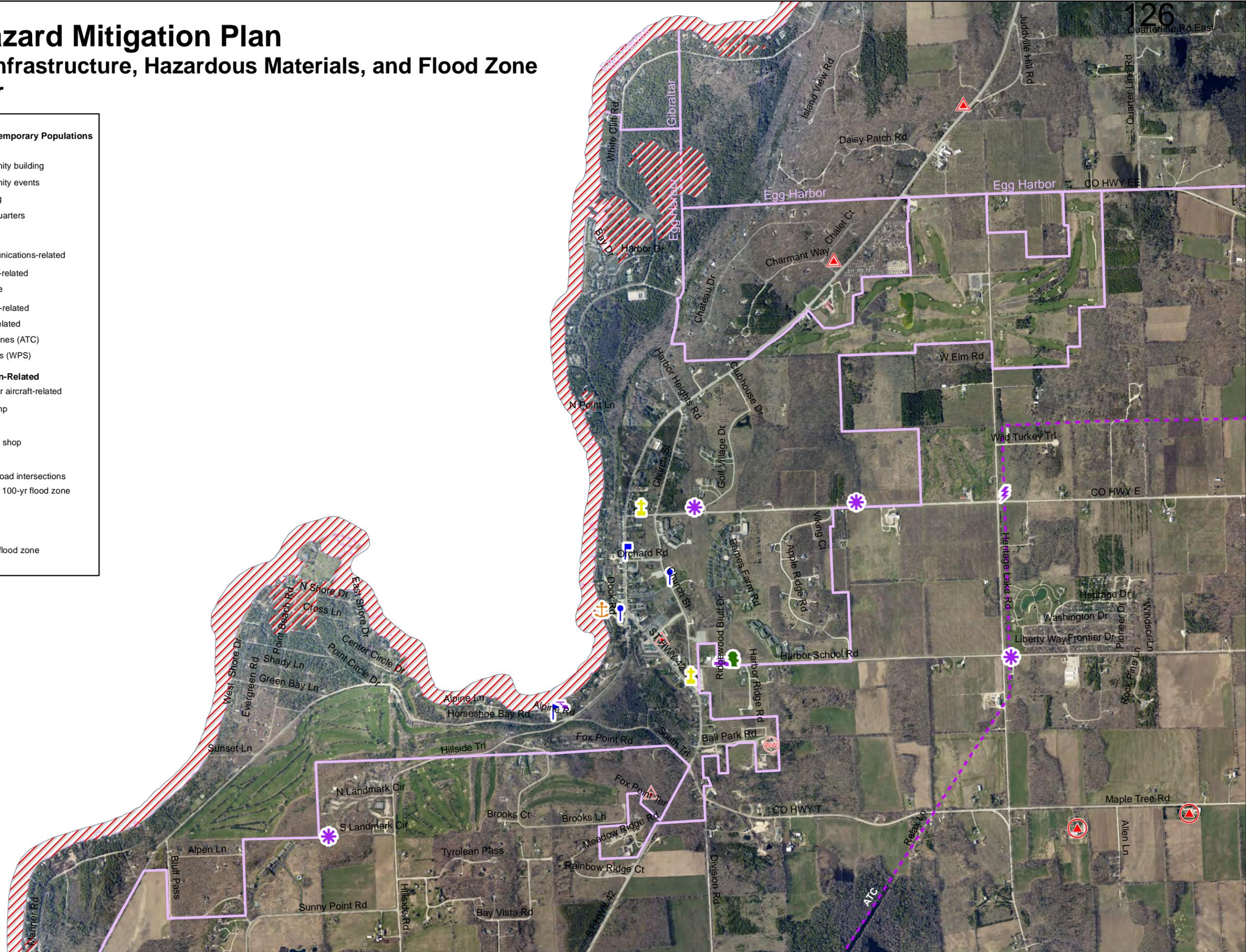


# Door County Hazard Mitigation Plan

## Map 2.10: Facilities/Infrastructure, Hazardous Materials, and Flood Zone

### Village of Egg Harbor

Occupied Buildings/ Vulnerable Populations	Seasonal or Temporary Populations
child care	beach
school	community building
vulnerable population	community events
<b>Government/NGO Buildings</b>	camping
administrative building	group quarters
library	<b>Utilities</b>
church	communications-related
post office	electric-related
club buildings	propane
<b>Emergency Services</b>	radio/tv-related
Coast Guard-related	water-related
clinic/hospital	power lines (ATC)
emergency services	gas lines (WPS)
fire station	<b>Transportation-Related</b>
police station	airport or aircraft-related
<b>Hazardous Materials</b>	boat ramp
chemical storage	ferry
manure storage	highway shop
open contamination site	marina
fuel storage	stream road intersections
wastewater related	roads in 100-yr flood zone
landfill	<b>Other</b>
solid waste	dam
	100-yr flood zone

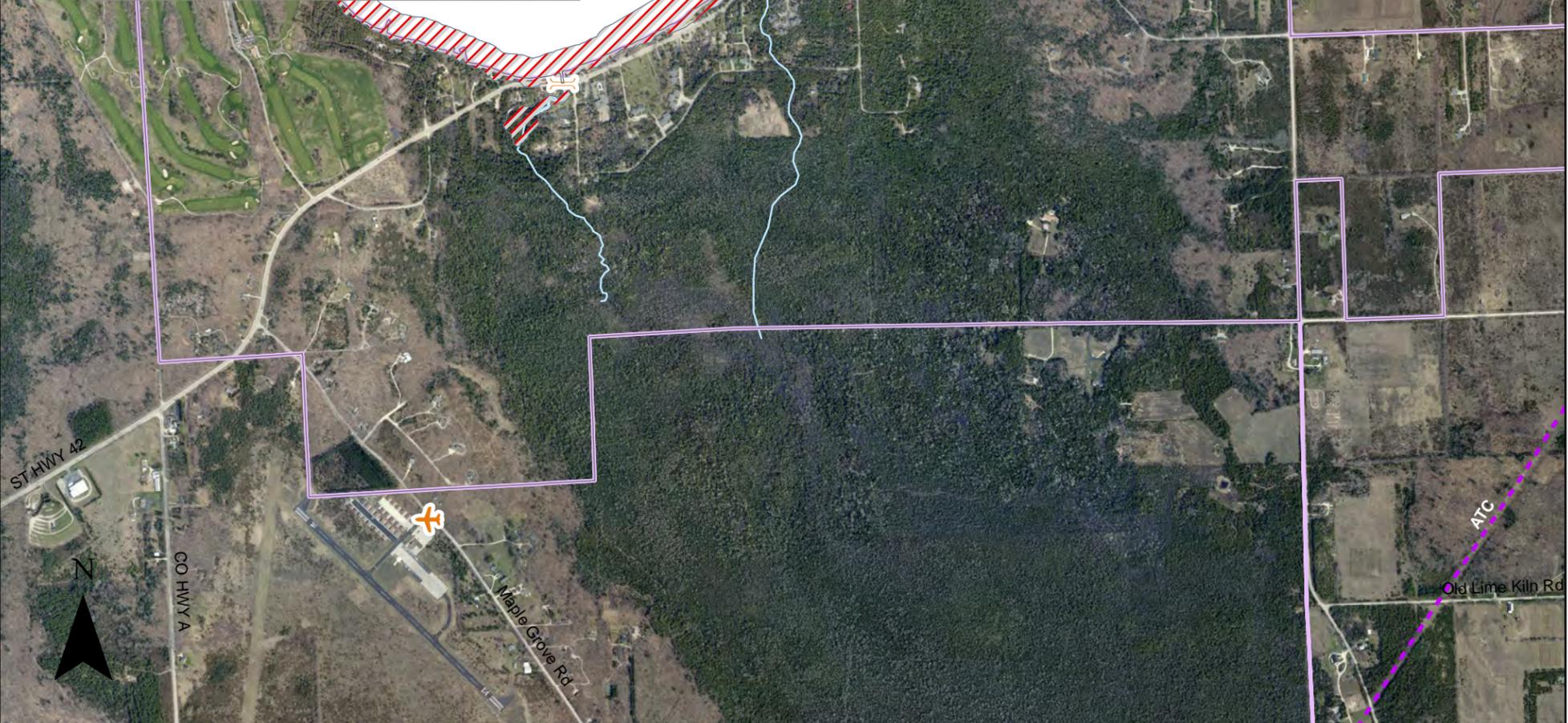
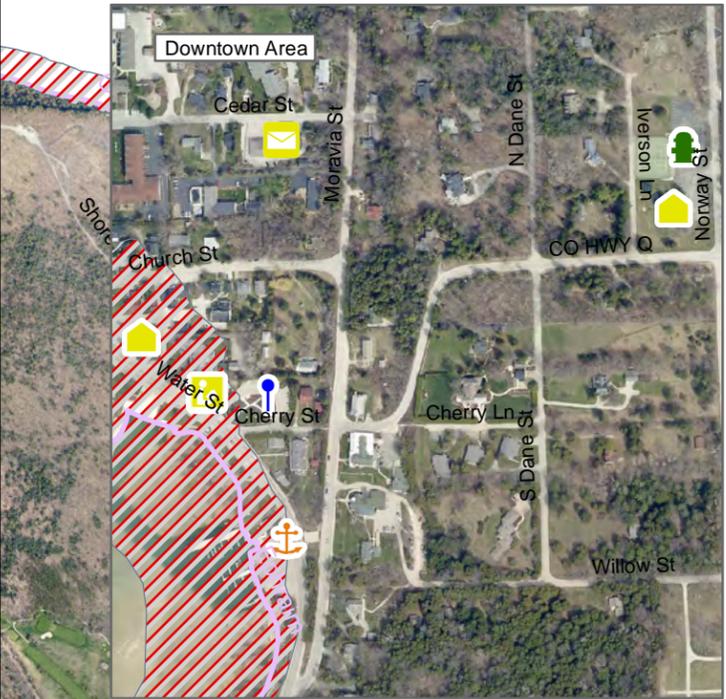




# Door County Hazard Mitigation Plan

## Map 2.12: Facilities/Infrastructure, Hazardous Materials, and Flood Zone Village of Ephraim

<b>Occupied Buildings/ Vulnerable Populations</b>	<b>Seasonal or Temporary Populations</b>
child care	beach
school	community building
vulnerable population	community events
<b>Government/NGO Buildings</b>	camping
administrative building	group quarters
library	<b>Utilities</b>
church	communications-related
post office	electric-related
club buildings	propane
<b>Emergency Services</b>	radio/tv-related
Coast Guard-related	water-related
clinic/hospital	power lines (ATC)
emergency services	gas lines (WPS)
fire station	<b>Transportation-Related</b>
police station	airport or aircraft-related
<b>Hazardous Materials</b>	boat ramp
chemical storage	ferry
manure storage	highway shop
open contamination site	marina
fuel storage	stream road intersections
wastewater related	roads in 100-yr flood zone
landfill	<b>Other</b>
solid waste	dam
	100-yr flood zone



# Door County Hazard Mitigation Plan

## Map 2.13: Contamination Sites, Hazardous Materials Storage, and Groundwater Concern Areas Village of Ephraim

**Hazardous Materials**

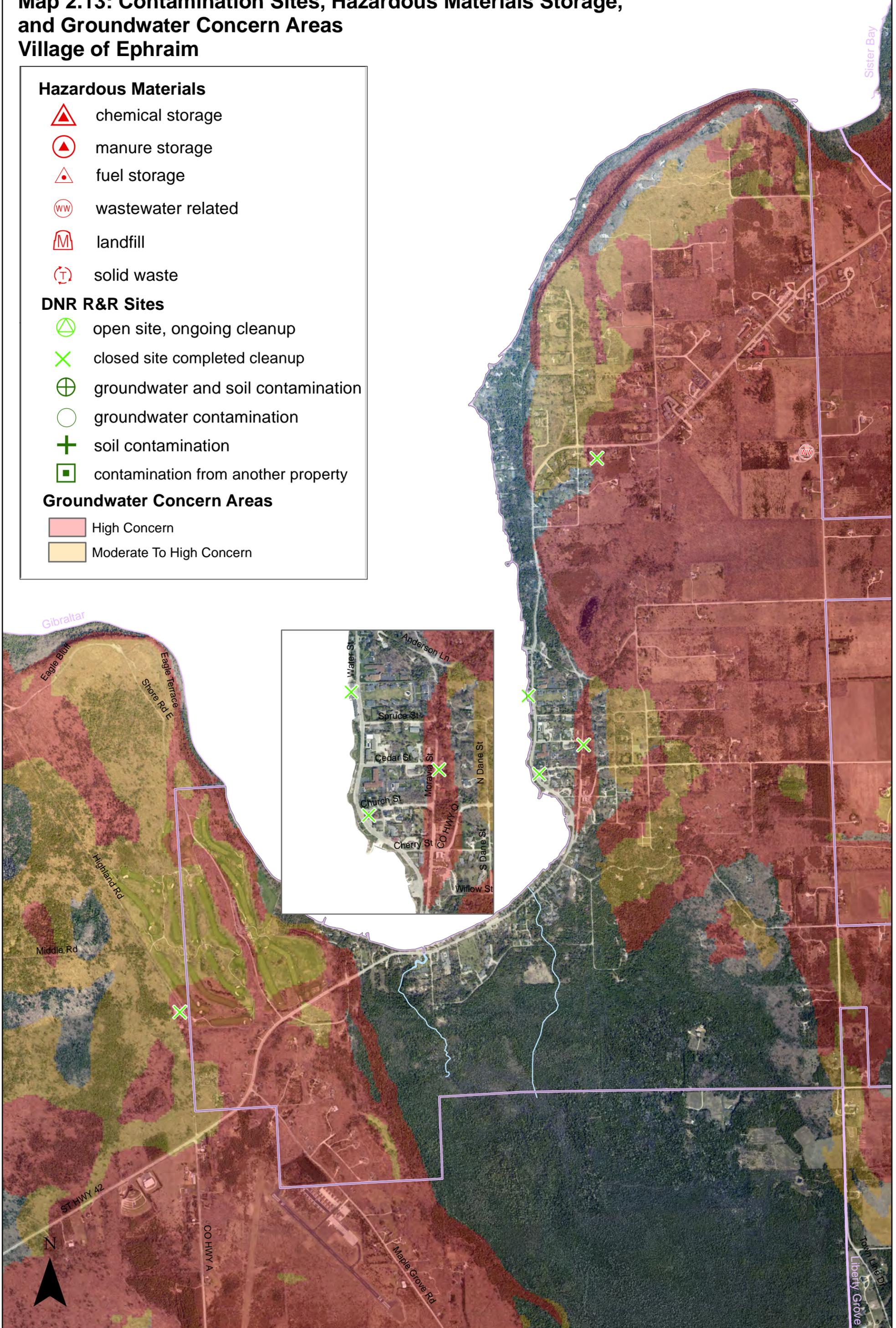
-  chemical storage
-  manure storage
-  fuel storage
-  wastewater related
-  landfill
-  solid waste

**DNR R&R Sites**

-  open site, ongoing cleanup
-  closed site completed cleanup
-  groundwater and soil contamination
-  groundwater contamination
-  soil contamination
-  contamination from another property

**Groundwater Concern Areas**

-  High Concern
-  Moderate To High Concern



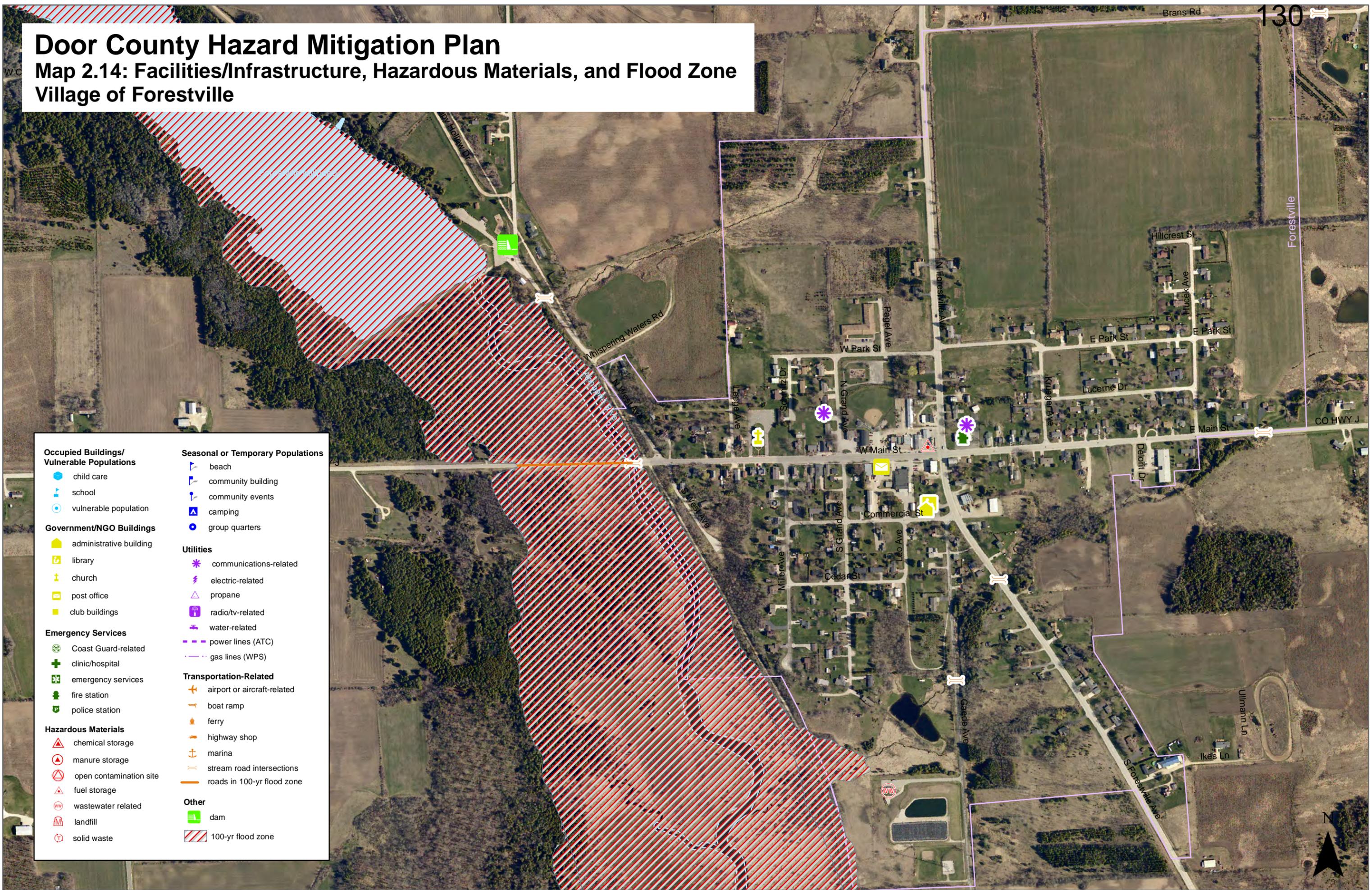
# Door County Hazard Mitigation Plan

## Map 2.14: Facilities/Infrastructure, Hazardous Materials, and Flood Zone

### Village of Forestville

130

<b>Occupied Buildings/ Vulnerable Populations</b>		<b>Seasonal or Temporary Populations</b>	
child care	beach	community building	camping
school	community events	group quarters	
vulnerable population			
<b>Government/NGO Buildings</b>		<b>Utilities</b>	
administrative building	communications-related	electric-related	radio/tv-related
library	propane	water-related	power lines (ATC)
church	radio/tv-related	gas lines (WPS)	
post office	water-related		
club buildings			
<b>Emergency Services</b>		<b>Transportation-Related</b>	
Coast Guard-related	airport or aircraft-related	boat ramp	100-yr flood zone
clinic/hospital	ferry	highway shop	
emergency services	marina	stream road intersections	
fire station	roads in 100-yr flood zone		
police station			
<b>Hazardous Materials</b>		<b>Other</b>	
chemical storage	dam		
manure storage	100-yr flood zone		
open contamination site			
fuel storage			
wastewater related			
landfill			
solid waste			



# Door County Hazard Mitigation Plan

## Map 2.15: Contamination Sites, Hazardous Materials Storage, and Groundwater Concern Areas

### Village of Forestville

#### Hazardous Materials

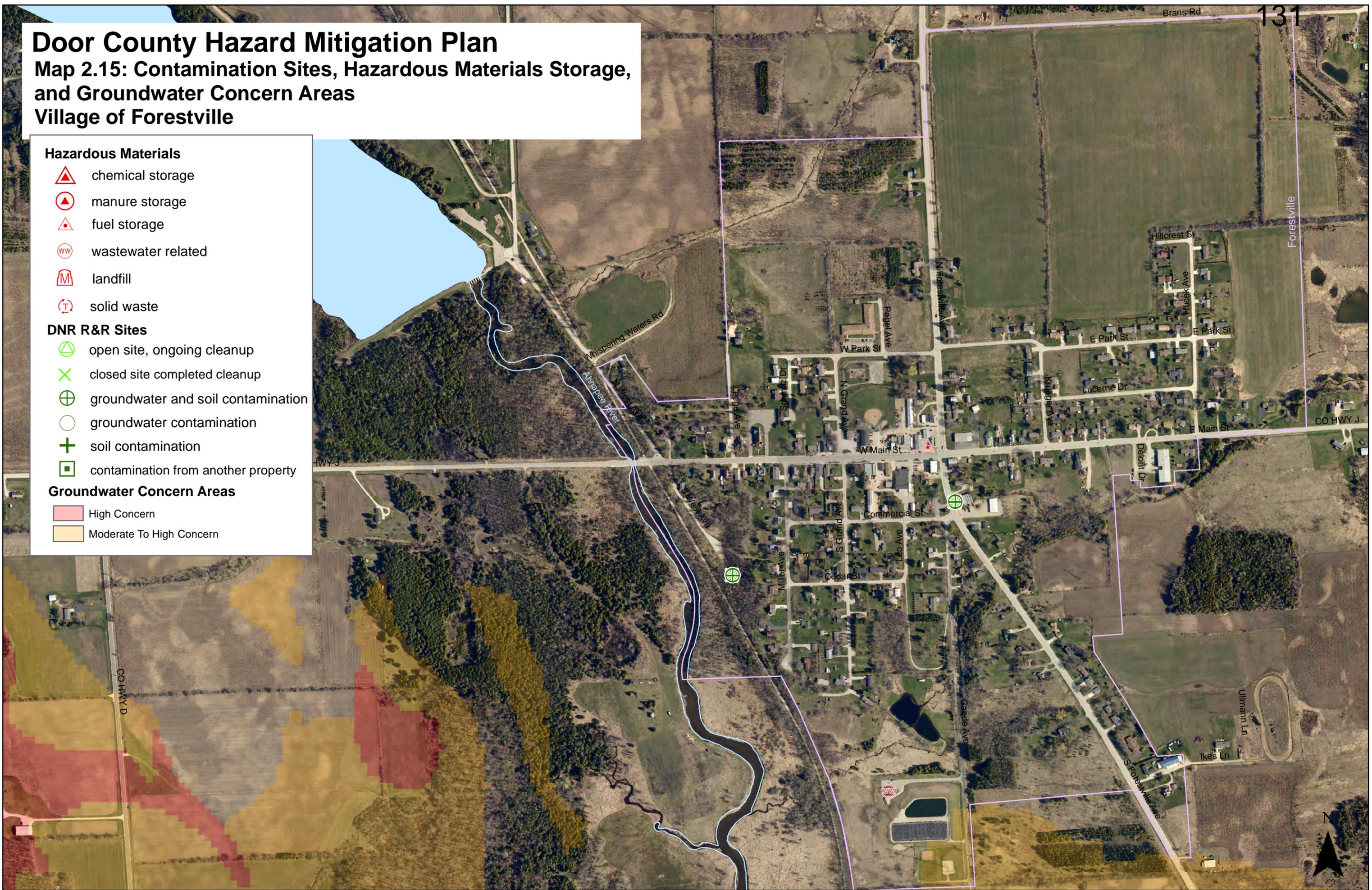
- chemical storage
- manure storage
- fuel storage
- wastewater related
- landfill
- solid waste

#### DNR R&R Sites

- open site, ongoing cleanup
- closed site completed cleanup
- groundwater and soil contamination
- groundwater contamination
- soil contamination
- contamination from another property

#### Groundwater Concern Areas

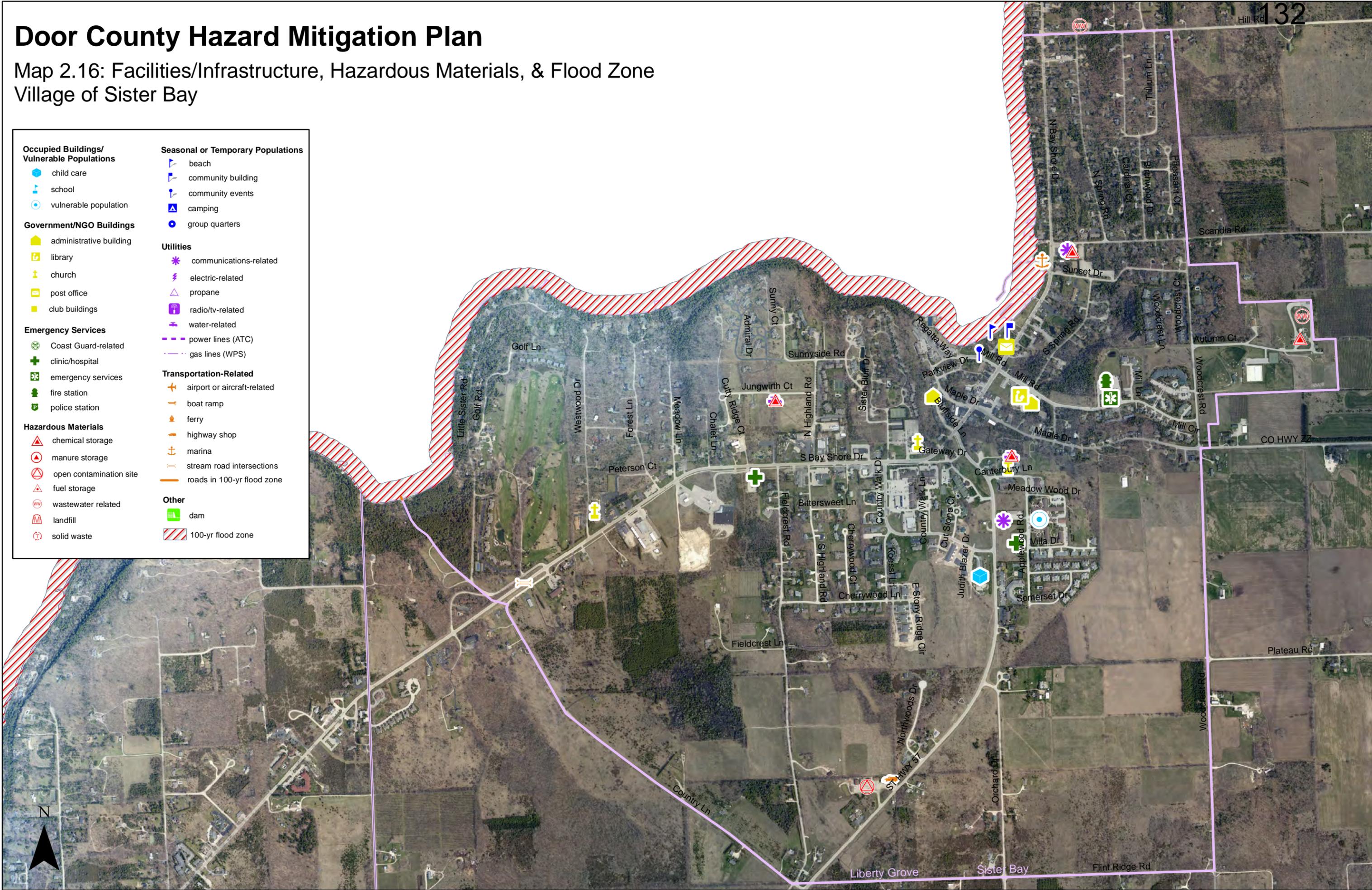
- High Concern
- Moderate To High Concern



# Door County Hazard Mitigation Plan

Map 2.16: Facilities/Infrastructure, Hazardous Materials, & Flood Zone  
Village of Sister Bay

<p><b>Occupied Buildings/ Vulnerable Populations</b></p> <ul style="list-style-type: none"> <li>child care</li> <li>school</li> <li>vulnerable population</li> </ul> <p><b>Government/NGO Buildings</b></p> <ul style="list-style-type: none"> <li>administrative building</li> <li>library</li> <li>church</li> <li>post office</li> <li>club buildings</li> </ul> <p><b>Emergency Services</b></p> <ul style="list-style-type: none"> <li>Coast Guard-related</li> <li>clinic/hospital</li> <li>emergency services</li> <li>fire station</li> <li>police station</li> </ul> <p><b>Hazardous Materials</b></p> <ul style="list-style-type: none"> <li>chemical storage</li> <li>manure storage</li> <li>open contamination site</li> <li>fuel storage</li> <li>wastewater related</li> <li>landfill</li> <li>solid waste</li> </ul>	<p><b>Seasonal or Temporary Populations</b></p> <ul style="list-style-type: none"> <li>beach</li> <li>community building</li> <li>community events</li> <li>camping</li> <li>group quarters</li> </ul> <p><b>Utilities</b></p> <ul style="list-style-type: none"> <li>communications-related</li> <li>electric-related</li> <li>propane</li> <li>radio/tv-related</li> <li>water-related</li> <li>power lines (ATC)</li> <li>gas lines (WPS)</li> </ul> <p><b>Transportation-Related</b></p> <ul style="list-style-type: none"> <li>airport or aircraft-related</li> <li>boat ramp</li> <li>ferry</li> <li>highway shop</li> <li>marina</li> <li>stream road intersections</li> <li>roads in 100-yr flood zone</li> </ul> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>dam</li> <li>100-yr flood zone</li> </ul>
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## Village of Sister Bay BOARD REPORT

Meeting Date 11/16/2016

**Recommendation:**

That the Village Board act on a Recommendation of the Plan Commission and adopt Ordinance 245-111616, Approving Planned Use Development Zoning for the Sister Bay Marketplace.

**Background:**

This item was reviewed at 10 previous publically noticed meetings by the Village Economic Development Committee, Plan Commission, Utilities Committee, and Village Board. One meeting of the Economic Development Committee was a noticed community input meeting, where mailed notices went out to all property owners within 1000', and approximately 40 members of the public participated in teams to produce a consensus plan for development of the site. Additionally, a noticed public hearing was held on March 22, 2016 by the Village Plan Commission.

This final public hearing and action by the Village Board is the results of months of negotiation work with multiple parties to solidify a final development plan which the Village Trustees have authorized at previous meetings. Tonight, the Board is considering the final ordinance adoption for the Project.

**Financial Impact:**

Recovery of funds from the sale of lots 2, 3, 4, 5, 7, 8 an amount of \$370,000.

Recovery of funds from the sale of lots 9 and 12 TBD.

TIF increment value likely to exceed \$28,125 on asset values of improvements on 2,3,4,5,7,8.

TIF increment value unknown for lots 9 and 12.

The Village also has the asset of a public parking lot on lots 10 and 11 in perpetuity, with a land value of \$205,000 and an improvement value which would be in the range of \$150,000-\$250,000.

Respectfully submitted,

Zeke Jackson  
Village Administrator



## Board of Trustees Public Notice

The Village of Sister Bay Board of Trustees will hold a public hearing at the Sister Bay Village Hall, 10693 Bay Shore Dr., Door County, Wisconsin on **Wednesday, November 16, 2016 at 6:00 P.M.** or shortly thereafter, for the purpose of considering proposed map amendments to the Zoning Map, as well as a Planned Unit Development (PUD) plan, Subdivision Plat, and PUD Ordinance. The proposed site of these changes is the unoccupied parcels at the intersection of Mill Rd. and Bay Shore Dr., commonly referred to as the "Sister Bay Market Place/Braun Site", parcel numbers 1814210012B, and 1814210012A and addressed as 10660 and 10654 Bay Shore Dr.

The purpose of this public hearing is to obtain comments and input from the public on the proposed Planned Unit Development

A copy of the proposed PUD plan, PUD Ordinance, map amendments and the current Zoning Code are available for inspection. The Zoning Code and Zoning Map for the Village are also on file at the Zoning Administrator's office and may be viewed at 2383 Maple Drive weekdays between 8:00 a.m. and 4:00p.m.

Written testimony, including email, will be accepted at the Sister Bay Administration Building, 2383 Maple Drive, Sister Bay, WI 54234, (FAX 920-854-9637) until 3:00 P.M. on the day of the meeting. Letters will be available for public inspection during normal business hours, until the close of business on the day of the hearing. Letters will be entered into the record; and a summary of all letters will be presented at the meeting, but individual letters may not be read. Anonymous correspondence will not be accepted.

All application materials for Regular Zoning Permits, Conditional Use Permits and zoning amendment petitions may be viewed at the Sister Bay Administration Building, 2383 Maple Drive, Sister Bay, WI during normal business hours, 8:00am. -4:00p.m.

By order of the Plan Commission of the Village of Sister Bay.

Zeke Jackson  
Zoning Administrator  
[zeke.jackson@sisterbaywi.gov](mailto:zeke.jackson@sisterbaywi.gov)

**From:** [GPG-legals.mbx](mailto:GPG-legals.mbx)  
**To:** [Zeke Jackson](mailto:Zeke.Jackson@sisterbaywi.gov)  
**Subject:** RE: 1696828 legal notice  
**Date:** Friday, October 28, 2016 3:47:38 PM  
**Attachments:** [image001.png](#)

---

Good afternoon,

The notice has been scheduled for the Door County Advocate for the date of November 2<sup>nd</sup> and 9<sup>th</sup>.

Thank you,  
Erin

[Erin Duffy](#)

Admin Support Specialist



Office: 877-943-0444

---

**From:** Zeke Jackson [mailto:Zeke.Jackson@sisterbaywi.gov]  
**Sent:** Friday, October 28, 2016 2:30 PM  
**To:** DCA-Legals mg  
**Cc:** Christy Sully; Janal Suppanz  
**Subject:** 1696828 legal notice

Legals,

Please see that the attached legal notice is inserted on or about November 2 and 9.

Thank you,

Zeke Jackson  
Village Administrator  
Village of Sister Bay, WI  
920-854-4118

Open Meetings Disclaimer: The email above contains the thoughts, opinions, and commentary of the author alone. It is intended as a one-way transmission of a thought, idea, or information related to my role as a municipal official or issues within the municipality, but is not intended to serve as an invitation for reply, rebuttal, discussion, debate or responsive commentary. Please do not respond to this email, unless specifically requested to do so above, as it is the author's intention to utilize the informality and convenience of this electronic message while simultaneously avoiding any and all violations of the Wisconsin Open Meeting Law contained in Section 19.81 of the Wisconsin Statutes or elsewhere within Wisconsin law, as applicable to this municipality as described in 66 Op. Attorney General 237 (1977). Specifically, there is no intention on the part of the author to engage in or foster any governmental business as defined in State ex. rel. Newspapers v. Showers, 398 N.W.2d 154 (Wis.1987). You are specifically requested to refrain from forwarding or replying to all with regard to its contents, so as to avoid the possible walking quorum proscriptions, including those considered in State ex. rel. Lynch v.

Conta 239 N.W.2d 313 (Wis. 1976). It is the author's motive and intent to comply with the overriding policy of the open meeting law - to ensure public access to information about governmental affairs.

# SISTER BAY MARKET PLACE

## PLANNED UNIT DEVELOPMENT

ALL OF LOTS 1 AND 2, VOLUME 18 OF CERTIFIED SURVEY MAPS, PAGE 53, MAP NO. 2950 BEING PART OF LOT 12 AND 13, BLOCK 1, AND PART OF LOT 1, BLOCK 1, ALL BEING LOCATED IN THE VILLAGE OF SISTER BAY ASSESSOR'S PLAT NO. 2, BEING A PART OF GOVERNMENT LOT 4 AND PART OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 5, TOWNSHIP 31 NORTH, RANGE 28 EAST, VILLAGE OF SISTER BAY, DOOR COUNTY, WISCONSIN

### CORPORATE OWNER'S CERTIFICATE:

VILLAGE OF SISTER BAY, a Village duly organized and existing under and by virtue of the laws of the State of Wisconsin, as owner, does hereby certify that said Village of Sister Bay caused the land described on this plat to be surveyed, divided, mapped, and dedicated as represented on this plat. VILLAGE OF SISTER BAY does further certify that this plat is required by s.236.10 or s.236.12 to be submitted to the following for approval or objection:

Village of Sister Bay  
Department of Administration  
Wisconsin Department of Transportation  
Door County Planning Department

IN WITNESS WHEREOF, the said VILLAGE OF SISTER BAY has caused these presents to be signed by David W. Lienau, it's Village Board President, at Sister Bay, Wisconsin. In the presence of:

David W. Lienau, Village Board President  
VILLAGE OF SISTER BAY

STATE OF WISCONSIN)  
BROWN COUNTY) SS

Personally came before me this \_\_\_ day of \_\_\_\_\_, 2016.

David W. Lienau of the above named Village of Sister Bay, to me known to be the person who executed the foregoing instrument, and to me known to be such, and acknowledged the same.

Notary Public  
Door County, Wisconsin  
My commission expires: \_\_\_\_\_

### VILLAGE BOARD RESOLUTION:

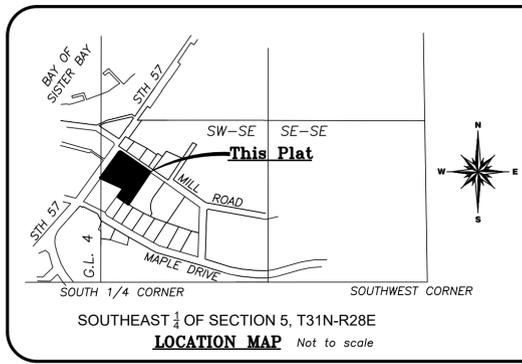
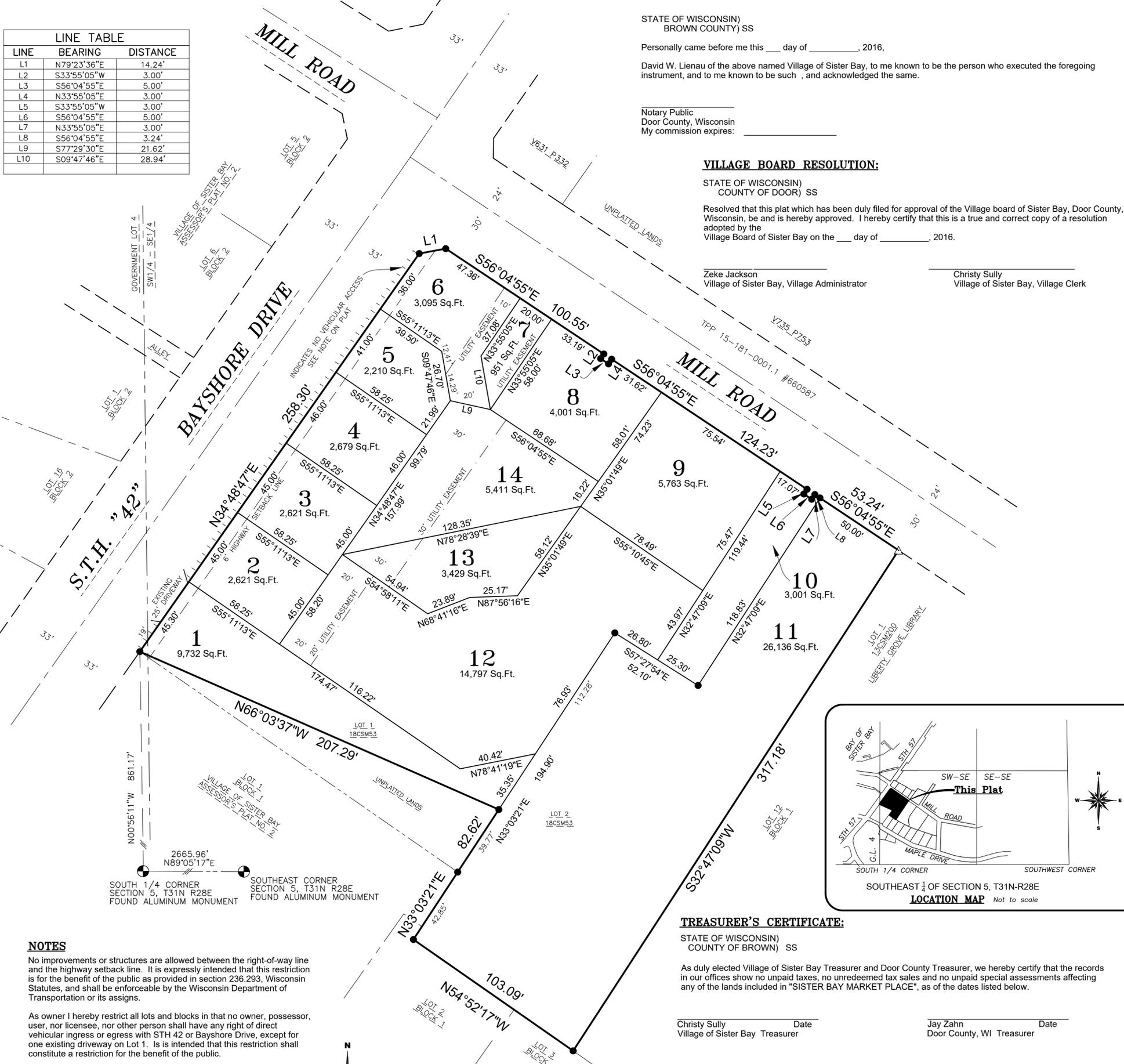
STATE OF WISCONSIN)  
COUNTY OF DOOR) SS

Resolved that this plat which has been duly filed for approval of the Village board of Sister Bay, Door County, Wisconsin, be and is hereby approved. I hereby certify that this is a true and correct copy of a resolution adopted by the Village Board of Sister Bay on the \_\_\_ day of \_\_\_\_\_, 2016.

Zeke Jackson  
Village of Sister Bay, Village Administrator

Christy Sully  
Village of Sister Bay, Village Clerk

LINE	BEARING	DISTANCE
L1	N79°23'36"E	14.24'
L2	S33°55'05"W	3.00'
L3	S56°04'55"E	5.00'
L4	N33°55'05"E	3.00'
L5	S33°55'05"W	3.00'
L6	S56°04'55"E	5.00'
L7	N33°55'05"E	3.00'
L8	S56°04'55"E	3.24'
L9	S77°29'30"E	21.62'
L10	S09°47'46"E	28.94'



### NOTES

No improvements or structures are allowed between the right-of-way line and the highway setback line. It is expressly intended that this restriction is for the benefit of the public as provided in section 236.293, Wisconsin Statutes, and shall be enforceable by the Wisconsin Department of Transportation or its assigns.

As owner I hereby restrict all lots and blocks in that no owner, possessor, user, nor licensee, nor other person shall have any right of direct vehicular ingress or egress with STH 42 or Bayshore Drive, except for one existing driveway on Lot 1. It is intended that this restriction shall constitute a restriction for the benefit of the public.



SCALE: 1"=30'

Bearings are referenced to the south line of the Southeast 1/4 of Section 5, T31N, R28E. Recorded as N89°05'17"E

All linear measurements have been made to the nearest hundredth of a foot and computed to the nearest hundredth of a foot.

All angular measurements have been made to the nearest three seconds and computed to the nearest half second.

DRAFTED BY: Dennis Reim  
File: R:\0200\0282\0282170\dwg\0282170FINAL.dwg  
Plot Date: Oct 28, 2016 - 12:43pm

**Robert E. Lee & Associates, Inc.**  
ENGINEERING, SURVEYING, ENVIRONMENTAL SERVICES  
1250 CENTENNIAL CENTRE BOULEVARD  
HOBART, WI 54155  
INTERNET: www.releinc.com

All other lot and meander line corners marked with a 1.125" outside dia x 24" iron pipe weighing 1.38 lbs/lin. ft.

SHEET 1 OF 1

Revised this 16th day of September 2016

### TREASURER'S CERTIFICATE:

STATE OF WISCONSIN)  
COUNTY OF BROWN) SS

As duly elected Village of Sister Bay Treasurer and Door County Treasurer, we hereby certify that the records in our offices show no unpaid taxes, no unredeemed tax sales and no unpaid special assessments affecting any of the lands included in "SISTER BAY MARKET PLACE", as of the dates listed below.

Christy Sully  
Village of Sister Bay Treasurer

Jay Zahn  
Door County, WI Treasurer

### SURVEYOR'S CERTIFICATE:

I, Dennis E. Reim, Professional Land Surveyor, hereby certify: That I have surveyed, divided and mapped SISTER BAY MARKET PLACE, A Planned Unit Development being all of Lots 1 and 2, Volume 18 of Certified Survey Map, Page 53, Map Number 2950, being part of Lots 12 and 13, Block 1, Village of Sister Bay Assessor's Plat No. 2, being a part of Government Lot 4 and part of the Southwest 1/4 of the Southeast 1/4 of Section 5, Township 31 North, Range 28 East, Village of Sister Bay, Door County, Wisconsin described as:

Commencing at the South 1/4 corner of said Section 5; thence N00°56'11"W, 861.17 feet to the southwest corner of said Lot 1, the Point of Beginning; thence N34°48'47"E, 258.30 feet on the westerly line of said Lot 1; thence N79°23'36"E, 14.24 feet on said northerly line to the northerly line of said Lot 1; thence S56°04'55"E, 100.55 feet on said northerly line; thence S33°55'05"W, 3.00 feet on said northerly line; thence S56°04'55"E, 5.00 feet on said northerly line; thence N33°55'05"E, 3.00 feet on said northerly line; thence S56°04'55"E, 124.23 feet on said northerly line; thence S33°55'05"W, 3.00 feet on said northerly line; thence S56°04'55"E, 5.00 feet on said northerly line; thence N33°55'05"E, 3.00 feet on said northerly line; thence S56°04'55"E, 53.24 feet on said northerly line and the northerly line of said Lot 2; thence S32°47'09"W, 317.18 feet on the easterly line of said Lot 2; thence N54°52'17"W, 103.09 feet on the southerly line of said Lot 2; thence N33°03'21"E, 82.62 feet on the westerly line of said Lot 2; thence N63°03'37"W, 207.29 feet to the Point of Beginning. That I have made such survey, land-division and plat by the direction of Zeke Jackson the Village Administrator, for the Village of Sister Bay, owner of said land, containing 82,376 square feet or 1.89 acres of land more or less.

That such plat is a correct representation of all the exterior boundaries of the land surveyed and the subdivision thereof made. That I have fully complied with the provisions of Chapter 236 of the Wisconsin Statutes and the subdivision regulations of the Village of Sister Bay, in surveying, dividing, and mapping the same.

Dated this \_\_\_ day of \_\_\_\_\_, 2016

Dennis E. Reim, Professional Land Surveyor #1590  
ROBERT E. LEE & ASSOCIATES, INC.



Revised this 28th day of October 2016

There are no objections to this plat with respect to Secs. 236.15, 236.16, 236.20 and 236.21(1) and (2), Wis Stats. as provided by s. 236.12, Wis. Stats.

Certified \_\_\_\_\_, 20\_\_

Department of Administration



**Zeke Jackson**

---

**From:** Jill Hanley <jill@silverbirchdoorcounty.com>  
**Sent:** Wednesday, November 09, 2016 5:27 PM  
**To:** Zeke Jackson; Jodi Arndt Labs; Emily Hanley

Zeke,

Thanks for your time today discussing the Sister Bay Market Place. As was stated at the November 3rd board meeting, the village will decide on the final overall site plans within 45 - 60 days. We look forward to receiving those final plans when available and will proceed from there. Our offer to purchase and develop Lots 4 and 5 was made based on publicly presented plans that detailed the original site design as well as the village obligations. Of particular concern regarding the changes is the idea of putting buildings on what had been designated as green space, as well as changing the overall plan after developer offers were made and accepted, based on what had been presented originally.

Thank you,

Jill Hanley

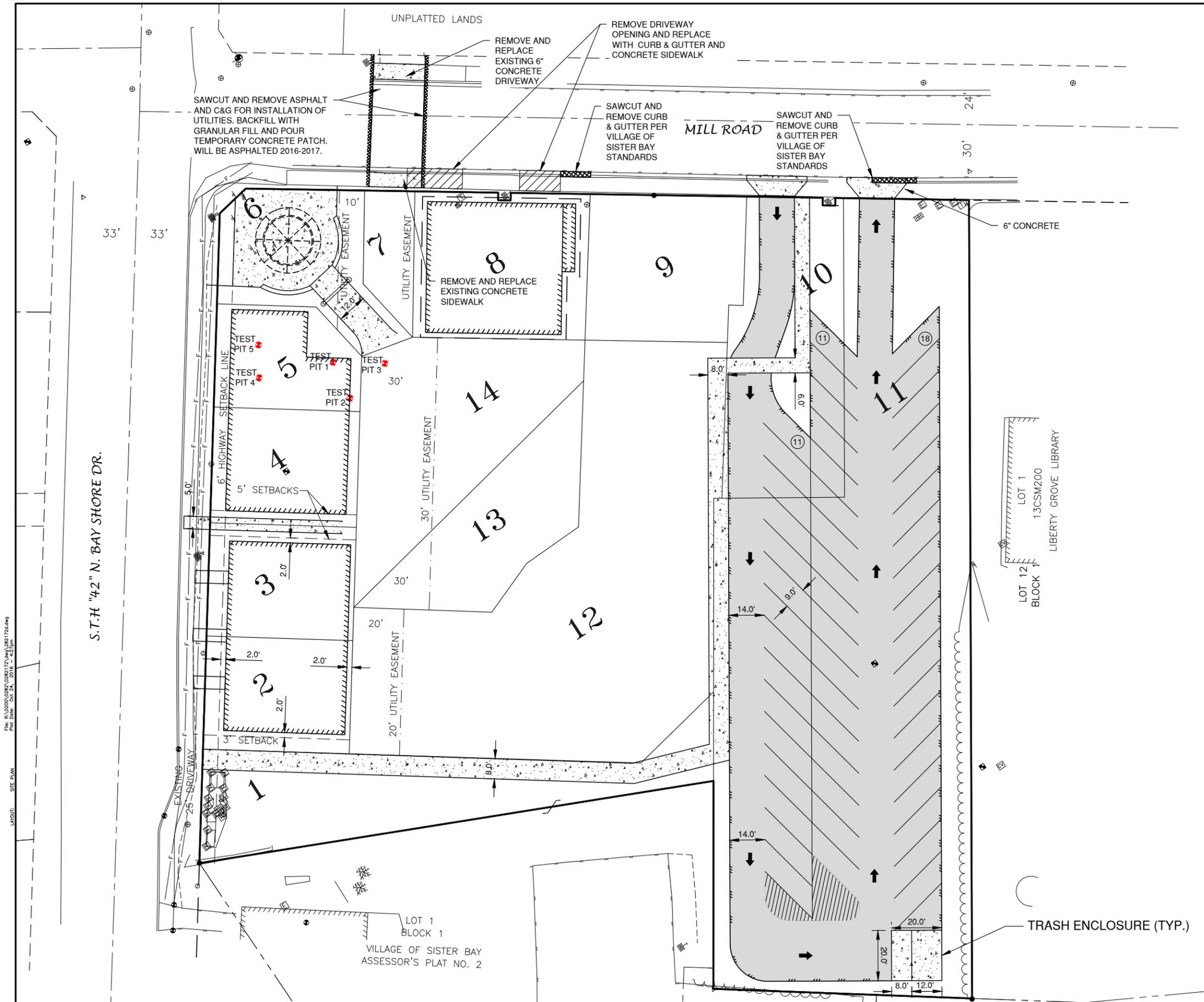
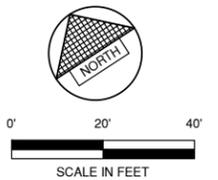
**NOTE**  
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**PARKING DATA**  
 TOTAL PARKING SPACES PROVIDED = 50  
 HANDICAP ACCESSIBLE PARKING SPACES = 2

- LEGEND**
- CONCRETE PAVEMENT
  - ASPHALT PAVEMENT
  - LANDSCAPE AREA
  - GREEN SPACE
  - PROPOSED 24" CURB & GUTTER (UNLESS OTHERWISE NOTED)
  - PROPOSED SHEDDING CURB & GUTTER
  - TRAFFIC FLOW ARROW
  - HANDICAPPED PARKING
  - INDICATES NUMBER OF PARKING STALLS

\*NOTE: ALL DIMENSIONS ARE TO THE FACE OF CURB, UNLESS NOTED OTHERWISE

LOT NUMBER	LOT SQUARE FOOTAGE (S.F.)
1	9,732 S.F.
2	2,621 S.F.
3	2,621 S.F.
4	2,679 S.F.
5	2,210 S.F.
6	3,095 S.F.
7	951 S.F.
8	4,001 S.F.
9	5,763 S.F.
10	3,001 S.F.
11	26,136 S.F.
12	14,797 S.F.
13	3,429 S.F.
14	5,411 S.F.



File: R:\0300\0282\0282172\plan\282172.dwg  
 Plot Date: Oct 24, 2016 10:22:00am  
 Layout: SITE PLAN

NO.	DATE	APPROV.	REVISION	NO.	DATE	APPROV.	REVISION

SISTER BAY PARKING LOT IMPROVEMENTS  
 SISTER BAY MARKET PLACE  
 VILLAGE OF SISTER BAY  
 DOOR COUNTY, WISCONSIN

SITE PLAN

DATE: 08/24/2016  
 FILE: 282172D  
 JOB NO.: 0282172

**Robert E. Lee & Associates, Inc.**  
 ENGINEERING, SURVEYING, ENVIRONMENTAL SERVICES  
 1250 CENTENNIAL CENTRE BOULEVARD HOBART, WI 54155  
 920-662-9641 www.releinc.com  
 Celebrating 60 Years of Excellence

SHEET NO. **3**

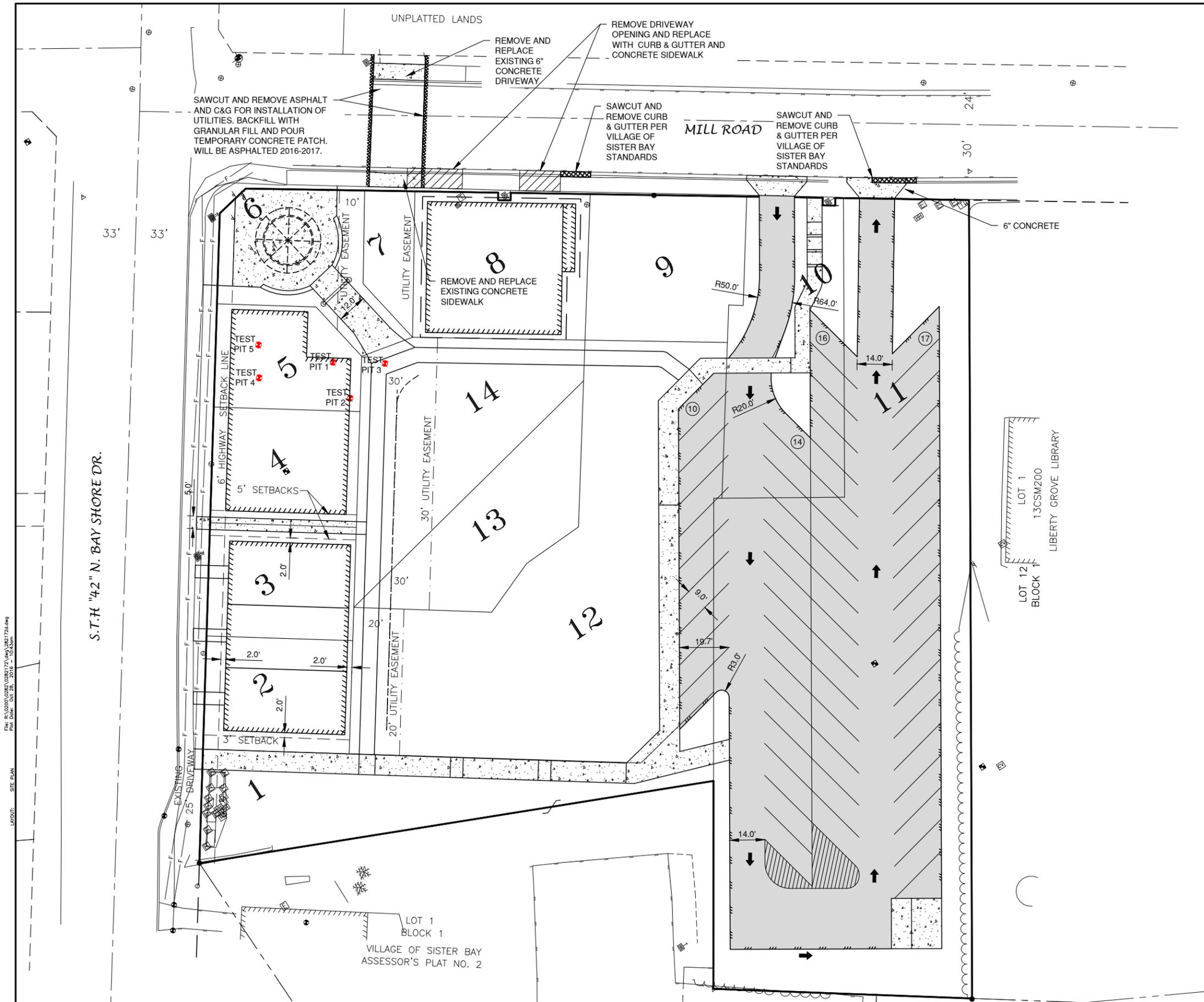
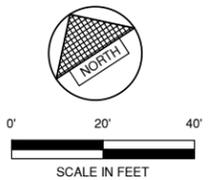
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**PARKING DATA**  
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 HANDICAP ACCESSIBLE PARKING SPACES = 2

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File: R:\0300\0282\0282172\172.dwg  
 Plot Date: Oct 25, 2016 - 10:56am  
 Layout: SITE PLAN

NO.	DATE	APPROV.	REVISION	NO.	DATE	APPROV.	REVISION

SISTER BAY PARKING LOT IMPROVEMENTS  
 SISTER BAY MARKET PLACE  
 VILLAGE OF SISTER BAY  
 DOOR COUNTY, WISCONSIN

SITE PLAN

DATE: 08/24/2016  
 FILE: 282172D  
 JOB NO: 0282172

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SHEET NO. 3

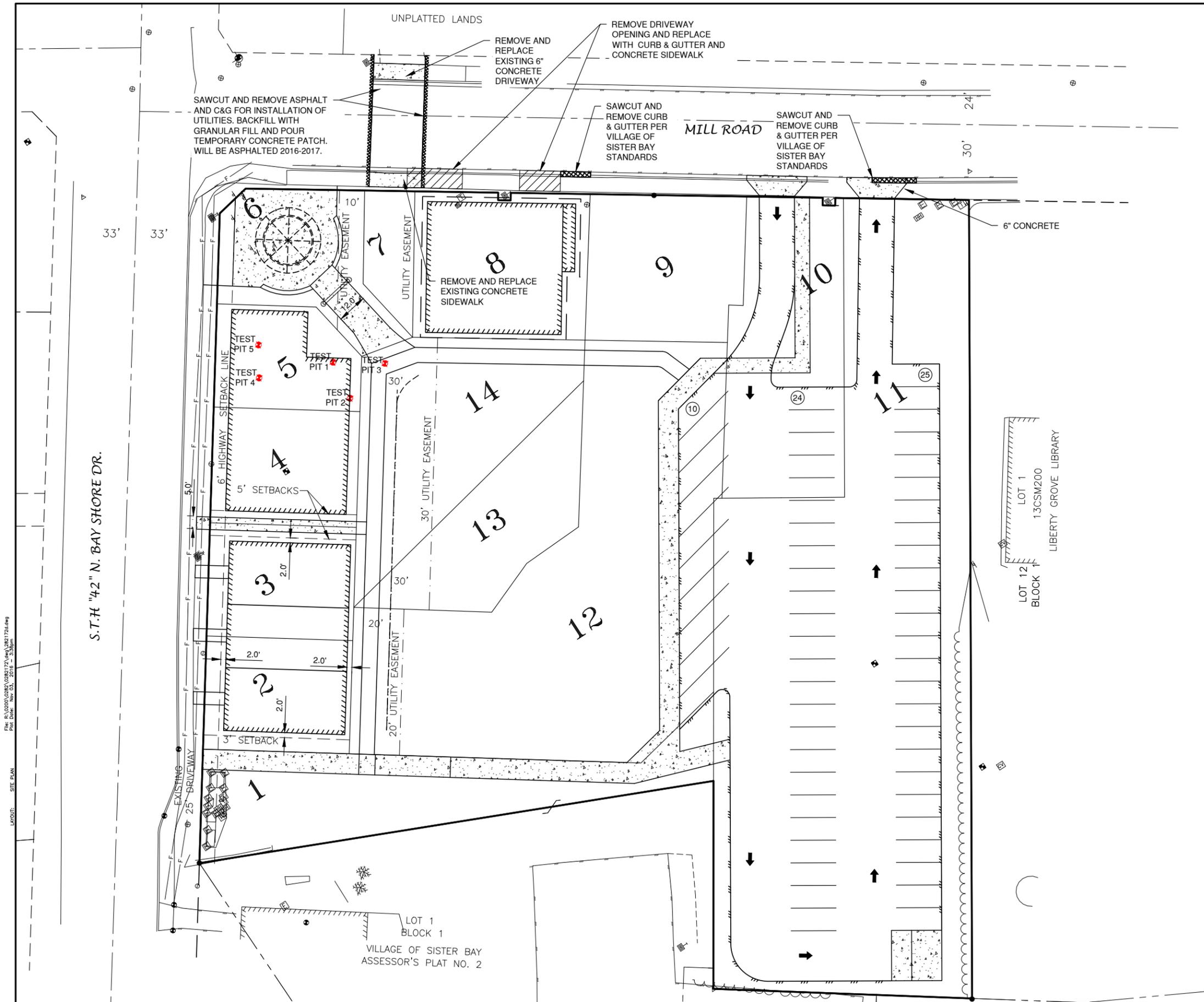
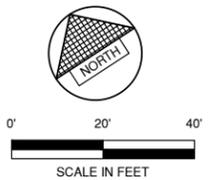
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File: R:\0201\0282\0282172\SitePlan.dwg  
 Plot Date: Nov 22, 2016 - 3:56pm  
 Layout: SITE PLAN

NO.	DATE	APPROV.	REVISION	NO.	DATE	APPROV.	REVISION

**SISTER BAY PARKING LOT IMPROVEMENTS**  
 SISTER BAY MARKET PLACE  
 VILLAGE OF SISTER BAY  
 DOOR COUNTY, WISCONSIN

**SITE PLAN**

DATE: 08/24/2016  
 FILE: 282172D  
 JOB NO: 0282172



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SHEET NO. **3**

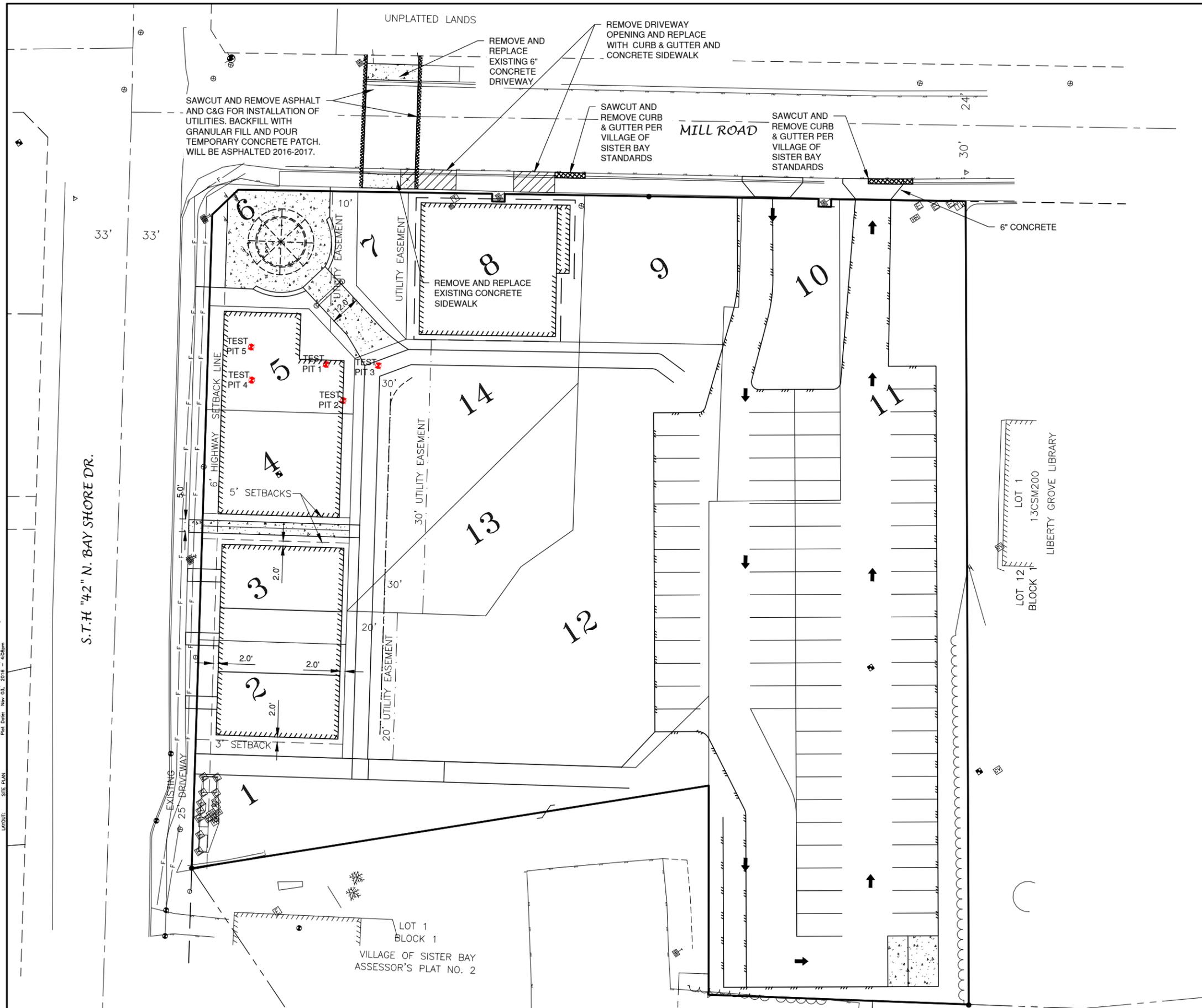
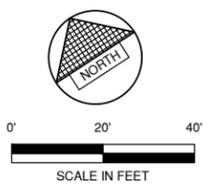
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File: R:\0200\0282\0282172\SitePlan.dwg  
 Plot Date: Nov 22, 2016 - 8:05am  
 Layout: SITE PLAN

NO.	DATE	APPROV.	REVISION	NO.	DATE	APPROV.	REVISION	DRAWN BLT CHECKED JGS DESIGNED BLT	SISTER BAY PARKING LOT IMPROVEMENTS SISTER BAY MARKET PLACE VILLAGE OF SISTER BAY DOOR COUNTY, WISCONSIN	DATE 08/24/2016 FILE 282172D JOB NO. 0282172	Robert E. Lee & Associates, Inc. ENGINEERING, SURVEYING, ENVIRONMENTAL SERVICES 1250 CENTENNIAL CENTRE BOULEVARD HOBERT, WI 54155 920-662-9641 www.releinc.com Celebrating 60 Years of Excellence	SHEET NO. 3
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**ORDINANCE NO. 245-111616**

**AN ORDINANCE AMENDING THE SISTER BAY OFFICIAL MAP, AND CREATING THE SISTER BAY MARKETPLACE PLANNED UNIT DEVELOPMENT**

**WHEREAS,** THE VILLAGE BOARD OF THE VILLAGE OF SISTER BAY, WISCONSIN DOES ORDAIN AS FOLLOWS:

**SECTION 1:** THE FOLLOWING DESCRIBED PROPERTY IS HEREBY REZONED FROM DOWNTOWN BUSINESS (B-3) TO PLANNED UNIT DEVELOPMENT (PUD) AND SHALL BE SUBJECT TO THE SITE PLAN AND REQUIREMENTS INCORPORATED HEREIN:

ALL OF LOTS 1 AND 2, VOLUME 18 OF CERTIFIED SURVEY MAPS, PAGE 53, MAP NO. 2950 BEING PART OF LOT 12 AND 13, BLOCK 1, AND PART OF LOT 1, BLOCK 1, ALL BEING LOCATED IN THE VILLAGE OF SISTER BAY ASSESSOR'S PLAT NO. 2, BEING A PART OF GOVERNMENT LOT 4 AND PART OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 5, TOWNSHIP 31 NORTH, RANGE 28 EAST, VILLAGE OF SISTER BAY, DOOR COUNTY, WISCONSIN

COMMONLY REFERRED TO AS THE SISTER BAY MARKETPLACE DEVELOPMENT, AND FORMERLY KNOWN AS THE "BRAUN SITE", AND SAID PARCEL CONTAINS APPROXIMATELY 82,376 SQUARE FEET (1.89 ACRES).

**SECTION 2:** THE FOLLOWING REQUIREMENTS AND CONDITIONS ARE PLACED UPON THE PROPERTY DESCRIBED WITHIN THE LEGAL DESCRIPTION.

**A. UNDERLYING ZONING:** THE UNDERLYING ZONING DISTRICT SHALL BE DOWNTOWN BUSINESS (B-3).

**B. CONFORMANCE WITH FINAL PUD PLANS:** THE DEVELOPMENT OF THE SITE SHALL CONFORM TO THE APPROVED FINAL PUD PLANS, INCLUDING THE RECORDING OF THE UTILITY EASEMENTS PER THE APPROVED ENGINEERING PLANS.

**C. PERMITTED USES:** PERMITTED AND CONDITIONAL USES SHALL CONFORM TO THE DOWNTOWN BUSINESS (B-3) ZONING DISTRICT.

**D. DEVELOPMENT STANDARDS:** EXCEPT AS OTHERWISE INDICATED BY THE APPROVED FINAL PUD PLANS, ALL DEVELOPMENT SHALL CONFORM TO THE ZONING REQUIREMENTS FOR THE DOWNTOWN BUSINESS (B-3) ZONING DISTRICTS, INCLUDING REQUIREMENTS FOR IMPERVIOUS SURFACES, HEIGHT, AREA, PARKING AND OTHER ZONING STANDARDS.

**E. PARKING:** LOTS 1, 10 AND 11 ARE INTENDED TO FACILITATE PUBLIC USE AND ENJOYMENT OF THE VILLAGE'S WATERFRONT PARK, AND TO FACILITATE DEVELOPMENT OF LOTS 2,3,4,5,6,7,9, AND 12 OF THE MARKETPLACE DEVELOPMENT.

**F. LANDSCAPING MAINTENANCE:** PRIOR TO THE ISSUANCE OF A BUILDING PERMIT FOR EACH LOT, A LANDSCAPING MAINTENANCE PLAN SHOWING HOW THE LANDSCAPE MATERIALS WILL BE INSTALLED.

**G. GREEN SPACE:** LOTS 13 AND 14 ARE INTENDED TO PROVIDE A CENTRAL GREEN SPACE FOR THE USE AND ENJOYMENT OF THE SUBSEQUENT DEVELOPERS IN A PUBLIC FASHION. THIS SPACE IS NOT INTENDED FOR PRIVATE USE ONLY, AND LOT 6 PROVIDES A COMMON GATEWAY TO THE COMMON GREEN SPACE CREATED ON LOTS 13 AND 14. WHEN NOT EXPRESSLY OCCUPIED BY A DEVELOPER FOR A SPECIAL EVENT, SALE, OR OTHER SPECIAL ACTIVITY, THE PUBLIC MAY FREELY ENJOY THE USE OF THIS SPACE.

**H. CONSTRUCTION EROSION AND STORMWATER CONTROL:** PRIOR TO ISSUANCE OF ANY PERMITS FOR DEVELOPMENT, A CONSTRUCTION EROSION CONTROL AND DRAINAGE PLAN SHALL BE REVIEWED BY THE VILLAGE ENGINEER. THE PLAN SHALL ADDRESS (BUT NOT BE LIMITED TO) PROTECTING AREAS WHERE CREVICES ARE EXPOSED IN BEDROCK DURING SITE GRADING AND CONSTRUCTION ACTIVITIES FOR THE BUILDING, PARKING AREAS, AND EFFECTIVE STORMWATER MANAGEMENT.

**I. STORMWATER COLLECTION SYSTEM:** PRIOR TO ISSUANCE OF ANY PERMITS FOR DEVELOPMENT, ADJUSTMENTS TO THE STORMWATER COLLECTION SYSTEM SHALL BE SUBMITTED TO AND APPROVED BY THE VILLAGE ENGINEER, WITH SUCH ADJUSTMENTS TO INCLUDE MORE STORM INLETS, RELOCATION OF STORM INLETS, GRADING CHANGES OR A COMBINATION THEREOF.

**J. GROUND SIGNS SHALL NOT BE ALLOWED, EXCEPT VILLAGE WAYFINDING OR TRAFFIC SIGNAGE.**

**K. RESERVED.**

**L. DEVELOPMENT AGREEMENT:** PRIOR TO ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY ON ANY LOT OF THE DEVELOPMENT, THE DEVELOPER AND THE VILLAGE SHALL ENTER INTO A DEVELOPMENT AGREEMENT WHICH ADDRESSES THE SPECIFICS OF THE DEVELOPMENT OF THE LOT.

**Section 3 – Other Conflicts**

All other Ordinances in conflict herewith are hereby repealed.

**Section 4 – Effective Date**

This Ordinance shall take effect and be in full force from and after its passage and publication according to law.

**Section 5 – Severability**

If a Court of competent jurisdiction adjudges any section, clause, provision or portion of this Ordinance unconstitutional or invalid, the remainder of this Ordinance shall not be affected thereby.

**Village of Sister Bay**

**Attest:**

By: \_\_\_\_\_  
David W. Lienau, President

\_\_\_\_\_  
Christine M. Sully, Clerk WCPC, MMC

Date Introduced: September 20, 2016

Date Adopted: \_\_\_\_\_

Publication Date: \_\_\_\_\_

SISTER BAY & LIBERTY GROVE FIRE BOARD  
MEETING MINUTES  
THURSDAY, OCTOBER 6, 2016

Covostos called the October 6, 2016 meeting of The Sister Bay & Liberty Grove Fire Board meeting order at 9:30 A.M.

Present: Chair: Lou Covostos, Sister Bay members: Scott Baker, Denise Bhirdo, Liberty Grove members: Nancy Goss, Hugh Milliken, Fire Chief Chris Hecht

Others Present: Stacy Bell

A motion was made by Goss, seconded by Covostos, to approve the October 6, 2016 agenda as presented.

A motion was made by Goss, seconded by Baker, to approve the Minutes of the August 9, 2016 meeting as presented.

Covostos asked if there was any public input, and nobody responded.

Chief's Report:

Chief Hecht presented a flow chart tracking the Fire Department calls for 2016, he noted that there have been more EMR calls so far and Fire calls are expected to be equal or just below last year.

The Department is looking to get members involved in several classes this fall and hoping to host an Instructor I course. NWTC building will be useful for classroom sessions but not for hands-on sessions.

Hose testing was done recently and the typical amount of 800-1200 feet of hose failed. Pump testing resulted in \$5,000-\$6,000 in maintenance and repairs. The company will be back to fix other issues later in the month with estimated costs of \$5,000-\$6,000 at that time.

Health screenings have been done by 50% of the members. 48% of fire department personnel across the county are considered high risk.

Hecht is waiting to hear about FEMA grant awards. More equipment grants will start to open for submissions in October. The DNR grant applied for was granted for \$4991.07.

Clerk's/Treasurer's report:

Hecht reported on the calls since the last meeting. A motion was made by Bhirdo, seconded by Goss to approve the Clerk's report as presented.

#### Village Budget:

Bhirdo reported that the 2017 budget is scheduled to be discussed at the Village Board again in early November. A discussion was held about the Chief's pay, and due to the hiring process, it will stay where it is at this time, but Hecht will receive an additional stipend for 2017. The budget document will need to be updated to show \$5,000.00 compensation not \$7,500.00

A discussion was held on the process of replacing the fire chief. This is currently done by an election from within the department and then approved by the Board. Covostos requested this process be reviewed as an agenda item for the next meeting. Chris will attempt to figure out a method that balances opinions of the Firefighters and the Board. The Fire Board, Village, Town, and Firefighters should all have buy-in for the process.

- Consider contract vs. compensation
- May need to removed compensation information from the job description (currently documented to start at 50% of the cap which can be adjusted by the Fire Board.
- Employment Agreement options?
- 2 year election term – can this be an employee at will
- Allowing the Board more authority will keep the process simple
- Realistic about expectations – reversible, dissolve vs. break if necessary
- Do we need an account to prevent budget shock?
- Can auxiliary funds be re-allocated if not used in a year?

A motion was made by Covostos, second by Goss to accept the auxiliary compensation line item to be split quarterly in payment to the Fire Chief. Mulliken clarified it will be \$5,000.00 as compensation and \$2,500.00 will be added to the auxiliary compensation fund. Goss confirmed that this auxiliary compensation will be designated as payment to Chief Hecht for the 2017 budget year. Motion passed.

#### Fire Department budget:

- Brush Truck CIP: scheduled to have bids signed in December of 2016 with payments in January of 2017.
- 4% increase overall for valuation of village properties, seen as \$25.090 per 100,000.00.
- Both the Village and the Town's overall assessment was down as the State of Wisconsin determines the equalized value of property

Next Meeting:

December 8, 2016 at 8:00 A.M.

Hecht will plan to have a brush truck recommendation at this meeting.

Hecht will provide updated information for the binders that were provided for all Fire Board members.

A motion was made by Baker, seconded by Goss to adjourn the October 6, 2016 Fire Board meeting at 10:23 A.M.

**Sister Bay / Liberty Grove Library Commission Meeting  
October 11 2016**

The meeting of the Sister Bay / Liberty Grove Library Commission was called to order by Virginia Phelan at 1:03 p.m.

**Members Present:** Virginia Phelan, Lou Covotsos, Allen Strack, Frank Forkert, Henry Timm, Dixie Jorns and Ralph Blankenburg.

Absent: Kathy Enquist

**Public Input:** None.

**Review and Approve the Minutes of the September 13, 2016 Meeting:**

Lou Covotsos moved and Frank Forkert seconded a motion to approve the minutes of the *September 13, 2016* meeting. The motion passed 5-0.

**Review and Approval of Bills:**

Village of Sister Bay	Marina Fest	\$282.89
Department of Treasury	Social Security / Medicare	\$337.40
Wulf Brothers	New Thermostats	\$1,559.59
Sparkle Cleaning Service	General Cleaning	\$1,700.00
Jungwirth Ace Hardware	Hornet Spray / sealer /Cord	\$16.57
Wisconsin Public Service	Electrical service	\$643.84
Gibraltar Middle School	Marina Fest Share	\$1,398.36
Village Water & Sewer	Domestic Water	\$533.78
Village Water & Sewer	Fire Sprinkler Water	\$110.25
Frontier Communications	Telephone	\$131.53
Total		\$6,714.21

Frank Forkert moved and Allen Strack seconded the motion to approve the payment of the bills. The motion passed 5-0.

**Librarians Report:**

**Circulation**

	Checkouts	Renewals	Total	YTD
2016	4,708	725	5,433	47,524
2015	4,633	713	5,346	46,558

**Library Visits Month:**

2016	5,669
2015	4,154

**Library Programs:**

	Adult	Children	Total
2016	13	42	55
2015	14	30	44

**Computer Use:**

	Public Computers Total Sessions	Minutes/Session	Total Minutes
2016			
2015	685	29	20,045

Wireless:		
	Devices	Average Connections/Day
2016	985	73
2015	749	56

**Overdrive:**

	E-Book Use	E-Audiobook Use	Video	Magazine
2016	214	134	2	20
2015	223	94	0	0

Overall, the statistics indicate that we are doing well - We are surpassing last year's numbers in almost all areas. Unfortunately, no public computer use statistics for September have been released as of today.

After the busy summer season we are seeing a bit of slowdown, but library usage remains steady. We will continue to be on summer hours until the last week of October when the hours are slightly shortened and the library will be closed on Thursday.

The door County library Board has approved closure of the library for Friday and Saturday (October 14th and 15th) due to Fall Fest. Staff members will be here Friday morning. I am planning to have a brief staff meeting and then work on a project that we have been brainstorming and planning for some time. I believe that we are losing circulation with the children's nonfiction so far away from the rest of the children's materials. Our goal is to shift some parts of library's collection in order to bring all the children's materials into the same area and also to move the young adult materials out of this area and closer to the adult materials. Much of the YA collection is popular with both teenagers and adults and we have found that teenagers are often reluctant to browse for books in the "kid section". WE are finding that we will have to reconfigure the children's area slightly in order to accommodate the nonfiction collection and will need additional shelving. Much of the work can be done on Friday. I would be extremely surprised if we don't see substantial circulation increases in both of these parts of the collection after making the changes.

I will be meeting with the library's administrative assistant on Thursday prior to the full staff meeting regarding the Donna Johnson memorial fund so that a bench can be dedicated in her memory.

**New Plaques:**

Ralph Blankenburg reported that he inspected the original memorial plaques attached to the tables and benches and found that they had faded or gone blank. He suggested that we replace them with engraved plaques. Ralph got a price of \$30 a plaque and \$.40 a letter to make up new plaques. Henry Timm moved and Virginia Phelan seconded a motion to replace the plaques with engraved plaques.

**Maintenance:****Lighting:**

Ralph Blankenburg spoke with Action Electric about replacing the lobby lights that we have not been able to find new bulbs for. They will also check if they could find an insert for the pendant lights with LED lights that we could replace and would have longer life.

**New Thermostats:**

The new thermostats are all installed and working. They need to be programmed with a security code and register the modems with Honeywell. The modems will permit us to monitor the temperature remotely and change the setting if the library were closed because of weather or other reasons. The system will also e-mail us if there is a problem with the heating.

**Next Meeting:**

The next meeting will be December 13, 2016 @ 2:00 P.M.

**Adjourn**

It was moved by Lou Covotsos and seconded by Allen Strack adjourn at 2:15 p. m. The motion passed 5-0.

Submitted by: Ralph Blankenburg.

1                                   **MARINA COMMITTEE MEETING MINUTES**  
2   **WEDNESDAY, OCTOBER 11, 2016**  
3                                   **SISTER BAY-LIBERTY GROVE FIRE STATION - 2258 MILL ROAD**

4  
5 The October 11, 2016 meeting of the Marina Committee was called to order by Chairperson  
6 John Clove at 2:02 P.M.

7  
8 **Present:** Chairperson John Clove, and committee members Scott Baker, Pat Duffy, and Dan  
9 Jungwirth, and Greg Sunstrom

10  
11 **Excused:** Dwight Anderson

12  
13 **Staff Members:** Village Administrator Zeke Jackson, Finance Director Tasha Rass, Marina  
14 Manager Nicole Krauel and Utilities Clerk Anastasia Bell.

15  
16 **Others:** Teddy Agnew, Geoffrey Cronk, Cory Diltz, Eric Lundquist, Peder Nelson, and Jim  
17 Robinson.

18  
19 **Approval of the agenda:**

20 *A motion was made by Baker, seconded by Duffy that the Agenda for the October 11, 2016 meeting of*  
21 *the Marina Committee be approved as presented. Motion carried - All ayes.*

22  
23 **Approval of minutes as published:**

24 **As to the minutes for the June 27, 2016 meeting of the Marina Committee:**

25 There was some confusion as whether or not the minutes of the June 27, 2016 had already  
26 been approved so, Bell was asked to resolve this issue and take appropriate follow-up  
27 actions.

28  
29 **As to the minutes for the September 21, 2016 meeting of the Marina Committee:**

30 Baker noted that the times when the Committee entered into and reconvened from closed  
31 session need to be corrected on Page 10, line 18 of the September 21, 2016 meeting minutes.  
32 The times should read 4:27 PM for entering closed session and 5:21 PM for reconvening to  
33 open session.

34  
35 *A motion was made by Baker, seconded by Duffy that the minutes for the September 21, 2016 meeting*  
36 *of the Marina Committee be approved as amended. Motion carried - All Ayes.*

37  
38 **Comments, correspondence and concerns from the public:**

39 Clove asked if anyone wished to comment regarding a non-agenda item. No one responded.

40  
41 He then noted that the following items of correspondence had been received:

- 42 • A letter from Jim Robinson, a copy of which was included in the meeting packets.  
43 Robinson was present and confirmed that all of the concerns he raised in his letter have  
44 now been addressed.
- 45 • A letter from Bunny Spearo, which was read aloud. A copy of that document is hereby  
46 attached and incorporated by reference.
- 47 • An email from Greg Diltz, a copy of which was included in the meeting packets.  
48 Jackson commented that the Marina's website will provide a link to the SBAA's

1 website, and therefore, further information regarding restaurants and shops within the  
2 Village will be available. Krauel confirmed that she is in the process of creating a new,  
3 mobile friendly website for the marina.  
4

5 **Business Items:**

6 **Item No. 1. Report from the Marina Manager:**

7 The Marina Manager's Report was included in the meeting packets, and the Committee  
8 members jointly reviewed that document. During the review process Krauel noted that:

- 9 • The uprights have been lifted, repaired, and placed along "A" Dock for the winter.  
10 There was an expense of \$150.00 for materials in addition to the time the Public Works  
11 crew spent to make the repairs. Port-a-Pier will come after October 31, 2016.
- 12 • The winterization process for the marina building will start after Fall Fest. Krauel will  
13 be the only staff member assisting the Public Works Crew with this process.
- 14 • Slip reservations have been made for Fall Fest, so the Marina will be open on the  
15 weekend of October 14-16, 2016.
- 16 • She is working on the new website design
- 17 • Krauel noted that a copy of an email from Stan Slabas had been included in the meeting  
18 packets. In that email Slabas contests the charges for the removal and replacement of a  
19 cleat on the dock he utilizes. The Committee members indicated that they support  
20 Krauel's decision, and it was the consensus that the costs of removal and replacement  
21 of the cleat should be made by Slabas prior to the process.
- 22 • She will begin to send invoices to the seasonal tenants returning for the 2017 season  
23 soon.  
24

25 **Item No. 2. Discussion regarding Commercial Vendor Contracts and Terms; consider an**  
26 **appropriate motion for action if necessary:**

27 The Commercial Vendor Contracts will be expiring soon, and Krauel is recommending that a  
28 3-year contract with the possibility of a 2-year extension be entered into with commercial  
29 vendors whose proposals are accepted by Village Officials. She also is recommending that a  
30 2% discount be granted to vendors who pay their entire invoice by May 1<sup>st</sup> of each year. As  
31 of this time there are two vendors who have outstanding invoices; one of them owes for the  
32 second installment, but the other still owes for the entire season.  
33

34 *A motion was made by Duffy, seconded by Sunstrom that the Marina Committee approves of the*  
35 *amendments to the Commercial Vendor Contract which were recommended by the Marina Manager.*

36 *Motion carried - All Ayes*  
37

38 Clove noted that the Committee will be provided copies of any and all commercial vendor  
39 contracts which are eventually entered into.  
40

41 **Item No. 3. Open bid packets and have a discussion regarding the renewal of Commercial**  
42 **vendor Leases/RFP's; consider an appropriate motion for action if necessary:**

43 A 2:40 Pm Clove recused himself due to a potential conflict of interest requested that Duffy  
44 assume his duties as Chair of the Marina Committee. Duffy complied, and Clove then had a  
45 seat in the audience.

46 Jackson explained how the RFP process works and further explained the scoring system to  
47 be utilized during the proposal review today. The items to be considered are "Novelty of  
48 Business," "Prior Experience," "Quality of Equipment," "Marketing Content," "Sister Bay

1 Property Ownership," "Existing Operator," and "Duration of the Operation," He also  
2 stressed that input from the audience will not be allowed during the proposal review  
3 process.  
4

5 Duffy requested clarification as to whether or not the number of slips required for specific  
6 commercial vendors should also be taken into consideration and Jackson replied that slip  
7 assignments will be addressed after vendor contracts have been awarded.  
8

9 The Committee members the jointly reviewed the proposals which had been received from  
10 the following business/individuals:

- 11 • Sister Bay Boat Rentals – Eric Lundquist,
  - 12 • Sister Bay Scenic Boat Tours – Eric Lundquist,
    - 13 ○ The determination was made that Lundquists shall be considered an existing
    - 14 operator as he is currently operating Sister Bay Boat Rentals.
  - 15 • Beacon Marine – Mark Matson,
  - 16 • Sail Door County – Peder Nelson,
  - 17 • Shoreline Scenic Cruises and Charters – Jim Robinson, and
    - 18 ○ Door County Bikes and Mopeds (it was the consensus that this proposal shall be
    - 19 referred to the Parks Committee.)
- 20

21 Lengthy discussion followed regarding the limited parking available within the Village for  
22 customers of businesses operating out of the Marina and finally Duffy and Jackson noted  
23 that referrals will have to be made to the Parks Committee, and/or Plan Commission  
24 regarding that issue.  
25

26 Due to the time constraints, it was the consensus that this issue should be addressed further  
27 at the next meeting of the Marina Committee which has been scheduled for 11:00 AM on  
28 October 20, 2016.  
29

30 At 5:20 PM, Clove returned to the table and resumed his Chairperson duties.  
31

32 **Item No. 8. Discussion regarding matters to be placed on a future agenda or referred to a**  
33 **Committee, Official, or Employee:**

34 The Committee members requested that Krauel make contact with officials from Beacon  
35 Marine and inform them that if their payment for the 2016 season is not received by October  
36 20, 2016 a new contract for 2017 may not be awarded.  
37

38 **Item No. 5. Consider a motion to convene into executive session pursuant to Wis. Stats.,**  
39 **§19.85(1)(f) to discuss personnel matters and consider financial, medical, social or personal**  
40 **histories or disciplinary data with respect to specific persons, and preliminarily consider**  
41 **specific personnel problems or investigation of charges against specific persons, which, if**  
42 **discussed in public would be likely to have a substantial adverse effect on the reputation**  
43 **of any person mentioned in such histories or data or involved in such problems or**  
44 **investigations, and §19.85(1)(e) to deliberate or negotiate the purchase of public**  
45 **properties, the investment of public funds, or conduct other specified public business,**  
46 **whenever competitive or bargaining reasons require a closed session:**

47 *At 5:25 P.M. a motion was made by Clove, seconded by Sunstrom that the Marina Committee*  
48 *convene into executive session pursuant to Wis. Stats., §19.85(1)(f) to discuss personnel matters,*

1 consider financial, medical, social or personal histories or disciplinary data with respect to specific  
2 persons, and preliminarily consider specific personnel problems or investigate charges against specific  
3 persons, which, if discussed in public would be likely to have a substantial adverse effect on the  
4 reputation of any person mentioned in such histories or data or involved in such problems or  
5 investigations, and §19.85(1)(e) to deliberate or negotiate the purchase of public properties, the  
6 investment of public funds, or conduct other specified public business, whenever competitive or  
7 bargaining reasons require a closed session.

8  
9 A roll call vote was taken on that motion, and the Committee members voted in the following fashion:

10  
11 Anderson – Aye; Baker – Aye; Clove – Aye; Duffy – Aye; Jungwirth – Aye; Sunstrom – Aye

12  
13 Motion carried.

14  
15 **Item No. 6. Consider a motion to reconvene into open session:**

16 At 5:54 P.M. a motion was made by Baker, seconded by Sunstrom that the Marina Committee  
17 reconvene into open session. Another roll call vote was taken, and the Committee members again voted  
18 in the following fashion:

19  
20 Anderson – Aye; Baker – Aye; Clove – Aye; Duffy – Aye; Jungwirth – Aye; Sunstrom – Aye

21  
22 Motion carried.

23  
24 **Item No. 7. Consider a motion to take action, if required:**

25 No formal action was taken.

26  
27 **Item No. 4 Review of Financial Statements:**

28 Due to time constraints, this agenda item was not addressed

29  
30 **Adjournment:**

31 A motion was made by Duffy, seconded by Baker that the October 11, 2016 meeting of the Marina  
32 Committee be adjourned at 5:55P.M.

33  
34 Respectfully submitted,

35  
36  
37 Anastasia Bell

38 Utilities Clerk

1                   **MARINA COMMITTEE MEETING MINUTES**  
2                                   **THURSDAY, OCTOBER 20, 2016**  
3                   **Sister Bay-Liberty Grove Fire Station – 2258 Mill Road**  
4                                   **(APPROVAL PENDING)**

5  
6   The October 20, 2016 meeting of the Marina Committee was called to order by Chairperson  
7   John Clove at 11:02 A.M.

8  
9   **Present:** Chairperson John Clove, and Committee members Scott Baker, Pat Duffy, Dwight  
10   Anderson and Greg Sunstrom

11  
12   **Excused:** Dan Jungwirth

13  
14   **Staff Members:** Village Administrator Zeke Jackson, Finance Director Tasha Rass, Marina  
15   Manager Nicole Krauel and Enterprise Clerk Anastasia Bell.

16  
17   **Others:** Cory Diltz, Eric Lundquist, Mark Matson, and Jim Robinson

18  
19   **Approval of the agenda:**

20   *A motion was made by Baker, seconded by Sunstrom that the Agenda for the October 20, 2016*  
21   *meeting of the Marina Committee be approved as presented. Motion carried – All Ayes.*

22  
23   **Approval of minutes as published:**

24   **As to the minutes for the June 27, 2016 meeting of the Marina Committee:**

25   *A motion was made by Anderson, seconded by Sunstrom that the minutes for the June 27, 2016*  
26   *meeting of the Marina Committee be approved as presented. Motion carried – All Ayes.*

27  
28   **As to the minutes for the October 11, 2016 meeting of the Marina Committee:**

29   *A motion was made by Sunstrom, seconded by Baker that the minutes for the October 11, 2016*  
30   *meeting of the Marina Committee be approved as presented. Motion carried – All Ayes.*

31  
32   **Comments, correspondence and concerns from the public:**

33   Clove asked if anyone wished to comment regarding a non-agenda item.

34  
35   Jim Robinson stated that he would like to withdraw the RFP he had submitted for Shoreline  
36   Scenic Tours and Charters, and thanked the members of the Marina Committee for doing  
37   business with him for 10 years. He then left the meeting.

38  
39   **Business Items:**

40   **Item No. 2. Review of RFPs and recommend approval to the Village Board/Plan**  
41   **Commission for consideration of commercial vendor parking requirements. Consider an**  
42   **appropriate motion for action if necessary:**

43   Clove noted that it is possible that parking and foot traffic issues could arise at the Marina if  
44   all the proposals which have been submitted are accepted. He suggested that the Committee  
45   members be prepared to discuss those issues during the RFP review process.

46  
47   Discussion then turned to possible placement for all the vessels which were the subject of the  
48   remaining proposals, and Krauel noted that any forced changes in seasonal tenant slip

1 assignments could result in tenants becoming upset or leaving the Marina. Eric Lundquist  
2 informed her that if Sister Bay Scenic Boat Tours' proposal is accepted he would need a slip  
3 which can accommodate a 64' boat with a starboard stern tie. Slip 103 would meet his needs.  
4

5 Clove confirmed that Lundquist would like to bring in an additional vessel and do business  
6 as Sister Bay Scenic Boat Tours, and asked the Committee members what size boat and  
7 related foot traffic they believe the Marina could accommodate. Duffy responded that this is  
8 difficult to assess at this time. Lundquist commented that although the new boat has a large  
9 capacity, he would expect customer counts to resemble those which he experiences in Fish  
10 Creek. (He currently averages 43 passengers per trip in Fish Creek.) He also is willing to  
11 negotiate a daily capacity limit as long as a specified number of "over capacity" days are  
12 designated for special trips or occasions. Clove commented that such an agreement would  
13 have to be re-evaluated in one year.  
14

15 Lengthy discussion took place regarding the parking needs for the Commercial Vendors'  
16 customers and employees. Clove stated that he guarantees that parking is going to be a  
17 very sensitive issue for a lot of people in the Village and it would behoove us to have those  
18 answers before we go to the Board. Anderson pointed out that he is always in the Marina  
19 Parking lot and it is underutilized most of the time and that might be a good solution to the  
20 parking. Duffy asked if it was a Marina property and Jackson responded that it was.  
21 Considerable discussion took place on how to reconstitute the Marina Parking lot to  
22 accommodate boat trailers and commercial vendor parking. Jackson commented that it  
23 should really help the parking situation as we would be getting them off Bayshore Drive.  
24 Clove suggested that if we designated parking for commercial vendors we should put it into  
25 their contracts and charge a nominal fee for it. Further discussion took place on whether or  
26 not we should have a time limit on parking and Jackson commented that he realizes this is  
27 Marina property but if we are going to charge a fee and set time limits it should go before the  
28 Plan commission and Board to discuss parking in totality. Duffy commented that the best  
29 solution at this time might be to create a "Commercial Vendor" parking area in the back  
30 portion of the Short-Term Marina Parking Lot. This alternative would only require a walk-  
31 through to determine the number of available spaces and re-painting in the spring. Clove  
32 suggested that a "Commercial Vendor Parking" sign be created, and Jackson noted that the  
33 Highway Department could be asked to stripe the lot when they are painting streets  
34 throughout the Village in spring. The Committee would then have to designate "per space"  
35 fees. Cory Diltz asked if signs could be erected on Mill road which direct people to the  
36 parking area due to traffic patterns, and Jackson responded that off-site signage which is not  
37 part of the Village's way-finding signage system is not compliant with the Village's Sign  
38 Code. It was the consensus that Duffy's suggestion would be a great first step to address the  
39 parking issue, as long as there is an applicable provision included in each vendor's contract.  
40

41 Clove asked that each of the Committee members express their opinions about traffic,  
42 aesthetics and the overall impact Sister Bay Scenic Boat Tour's proposal would have on the  
43 Village, and the Committee members responded in the following fashion:  
44

- 45 • Anderson stated that he was worried about parking, but with Robinson "backing out"  
46 and the numbers which are being proposed by Lundquist, he believes Sister Bay  
47 Scenic Boat Tours is offering something which is needed here.

- 1 • Sunstrom stated that he likes the idea that Lundquist is willing to compromise  
2 regarding boat capacity and negotiate the number of days on which he will be  
3 allowed to exceed that limit, since we already have a parking problem. He also  
4 believes it will help if Slips 103 or 104, which are inside, are utilized.
- 5 • Duffy stated that he would like to accept Sister Bay Scenic Boat Tour's proposal, and  
6 Baker concurred.
- 7 • Clove stated that he also is in favor of accepting Sister Bay Scenic Boat Tour's  
8 proposal.  
9

10 *A motion was made by Clove, seconded by Baker that the Marina Committee awards a Commercial*  
11 *Vendor Contract to Sister Bay Boat Rentals in accord with the proposal which was reviewed at this*  
12 *meeting. Motion carried - All Ayes.*  
13

14 *A motion was made by Clove, seconded by Anderson that the Marina Committee awards a*  
15 *Commercial Vendor Contract to Sail Door County in accord with the proposal which was reviewed at*  
16 *this meeting. Motion carried - All Ayes.*  
17

18 *A motion was made by Sunstrom, seconded by Duffy that the Marina Committee awards a*  
19 *Commercial Vendor Contract to Sister Bay Scenic Boat Tours in accord with the proposal which was*  
20 *reviewed at this meeting on the condition that a review of traffic flow for that business shall be*  
21 *conducted in one-year. A provision shall be added to the contract with Sister Bay Scenic Boat Tours*  
22 *that there will be an 80-person trip limit per day, but that limit may be exceeded for 16 days out of the*  
23 *year. Motion carried - All Ayes*  
24

25 Krauel noted that to date Beacon Marine has not paid their 2016 commercial vendor fees,  
26 and, therefore, she would be uncomfortable with awarding a new Commercial Vendor  
27 Contract to that company. Jackson responded that Mark Matson has been in contact with  
28 him and is attempting to satisfy the obligation. Anderson commented that the person who is  
29 in charge of financials for Beacon has been out of town for a significant amount of time and  
30 will be back in the office on Monday.  
31

32 *A motion was made by Clove, seconded by Baker that the Marina Committee awards a Commercial*  
33 *Vendor Contract to Beacon Marine in accord with the proposal which was reviewed at this meeting,*  
34 *on the condition that any and all fees related to the 2016 contract must be paid in full by October 31,*  
35 *2016. Motion carried - All Ayes.*  
36

37 *Eric Lundquist asked when he would be able to get his copy of the Sister Bay Scenic Boat Tours*  
38 *contract. He also asked if it would be o.k. for him to purchase the 160 seat boat at this time. Jackson*  
39 *responded that he believed it would be in Lundquist's best interest to have a signed contract in hand*  
40 *prior to making any financial outlays. He also stated that President Lienau and Christy Sully are the*  
41 *only Village officials authorized to execute a document of this nature. Lienau will be out of the country*  
42 *until the last week of October.*  
43

44 *Clove stated, "But the Committee has approved your boat", to which Anderson replied, "But he*  
45 *doesn't want to go out and purchase a big boat . . .", and Clove responded, "It's subject to figuring out*  
46 *slip assignments, but you know you have it, and you're going to be able to run the operation next*  
47 *year.". Duffy then stated, "In any situation, before you make a large expenditure, it would be wise for*  
48 *anybody to have a signed contract. That's not going to limit your ability to use said purchased asset.*

1 *There has not been any history of that signature changing things drastically, but I can't tell you that*  
 2 *that couldn't happen."*

3  
 4 **Item No. 1. Review of the draft contract for Commercial Vendors. Consider an**  
 5 **appropriate motion for action if necessary.**

6 The boilerplate for the new Commercial Vendor Contract was revised in accord with the  
 7 Committee's directives, and a draft of the revised version of that document was included in  
 8 the meeting packets. During the review process Clove clarified that the new contracts will be  
 9 valid for three (3) years.

10  
 11 *A motion was made by Duffy, seconded by Sunstrom that the Marina Committee approves the*  
 12 *"boilerplate" version of the Commercial Vendor Contract which was reviewed at this meeting as*  
 13 *amended. Staff members are directed to utilize the boilerplate when drafting contracts for Sister Bay*  
 14 *Boat Rentals, Sail Door County, Sister Bay Scenic Boat Tours and Beacon Marina, and see that the*  
 15 *contracts are executed. The previously mentioned conditions shall be added to Sister Bay Scenic Boat*  
 16 *Tours' contract, and the Beacon Marina contract shall not be executed unless and until any and all*  
 17 *2016 commercial vendor fees have been paid. Motion carried – All Ayes.*

18  
 19 **Item No. 4. Consider a motion to convene into executive session pursuant to Wis. Stats.,**  
 20 **§19.85(1)(f) to discuss personnel matters and consider financial, medical, social or personal**  
 21 **histories or disciplinary data with respect to specific persons, and preliminarily consider**  
 22 **specific personnel problems or investigation of charges against specific persons, which, if**  
 23 **discussed in public would be likely to have a substantial adverse effect on the reputation**  
 24 **of any person mentioned in such histories or data or involved in such problems or**  
 25 **investigations, and §19.85(1)(e) to deliberate or negotiate the purchase of public**  
 26 **properties, the investment of public funds, or conduct other specified public business,**  
 27 **whenever competitive or bargaining reasons require a closed session:**

28 *At 12:30 P.M. a motion was made by Clove, seconded by Baker that the Marina Committee convene*  
 29 *into executive session pursuant to Wis. Stats., §19.85(1)(f) to discuss personnel matters, consider*  
 30 *financial, medical, social or personal histories or disciplinary data with respect to specific persons, and*  
 31 *preliminarily consider specific personnel problems or investigate charges against specific persons,*  
 32 *which, if discussed in public would be likely to have a substantial adverse effect on the reputation of*  
 33 *any person mentioned in such histories or data or involved in such problems or investigations, and*  
 34 *§19.85(1)(e) to deliberate or negotiate the purchase of public properties, the investment of public*  
 35 *funds, or conduct other specified public business, whenever competitive or bargaining reasons require*  
 36 *a closed session.*

37  
 38 *A roll call vote was taken on that motion, and the Committee members voted in the following fashion:*

39 *Anderson – Aye; Baker – Aye; Clove – Aye; Duffy – Aye; Sunstrom – Aye*

40 *Motion carried.*

41  
 42 **Item No. 5. Consider a motion to reconvene into open session:**

43 *At 1:15 P.M. a motion was made by Clove, seconded by Anderson that the Marina Committee*  
 44 *reconvene into open session. Another roll call vote was taken, and the Committee members again voted*  
 45 *in the following fashion:*

46 *Anderson – Aye; Baker – Aye; Clove – Aye; Duffy – Aye; Sunstrom – Aye*

47 *Motion carried.*

**Item No. 6. Consider a motion to take action, if required:**

A motion was made by Duffy, seconded by Baker that the issue which was discussed in closed session shall be referred to the Personnel Committee. Motion carried - All Ayes.

**Item No. 3. Update regarding the internet upgrades for the Marina; consider an appropriate motion for action if necessary.**

Krauel noted that as part of the 2017 proposed budget \$3,500.00 has been budgeted for internet upgrades at the Marina. Applicable documentation was included in the meeting packets and the Committee members jointly reviewed it. It was the consensus that this issue shall be fully addressed at a future meeting of the Marina Committee.

**Item No. 7. Review of Financial Statements:**

Financial reports for the period of January 1, 2016 to October 17, 2016 were included in the meeting packets, and the Committee members jointly reviewed those documents.

Clove requested that a report be prepared which delineates the fees each of the Marina Fest vendors paid to the Village. Rass confirmed that this information will be included in the packets for a future Marina Committee Meeting after all the required information has been compiled. Clove requested clarification of the wages which were paid to Village employees who worked at Marina Fest, and Rass stated that she intends to re-code those items as the Parks Department is under a flat fee arrangement, and the Dockhands who worked at Marina Fest would be under their normal wage category. Janal Suppanz volunteered to work at the Wooden Boat Show registration table during Marina Fest and did not include any of her volunteer hours on her Village time sheet, but since she is salaried she technically "exceeded her normal working hours".

**Item No. 8. Discussion regarding matters to be placed on a future agenda or referred to a Committee, Official, or Employee.**

The next meeting of the Marina Committee has been scheduled for Wednesday, November 9, 2016 at 3:00 P.M.

It was the consensus that the following issues shall be addressed at a future meeting of the Marina Committee:

- Consider a motion to approve the following Commercial Vendor Contracts.
  - Sister Bay Boat Rentals – Eric Lundquist
  - Sister Bay Scenic Boat Tours – Eric Lundquist
  - Beacon Marine – Mark Matson
  - Sail Door County – Peder Nelson
- Discussion regarding parking and slip assignments for the Marina Commercial Vendors; consider a motion for action if necessary;
- Update regarding the internet upgrades for the Marina; consider an appropriate motion for action if necessary.
- Review of Marina Fest, 2016 financials.

**Adjournment:**

A motion was made by Duffy, seconded by Anderson that the October 20, 2016 meeting of the Marina Committee be adjourned at 1:24P.M.

Minutes for the October 20, 2016 Meeting of the Marina Committee

1 Respectfully submitted,

2

3 *Anastasia Bell*

4 Anastasia Bell

5 Enterprise Clerk



**1 histories or data, or involved in such problems or investigations:**

2 *At 4:37 P.M. a motion was made by Duffy, seconded by Enquist that the Personnel Committee*  
 3 *convene into executive session pursuant to Wis. Stats., §19.85(1)(c) to discuss personnel and*  
 4 *employee benefits, and §19.85(1)(f) to consider financial, medical, social or personal histories or*  
 5 *disciplinary data of specific persons, and preliminarily consider specific personnel problems or*  
 6 *investigate charges against specific persons which, if discussed in public, would be likely to have a*  
 7 *substantial adverse effect on the reputation of any person mentioned in such histories or data, or*  
 8 *involved in such problems or investigations.*

9  
 10 *A roll call vote was taken on the motion, and the Committee members voted in the following*  
 11 *fashion:*

12  
 13 *Bhirdo – Aye; Duffy – Aye; Enquist – Aye*

14  
 15 *Motion carried.*

**17 Item No. 4. Consider a motion to reconvene into open session:**

18 *At 5:50 P.M. a motion was made by Duffy, seconded by Bhirdo that the Personnel Committee*  
 19 *reconvene into open session.*

20  
 21 *Another roll call vote was taken and the Committee members again voted in the following*  
 22 *fashion:*

23  
 24 *Bhirdo – Aye; Duffy – Aye; Enquist – Aye*

25  
 26 *Motion carried.*

**28 Item No 5. Consider a motion to take action, if required:**

29 *A motion was made by Bhirdo, seconded by Enquist that the Personnel Committee Chair shall*  
 30 *contact the Village President and inform him of the conversation which took place during the*  
 31 *previously mentioned closed session. With the Village President's approval the Chair of the*  
 32 *Personnel Committee shall take the actions which were agreed upon in closed session. Motion*  
 33 *carried – All ayes.*

**35 Item No. 5. Matters to be placed on a future agenda or referred to a Committee or Commission:**

36  
 37 *The next meeting of the Personnel Committee has been scheduled for Thursday, November 10,*  
 38 *2016 at 4:30 P.M. At that meeting the following issues will be addressed.*

- 39 • *Discussion on a proposal to disperse sick leave credit to qualified employees with an*  
 40 *HSA contribution, (which would result in possible tax and WRS savings); Consider an*  
 41 *appropriate motion for action.*
- 42 • *Discussion on a proposal to create a Maintenance Technician II position in the Parks*  
 43 *Department to facilitate work and to contribute to succession planning; Consider an*  
 44 *appropriate motion for action.*

**46 Adjournment:**

47 *A motion was made by Bhirdo, seconded by Enquist to adjourn the meeting of the Personnel*  
 48 *Committee at 5:55 P.M. Motion carried – All ayes.*

1 Respectfully submitted,

2 

3 Janal Suppanz,

4 Assistant Administrator



1 Grutzmacher asked if sufficient parking will actually be provided. Jackson responded that  
2 the required number of parking spaces, (95), will not be, but the Plan Commission does have  
3 broad discretionary authority with respect to that requirement. Discussion then turned to  
4 lighting, and Michael Daubner and Tim Cross responded that low impact bistro-style lights  
5 are depicted on the plans and will be utilized. They also noted that they intend to comply  
6 with all the Village's lighting regulations.

7  
8 Attorney Randy Nesbitt was present and confirmed that in accord with §66.0404 of the  
9 Zoning Code - Adjustments To Required Parking, the Plan Commission does have the  
10 authority to make adjustments to the required parking, impose a fee in lieu of parking or  
11 approve off-site parking. If adjustments are made to parking the Plan Commission shall  
12 review the adequacy of that parking within one year following such modification and  
13 conduct periodic reviews thereafter.

14  
15 Shumway stated that she believes it would be best for the Plan Commission to take a one  
16 year "wait and see" approach with respect to parking for "The Boathouse", and  
17 Grutzmacher and Lienau concurred.

18  
19 *It was the consensus that the Development Agreement for "The Boathouse" shall be amended in such*  
20 *fashion that it states that parking for that establishment will be reviewed and re-addressed by the Plan*  
21 *Commission in one year.*

22  
23 Cross voiced concerns about the potential for he and his partners to incur considerable  
24 expense in the future if the determination is made that their parking is not sufficient.

25  
26 Denise Bhirdo asked if it would be possible to conduct a study which identifies the required  
27 parking for all businesses in the Village, and Lienau and Jackson indicated that they intend  
28 to do just that and will present the data to the Village Board at a future meeting. They also  
29 noted that the Village Board is considering utilization of a trolley in the Village.

30  
31 *A motion was made by Shumway, seconded by Baker that the Plan Commission approves the concept*  
32 *plans, site plans, elevation drawings, parking plan, lighting plan, landscaping plans, and architectural*  
33 *drawings for "The Boathouse" which were reviewed at this meeting as amended, on the condition that*  
34 *the performance standards of the Zoning Code must be met. Parking for "The Boathouse" will be*  
35 *reviewed by the Commission in approximately one year and may be subject to additional requirements.*  
36 *Attorney Nesbitt will draft a recordable letter for Ken and Candie Church to sign which states that*  
37 *they have no objections to a 3 foot side yard setback being maintained on both properties, and that*  
38 *document must be recorded in the Office of the Register of Deeds for Door County in a timely fashion.*  
39 *Motion carried - All ayes.*

40  
41 A page-by-page review of the draft of the Development Agreement which was included in  
42 the meeting packets was then conducted, and during the review process the Commission  
43 members pointed out some typographic errors and suggested some grammatical revisions.  
44 Jackson took note of all of them.

45  
46 *Bhirdo stated that because of the location of "The Boathouse" she believes Section 35 of the*  
47 *Development Agreement should state that outdoor music shall cease no later than 10:00 P.M. Several*  
48 *of the Commission members concurred, and Cross stated that he would not have any objections to*

1 *such a condition being imposed most of the time, but if a wedding is conducted that could become an*  
 2 *issue. It was the consensus that the time limit delineated in Section 35 of the Development Agreement*  
 3 *shall be 10:00 P.M. unless the Parks Committee grants permission for it to be extended to 11:00 P.M.*

4  
 5 *A motion was made by Grutzmacher, seconded by Howard that the Plan Commission recommends*  
 6 *that the Development Agreement which was reviewed at this meeting pertaining to the Boathouse,*  
 7 *which establishment is located at 10716 N. Bay Shore Drive in the Village of Sister Bay, be approved*  
 8 *as amended. Motion carried – All ayes.*

9  
 10 *At 7:19 a brief recess was taken and the Commission reconvened at 7:29 P.M.*

11  
 12 **Item No. 1. Review of plans for a commercial development for JACO Management on Lots**  
 13 **7 and 8 of the Sister Bay Marketplace PUD; consider a motion to recommend approval to**  
 14 **the Village Board:**

15 Since January, 2016 at least ten noticed public meetings have taken place regarding  
 16 development of the Braun Property, which is now referred to as “Sister Bay Marketplace”. A  
 17 Public Hearing was also conducted on March 22, 2016. The Village Board authorized the  
 18 Village’s engineers to draft parking plans for the property, and based on the concept  
 19 drawings which had been prepared for the development they determined that a couple of  
 20 retaining walls would be required. Originally Village officials thought that there would be  
 21 eighty-seven parking spaces within “Sister Bay Marketplace”, but based upon the  
 22 topography of the property and cost considerations that number has now been reduced to  
 23 sixty spaces. Several of the Commission members voiced concerns about there being  
 24 sufficient parking in the entire downtown area, especially if a motel is constructed at some  
 25 point in time.

26  
 27 *At 7:36 P.M. a brief recess was taken as Lienau indicated that he needed to confer with the Village*  
 28 *Attorney, and the Commission members reconvened at 7:44 P.M. At that time Lienau pointed out that*  
 29 *the Plan Commission should base any decisions they make with respect to parking for Lots 7 and 8*  
 30 *upon the development information which has been provided to them thus far.*

31  
 32 Plans for the restaurant Chris Schmeltz and Jody Wuollette would like to construct on Lots 7  
 33 and 8 of the Sister Bay Marketplace PUD were included in the meeting packets, and those  
 34 plans now depict construction of a 300 seat restaurant which is equipped with an elevator. In  
 35 accord with one interpretation of the Zoning Code ninety-five parking spaces will be  
 36 required for the restaurant, but as was stated previously the Plan Commission does have  
 37 broad discretionary authority with respect to that requirement. Wuollette noted that he and  
 38 Schmeltz do not anticipate that the restaurant which is depicted on the plans which were  
 39 included in the meeting packets will ever be open before 5:00 P.M. He also provided  
 40 documentation which proves that on the busiest day of the season at “LURE”, an existing  
 41 300 seat restaurant which is located in the Village, the customer count was 404 customers for  
 42 the entire day. Wuollette stressed that under no circumstances does he ever want 300 people  
 43 in the “Sister Bay Marketplace” restaurant at one time, but due to the provisions of the  
 44 State’s liquor licensing regulations that is his only available licensing option. Given the way  
 45 the proposed kitchen has been designed he anticipates that the maximum number of people  
 46 he can seat and serve at one time would be 150.

47

1 Following Wuolette's presentation Jackson asked if the Plan Commission members felt that  
2 the documentation and testimony submitted by Wuolette satisfied the requirements of  
3 §66.0404(a)(1) of the Zoning Code. (That section states, "The following provisions and factors  
4 shall be used as a basis to adjust parking requirements: (1) Evidence that actual parking  
5 demands will be less than chapter requirements. The petitioner shall submit written  
6 documentation and data to the satisfaction of the Plan Commission that the operation will  
7 require less parking than the chapter requires.") Howard and Grutzmacher confirmed that  
8 they believed sufficient information had been provided, and the other Commission members  
9 concurred.

10  
11 Nesbitt stated that in accord with §66.0404(a)(3) of the Zoning Code it would be possible for  
12 the Plan Commission and Village Board to consider whether or not optional modes of  
13 transportation are available in the community.

14  
15 Schmeltz pointed out that one of the conditions of the accepted Offer To Purchase for the  
16 property in question was that the Village would make parking requirement concessions. If  
17 all had gone according to plans they would have been ready to break ground as early as next  
18 Monday.

19  
20 Sharon Doersching noted that she saw how much the parking lot on the property in  
21 question, which is vacant, was used during "the season", and firmly believes that additional  
22 parking spaces will be warranted once new businesses are opened. If a new parking lot is  
23 created she believes the additional expense should be shared by all businesses within the  
24 PUD.

25  
26 Bhirdo stated that she does not believe any of the employees of the businesses in Sister Bay  
27 Marketplace should be allowed to park on-site or on Mill Road/Bay Shore Drive.

28  
29 Lengthy discussion took place regarding parking for Schmeltz and Wuolette's restaurant,  
30 and it was eventually the consensus that the parking for that establishment shall likewise be  
31 reviewed by the Plan Commission in one year and may be subject to additional  
32 requirements.

33  
34 The Plan Commission members then discussed the merits of evaluating every B-3 zoned  
35 property in the Village in accord with §66.0404(g) of the Zoning Code over the course of the  
36 next year.

37  
38 Attorney Nesbitt noted that one way to address the parking problems which have been  
39 identified would be to create a Business Improvement District. If that were to occur all B-3  
40 zoned properties could be assessed in some fashion for parking needs. Jackson has done  
41 some preliminary calculations, and based upon his analysis thus far, nearly every business in  
42 the downtown area does have a parking space deficit. Jackson noted that if every business in  
43 the densely developed downtown area actually had adequate on-site parking there would be  
44 no need for the public parking areas on Bay Shore Drive or Mill Road, or any of the public  
45 parking lots to be utilized by anyone other than those who utilize the beach or parks.

46  
47 A site plan, floor plans, a lighting plan, a parking proposal, elevation drawings and a  
48 landscaping plan for the building Schmeltz and Wuolette would like to construct were

1 included in the meeting packets, and the Commission members jointly reviewed all of those  
 2 documents. During the review process the Commission members noted that they are  
 3 amenable to allowing the roofline to encroach 2'6" onto the adjoining lot.

4  
 5 *Schmeltz presented samples of "Cinnabar" LP Smart Siding and "Pewter Weatherwood" CertainTeed*  
 6 *shingles, and stated that those are the materials he would like to use on the previously mentioned*  
 7 *restaurant. He also indicated that he would like the building to have white trim. It was the consensus*  
 8 *that the proposed siding and shingles as well as proposed color choices are acceptable.*

9  
 10 *A motion was made by Howard, seconded by Baker that the concept plans, site plans, elevation*  
 11 *drawings, parking plan, lighting plan, landscaping plans, and architectural drawings for the building*  
 12 *JACO Management, LLC would like to construct on Lot #7 and Lot #8 of the Sister Bay Marketplace*  
 13 *PUD which were reviewed at this meeting are approved as amended, on the condition that the*  
 14 *performance standards of the Zoning Code must be met. The proposed shingles, siding and color*  
 15 *samples which were reviewed at this meeting are also approved as presented, and parking for the*  
 16 *previously mentioned building will be reviewed by the Plan Commission in approximately one year*  
 17 *and may be subject to additional requirements. Motion carried – All ayes.*

18  
 19 A draft of an applicable Development Agreement was included in the meeting packets, and  
 20 the Commission members jointly reviewed that document. During the review process some  
 21 grammatical and typographic revisions were suggested and Jackson took note of all of them.  
 22 The Commission members again agreed that the time limit for outdoor music, which is  
 23 delineated in Section 36 of the Development Agreement, shall be 10:00 P.M. unless the Parks  
 24 Committee grants permission for that time limit to be extended to 11:00 P.M.

25  
 26 *A motion was made by Bell, seconded by Shumway that the Plan Commission recommends that the*  
 27 *Development Agreement with JACO Management, LLC which pertains to Lots 7 and 8 of the "Sister*  
 28 *Bay Marketplace" PUD and was reviewed at this meeting be approved as amended. Motion carried –*  
 29 *All ayes.*

30  
 31 **Item No. 3. Report by the Zoning Administrator regarding development activities, various**  
 32 **enforcement actions, and issuance of Sign and Zoning Permits:**

33 Jackson noted that he didn't have anything further to report, but asked if any of the  
 34 Commission members had any questions for him. No one responded.

35  
 36 **Item No. 4. Matters to be placed on a future agenda or referred to a committee, official or**  
 37 **employee:**

38 *It was the consensus that the following issues shall be addressed at a future meeting of the Plan*  
 39 *Commission:*

- 40 • *Discussion regarding parking issues throughout the Village.*

41  
 42 **Adjournment:**

43 *A motion was made by Grutzmacher, seconded by Baker to adjourn the meeting of the Plan*  
 44 *Commission at 9:31 P.M. Motion carried – All ayes.*

1 Respectfully submitted,

2 

3

Janal Suppanz,

4

Assistant Administrator



- 1 as sick days, unexcused absences, employee conduct and basic work rules.
- 2 • Blue Heron Etching and Sister Bay Massage, new businesses at the Country Walk
- 3 Shops, have joined the SBAA.
- 4 • There were approximately 520 riders registered for the Peninsula Fall Challenge
- 5 Bike Ride, which was conducted in Sister Bay. That event was sponsored by the
- 6 SBAA, and he and Leininger volunteered to work for it. Next year he will
- 7 investigate the possibility of the SBAA doing some type of fundraising activity at
- 8 the Fall Challenge.
- 9 • The menu mailboxes have been removed from their designated locations. If the
- 10 decision is made to use the mailboxes for another season, the frames will have to
- 11 be rebuilt and most of the mailboxes will have to be replaced.
- 12 • This year the duration of the “Seeking Sven” Contest was shortened by one
- 13 month. The primary goals of running the contest were to encourage use of
- 14 “Instagram” by retailers and encourage seekers of Sven to spend money in local
- 15 businesses and shops. Unfortunately neither of those goals were met. Several of
- 16 the retailers in the Village still do very little on Facebook, and, therefore,
- 17 Instagram was met with a tepid response. He is suggesting that in the future the
- 18 “Seeking Sven” Contest be modified in such fashion that it becomes a scavenger
- 19 hunt which is conducted on a specific day of the week throughout the summer,
- 20 or be replaced altogether with a variety of designated retail events.
- 21

22 **Item No. 5. Committee Reports:**

23 There were no committee reports.

24

25 **Discussion Items:**

26 **Item No. 6. Discussion regarding appointment of new Board members:**

27 Mary Blickman of Blue Heron Etching at the Country Walk Shops has indicated that she

28 would be willing to serve as a regular member of the SBAA Board of Directors and

29 would also be willing to serve as the Country Walk Owner’s Association Liaison. Collin

30 and Sara Doherty from Roots have also volunteered to serve as alternate members on

31 the Board.

32

33 *A motion was made by Enquist, seconded by Crowell that Mary Blickman of Blue Heron Etching*

34 *shall be appointed to serve as a member of the SBAA Board of Directors and the Country Walk*

35 *Owner’s Association Liaison, and Collin and Sara Doherty from Roots shall be appointed to serve*

36 *as alternate members of the SBAA Board of Directors. Motion carried – All ayes.*

37

38 **Item No. 7. Discussion regarding the Annual Fall Meeting/Dinner:**

39 The SBAA’s Annual Fall Meeting/Dinner will be conducted at the Birchwood Lodge on

40 October 27, 2016. The per person charge will be \$10.00, and a light supper and beverages

41 will be served. The deadline for registration is Friday, October 21, 2016. An Agenda has

42 yet to be developed, but Milligan would like the annual business meeting to last no

43 more than 90 minutes, and, therefore, any reports which are given should be brief.

44

45 **Item No. 8. Discussion regarding the 2017 budget:**

46 Work is ongoing on the SBAA’s 2017 budget. Milligan has requested that a better quality

47 printer/copier be purchased, but to his knowledge no expenditures will be required for

1 major capital items in 2017. It also is possible that more money will have to be budgeted  
 2 for co-op community advertising and ongoing education for SBAA members.

3  
 4 **Item No. 9. Discussion regarding Board member term limits and election of officers**  
 5 **for the SBAA:**

6 Some of the Board members' terms will be expiring soon, and, therefore, new  
 7 appointments and/or re-appointments will have to be made in November. Election of  
 8 officers will also take place in November. If any of the current Board members whose  
 9 terms will be expiring are no longer interested in serving, or if there is someone who is  
 10 interested in running for office they should let Bickford know before the Annual  
 11 Meeting.

12  
 13 **Item No. 10. Discussion regarding Light pole flags/banners:**

14 Milligan ordered a set of flex brackets and a sample banner from Sierra Banners, but  
 15 neither of those items have arrived yet. As soon as they do arrive Milligan will ask Steve  
 16 Mann to see that the sample banner is erected on one of the poles. Enquist noted that  
 17 several of the Village Board members questioned whether the flex brackets will actually  
 18 be necessary. It was the consensus that this is a decision which should be left up to  
 19 Village officials.

20  
 21 **Item No. 11. Festivals & Events:**

22 • **Fall Fest:**

23 Final planning for Fall Fest "is in the home stretch". The Arts & Crafts area is  
 24 sold out, and there will be several food vendors who sell products such as  
 25 gourmet mustard, spices, mixes, etc. participating in the show. If those type of  
 26 product offerings are well accepted a separate "Fall Fest Door County  
 27 Marketplace" may be created next year. Milligan is still trying to secure at least  
 28 two "Explorers" to assist with wristbanding. This year a four page newspaper-  
 29 style publication which highlights the very best of Fall Fest will be created, and  
 30 part of that publication is being underwritten by Mitch Larson. The publication is  
 31 a collaborative effort between the SBAA, The Pulse and Door Guide Publishing,  
 32 and hopefully it will improve the image of Fall Fest and highlight the activities  
 33 which make it so much fun. The Board members indicated that they believe the  
 34 publication is a great idea and thanked Mitch Larson, The Pulse and Door Guide  
 35 Publishing for their generosity and assistance. A Facebook survey was conducted  
 36 recently, and people were asked to rate their favorite Fall Fest activities. A total  
 37 of 744 responses were received, and the top vote getters were the food and  
 38 beverage tents, fall color, the music, the arts & crafts show, the parade, family  
 39 activities and the Lions Car Show. It was the consensus that a post-Fall Fest  
 40 survey should be conducted. A Volunteer of the Year has not been chosen yet.  
 41 Therefore, any nominations should be forwarded on to Milligan ASAP.

42  
 43 **Adjournment:**

44 *A motion was made by Kane, seconded by Enquist to adjourn the October 6, 2016 meeting of the*  
 45 *SBAA Board of Directors at 9:10 A.M. Motion carried – All ayes.*

46  
 47

1 Respectfully submitted,



2  
3 Janal Suppanz, Secretary

**SBAA ANNUAL MEETING MINUTES**  
**THURSDAY, OCTOBER 27, 2016**  
**BIRCHWOOD LODGE**  
**10571 STH 57, SISTER BAY, WI**  
**(APPROVAL PENDING)**

7 *The October 27, 2016 Annual Meeting of the Sister Bay Advancement Association was called to*  
 8 *order by President Drew Bickford at 6:02 P.M.*

10 **SBAA Board Members Present:** President Bickford, Ron Kane, Tonya Crowell, Larry  
 11 Gajda, Collin and Sarah Doherty, Mary Blickman, Kathy Enquist, and Windy Bittorf.

13 **Excused:** James Larsen and Denise Bhirdo

15 **Staff Members:** Chris Milligan, SBAA Coordinator, Meghan Leininger, Event Assistant  
 16 and Janal Suppanz, Secretary.

18 **Others:** Darrell Bittorf, Jim Robinson, Jerry Zaug, Warren Zaug, Trish Amusho, Betsy  
 19 Williams, Karen McCarthy, Lynn Church, Jenn Reilly, Karen Schwartz, Carol  
 20 Champeau, Kurt and Nancy Grube, Dianne Lensert, Mary Horton, Lori Wimmer, Anissa  
 21 Kalms, Linda Johnson, Susan Armour, Ann Birnschein, John Nelson, and Charlie  
 22 Henriksen.

24 **Business Items:**

25 **SBAA Board President Welcome Address:**

26 President Bickford introduced all of the SBAA Board members who were present as well  
 27 as Chris Milligan, the SBAA Coordinator and Meghan Leininger, the SBAA Event  
 28 Assistant. He also explained that Denise Bhirdo and James Larsen serve on the Board  
 29 but were unable to attend this meeting. Some of the Board members' terms will be  
 30 expiring soon, and if anyone is interested in serving on the Board they should contact  
 31 Milligan. Board meetings are conducted on the first Thursday of the month at the SBAA  
 32 Office and everyone is welcome.

34 The SBAA Board of Directors and staff members have a good working relationship with  
 35 Village of Sister Bay officials and its employees, and, to that end a formal Operating  
 36 Agreement has been entered into between the parties. That agreement, which addresses  
 37 Village funding, use of Village facilities for festivals and special events, and a number of  
 38 logistical issues, will be in effect for three years.

40 **SBAA Coordinator Report:**

41 Milligan explained that the mission of the Sister Bay Advancement Association is to  
 42 support and promote the business community of Sister Bay by attracting tourism  
 43 through a sustainable marketing plan; providing cultural activities and celebratory  
 44 events that make our community a vital place to live, work and play; and support the  
 45 development of Sister Bay as a year-round community for businesses, visitors and  
 46 residents. To that end a "Forward SBAA Committee" has been created, and the

1 members of that committee are Emily Hanley, Laura Wilder, Jess Reinke and Megan  
2 Leininger. The group objective is to define and prioritize topics which will drive  
3 recommendations for 2017 and beyond. In the first two meetings the group identified  
4 the following barriers or looming issues that may impede progress:

- 5
- 6 • There appears to be a perception that an “uptown” vs. “downtown” mentality  
7 exists in Sister Bay;
- 8 • Marketing is typically done around events or festivals, not business activities;  
9 and,
- 10 • The SBAA needs to integrate the business community in some planning.

11  
12 Karen McCarthy agreed that there is a perception that an “uptown vs. downtown”  
13 mentality exists in Sister Bay, especially with respect to the Country Walk Shops, and  
14 stated that she and the other Country Walk owners would appreciate anything the  
15 SBAA could do to promote their shops.

16  
17 Charlie Henriksen stated that it would be nice if “uptown” could be included and  
18 considered when improvements are being made in the Village. One example is that  
19 banners will be purchased for the new light poles downtown, but no flags or banners  
20 were even considered for the “uptown” area.

21  
22 One of the major stumbling blocks Milligan has encountered in his job is that there is a  
23 lack of volunteers. Any help any of the SBAA members could provide would be greatly  
24 appreciated, but in particular volunteers will be needed to serve on a Website Re-design  
25 Committee as the current SBAA website is outdated.

26  
27 Jerry Zaug stated that he believes there should be a link to the SBAA’s website on the  
28 Door County Visitor Bureau’s website.

29  
30 The suggestion was also made that an event app. be created, and Milligan explained that  
31 he has been discussing website updates as well as creation of an event app. with a  
32 graphic designer. He also is considering creating an SBAA Facebook page.

33  
34 Milligan noted that it is quite likely that Fall Fest will be a bit different next year as there  
35 may be buildings on what is commonly referred to as “the Braun Property” or “the  
36 Walkway Shops Property”. The suggestion was made that some Fall Fest activities be  
37 expanded to the Country Walk Shops.

38  
39 Sarah Doherty noted that there appears to be a mindset among Fall Fest attendees that  
40 the majority of the festival activities take place “downtown”. Her business is located on  
41 Maple Drive, and she and her husband erected a tent on their property during this  
42 year’s festival, but very few people other than friends even came to see what they had to  
43 offer.

44  
45 A copy of the results of the SBAA’s 2016 member survey as well as the 2016 Sister Bay  
46 brochure were provided to the SBAA members prior to this meeting, and those present  
47 jointly reviewed both documents. During the review process the suggestion was made

1 that two versions of the brochure - one which basically consists of a map delineating  
2 where stores, shops and points of interest are located, and one containing all the data  
3 found in the current brochure be created, but that the content of the more detailed  
4 document be reversed so that the map is more visible.

5  
6 Milligan asked if those present had any suggestions for things the SBAA could "do  
7 better", and the following suggestions were made:

- 8 • That Facebook pages be created for each of the events the SBAA will be  
9 sponsoring;
- 10 • That hash tags be created for any and all special events occurring in the Village;
- 11 • That a Marketing Committee be created; and,
- 12 • That Sister Bay bumper stickers be created.

13  
14 In conclusion Milligan thanked all those present for taking the time to attend this  
15 meeting and encouraged all of them to stop by his office at any time.

16  
17 **Discussion regarding the Sister Bay Historical Society Plaque/Walking Tour Project**

18 Susan Armour explained that there are now sixteen buildings out at The Corner of The  
19 Past. That facility is quite popular, and the members of the Sister Bay Historical Society  
20 are working on establishing group walking historical tours. They also would like to  
21 partner with business owners on fun activities and educational programs throughout  
22 "the season". Another activity which is being considered is creation of historical plaques  
23 to be displayed on older buildings in the Village. If any business owners are interested  
24 in joining the Historical Society or would like to partner with that organization they  
25 should contact Armour. More information will be provided regarding the historical  
26 plaques after a formal presentation has been made to the Village's Parks Committee.

27  
28 **Adjournment:**

29 *A motion was made by Bickford, seconded by Kane to adjourn the Annual Meeting of the Sister*  
30 *Bay Advancement Association at 7:14 P.M. Motion carried - All ayes.*

31  
32 Respectfully submitted,

33 

34 Janal Suppanz, Secretary

	Jan-15 Adj 1/31/16	Jan-16 Adj 7/31/16	Feb-15 Adj 1/31/16	Feb-16 Adj 7/31/16	Mar-15 Adj 1/31/16	Mar-16 Adj 7/31/16	Apr-15 Adj 1/31/16	Apr-16 Adj 7/31/16	May-15 Adj 1/31/16	May-16 Adj 7/31/16	Jun-15 Adj 1/31/16	Jun-16 Unadj	Jul-15 Adj 1/31/16	Jul-16 Unadj	Aug-15 Adj 1/31/16	Aug-16 Unadj
Baileys Harbor	3,221 13.18% 99	3,300 6.48% 169	2,978 15.82% 76	2,840 12.29% 118	3,316 14.17% 78	2,817 8.45% 124	3,906 9.83% 123	4,680 8.93% 117	7,917 26.55% 135	8,321 24.32% 153	8,926 48.12% 159	9,139 45.08% 185	9,469 75.38% 195	9,923 74.91% 200	9,394 70.66% 201	10,011 64.79% 207
Brussels	0 0.00% -	30 0.00% -	0 0.00% -	30 100.00% 42	0 0.00% -	62 69.35% 58	0 0.00% -	62 16.13% 159	0 0.00% -							
Clay Banks	0 0.00% -	99 19.19% 131	89 33.71% 129	189 38.10% 215	164 37.80% 213	213 72.30% 238	236 60.59% 204	186 58.06% 226	239 53.97% 217							
Egg Harbor-Town	9,248 10.21% 75	9,781 9.43% 85	7,715 16.31% 79	9,459 14.38% 85	9,558 10.48% 70	9,062 13.42% 73	8,983 10.59% 86	8,781 13.37% 67	11,629 23.66% 117	10,957 29.68% 108	11,650 45.36% 145	11,644 51.30% 148	11,995 69.55% 191	12,005 72.64% 193	11,990 66.81% 183	12,155 69.40% 177
Egg Harbor - Village	4,323 15.41% 108	4,819 17.76% 113	3,954 22.08% 109	4,524 24.78% 95	4,225 22.08% 94	4,816 22.94% 86	5,255 18.33% 95	4,891 21.65% 85	9,546 31.38% 121	9,241 36.26% 128	11,720 51.05% 141	11,518 58.14% 142	12,314 79.03% 171	12,286 76.73% 191	12,448 70.75% 188	12,177 71.42% 188
Ephraim	6,381 10.23% 117	5,564 14.40% 116	5,820 14.60% 109	5,096 20.57% 110	6,350 11.65% 105	5,705 13.78% 103	6,500 14.20% 99	5,724 16.06% 104	13,178 33.56% 108	14,406 28.27% 126	14,870 50.55% 139	15,469 53.46% 150	15,740 80.32% 171	14,243 83.07% 188	15,875 80.62% 173	15,892 79.81% 177
Forestville - Town	31 0.00% -	31 3.23% 38	28 0.00% -	58 1.72% 58	31 0.00% -	62 1.61% 40	30 0.00% -	60 3.33% 40	62 0.00% -	31 9.68% 71	30 16.67% 185	0 0.00% -	36 11.11% 136	31 35.48% 191	62 35.48% 109	31 41.94% 190
Forestville - Village	0 0.00% -	0 0.00% -	0 0.00% -	0 0.00% -	0 0.00% -	0 0.00% -	0 0.00% -	0 0.00% -								
Gardner	962 27.86% 77	873 20.39% 70	873 32.42% 72	870 32.99% 84	946 18.71% 72	899 17.13% 86	1,003 12.16% 89	1,414 12.02% 87	2,036 37.82% 80	1,951 33.62% 96	2,736 27.78% 128	1,838 37.00% 109	2,197 51.52% 127	1,961 61.75% 115	2,114 48.16% 124	1,972 49.80% 116
Gibraltar	6,284 18.54% 138	6,494 20.53% 160	5,738 24.26% 123	5,917 21.92% 135	5,953 17.00% 119	6,064 16.61% 114	7,154 19.90% 114	7,032 23.45% 93	15,257 34.46% 130	14,915 31.99% 137	16,676 59.72% 149	16,030 59.79% 161	17,480 83.00% 178	16,383 85.06% 195	17,534 80.64% 182	17,100 78.58% 190
Jacksonport	860 14.07% 154	854 7.26% 194	818 16.26% 106	893 9.97% 99	826 14.04% 114	839 9.54% 118	860 14.42% 86	863 8.00% 163	2,490 15.94% 110	2,310 18.74% 125	2,837 34.26% 159	2,740 37.77% 166	3,122 74.28% 184	3,052 74.38% 195	3,100 68.10% 200	3,257 73.17% 187
Liberty Grove	4,254 3.41% 165	4,907 2.69% 147	3,907 2.89% 132	4,213 4.11% 115	4,522 2.79% 113	4,431 3.79% 118	4,227 4.09% 105	4,691 5.59% 98	9,793 19.04% 118	9,766 17.97% 121	11,862 34.06% 148	12,138 38.75% 146	12,631 69.76% 170	12,697 71.07% 178	12,894 59.03% 182	12,360 66.28% 168
Nasewaupee	2,327 31.63% 51	2,329 21.04% 61	2,352 43.58% 63	2,177 49.10% 68	2,387 34.69% 54	2,338 21.00% 61	2,340 16.62% 67	2,340 23.38% 65	3,336 40.26% 97	3,244 48.18% 99	3,492 55.38% 116	2,571 52.24% 132	4,089 71.26% 139	3,842 82.87% 145	3,749 70.50% 141	2,578 63.42% 146
Sevastopol	4,201 18.00% 125	4,517 15.67% 148	3,776 31.25% 94	4,232 21.88% 123	4,257 23.73% 115	4,465 22.93% 110	4,743 28.40% 102	5,025 23.28% 116	6,584 35.80% 124	6,399 36.62% 137	6,959 54.78% 180	6,854 51.43% 186	7,211 76.54% 209	7,609 79.05% 222	7,271 72.99% 228	6,934 71.36% 318
Sister Bay	9,780 11.79% 107	9,917 12.87% 114	9,154 19.05% 76	8,357 18.39% 106	9,651 12.47% 88	9,942 15.33% 86	9,428 22.21% 65	9,598 15.95% 89	13,234 33.38% 102	13,016 29.59% 118	14,815 50.04% 138	14,769 51.19% 146	15,488 78.36% 169	15,361 82.97% 180	15,544 76.16% 178	15,367 75.14% 179
Sturgeon Bay - City	20,069 25.66% 74	19,831 27.52% 77	17,953 34.69% 73	18,477 38.00% 74	19,895 31.77% 78	19,774 31.70% 73	19,093 25.83% 79	19,324 33.73% 76	20,387 38.44% 93	20,079 46.37% 91	20,629 51.51% 110	19,019 60.28% 115	20,792 74.75% 126	20,811 74.88% 131	20,632 71.65% 124	19,455 69.06% 129
Sturgeon Bay - Town	289 9.34% 144	328 7.62% 147	227 16.30% 105	403 3.97% 107	368 5.43% 122	483 4.55% 128	261 11.88% 134	437 7.78% 154	508 19.29% 172	595 26.39% 142	798 49.50% 187	757 49.41% 146	902 73.61% 182	832 79.81% 188	942 76.43% 181	899 69.86% 191
Union	0 0.00% -	31 16.13% 554	0 0.00% -	30 0.00% -	30 0.00% -	31 38.71% 399	31 9.68% 747	31 22.58% 320	0 0.00% -							
Washington Island	1,036 6.85% 74	862 4.76% 70	852 10.92% 70	615 4.07% 62	1,079 6.30% 75	918 8.50% 72	1,004 13.35% 69	1,185 10.80% 70	3,829 16.58% 93	3,432 13.43% 83	5,456 35.94% 101	5,369 32.39% 108	5,817 56.85% 111	5,060 56.86% 117	5,764 68.72% 94	5,306 52.98% 123
Available Filled %	73,266 12,279 16.76%	74,407 12,496 16.79%	66,145 15,679 23.70%	68,131 16,319 23.95%	73,364 14,026 19.12%	72,615 14,162 19.50%	74,787 13,990 18.71%	76,045 15,650 20.58%	119,946 37,274 31.08%	118,752 38,034 32.03%	133,705 65,061 48.66%	130,049 67,130 51.62%	139,589 104,920 75.16%	136,363 105,080 77.06%	139,592 100,532 72.02%	135,733 96,443 71.05%
Average	\$ 92	\$ 101	\$ 84	\$ 91	\$ 85	\$ 84	\$ 87	\$ 85	\$ 111	\$ 117	\$ 139	\$ 146	\$ 167	\$ 178	\$ 171	\$ 179



**DOOR COUNTY TOURISM ZONE  
AD-HOC COMMITTEE Minutes of September 7th, 2016  
Village of Egg Harbor, Bertschinger Center, 7860 STH 42**

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**AD Hoc Committee Members Present by Roll Call:** Anderson, Larson and Van Lieshout.

**Also in Attendance:** Jane Hillstrom/ **Hillstrom PR**, Abigail Breseman/ **Hillstrom PR** and Kim Roberts/ **Administrator**

The Ad Hoc Committee met to discuss and refine the ongoing marketing campaign.

Respectfully submitted,

Kim Roberts  
Administrator



DOOR COUNTY TOURISM ZONE  
EXECUTIVE COMMITTEE MEETING

Minutes of September 15, 2016

City of Sturgeon Bay, 421 Michigan Street, Sturgeon Bay

**ACTION ITEMS:**

6 Nelson moved and Starr seconded to approve the agenda. Motion carried.

7 Le Clair moved and Starr seconded to approve the minutes of August 18th, 2016 Full Commission Meeting as  
8 present. Nelson abstained.

9 Weddig moved and Starr seconded to approve reports and payables plus receipts. Motion carried.

10 Consider motion to convene into Closed Session pursuant to Wisconsin State Statutes, Section 19.85(1) (g) to confer  
11 with legal counsel for the governmental body who is rendering oral or written advice concerning strategy to be  
12 adopted by the body with respect to litigation in which it is or likely to become involved; to wit: enforcement actions  
13 against lodging providers who have failed to obtain lodging permits and to timely remit monthly room tax reports and  
14 tax payments. Starr moved to convene into Closed Session as per statutes named; Weddig seconded. Motion carried.

15 Nelson moved to reconvene into Open Session; Starr seconded. Motion carried.

16 Starr moved to adjourn; Nelson seconded. Motion carried.

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18 **Committee Members Present by Roll Call:** Josh Van Lieshout, Bryan Nelson, Bill Weddig, Elizabeth Le Clair and Bob  
19 Starr.

20 **Excused:** Dick Skare and Dave Holtz.

21 **Also in Attendance:** Kim Roberts/Administrator, DCTZC.

22 **Call to Order**

23 Chair Van Lieshout called the meeting to order at 9:09 AM.

24 **Approval of the Agenda**

25 Nelson moved and Starr seconded to approve the agenda. Motion carried.

26 **Approval of the Minutes of the Full Commission Meeting Minutes of August 18th, 2016.**

27 Le Clair moved and Starr seconded to approve the minutes of August 18th, 2016 Full Commission Meeting as  
28 presented. Motion carried. Nelson abstained.

29 **Report by the Door County Visitor Bureau on Marketing Efforts**

30 Jack Moneypenny was not in attendance to report on the DCVB marketing activities.

31 **Report from Administrative Assistant on current activities, projects and issues associated with permitting new  
32 members.**

33 Roberts reported that she sent out seventy (70) no report letters for the report month of May on July 19th, 2016.  
34 She added that as of September 8th, 2016 five (5) properties remain to report for May 2016. She said that the five  
35 (5) properties for May 2016 had been turned over to legal counsel. She went on to say for June 2016 she had sent  
36 out fifty eight (58) no report letters on August 6<sup>th</sup>, 2016 and as of September 8<sup>th</sup>, 2016 seventeen (17) remain to  
37 report.

38 The total outstanding due in unpaid taxes, fees and penalties is two hundred sixty five dollars and eight cents  
39 (\$265.08) from five (5) permit holders.

40 Roberts said that she had permitted eight (8) new properties since the meeting in August; six (6) of which were a  
41 result of compliance efforts. In 2015, ten (10) properties were permitted during the same time period. She added  
42 that she was working on thirteen (13) unpermitted properties that are advertising online or have contacted the  
43 office regarding permitting; she noted that last year at the same time she was working on seventeen (17) properties.

1 Roberts reviewed VRBO listings for Door County: There are five hundred thirty eight (538) listings for Door County.  
2 All but three (3) properties are permitted; the three (3) unpermitted properties have received compliance letters.  
3 Homeaway and vacationrentals.com the other umbrella sites of Expedia are crossovers of VRBO, explained Roberts.  
4 Airbnb, Roberts said has one hundred twenty (120) rentals listed for Door County. Six (6) listed under Door County  
5 are actually Upper Peninsula Michigan, Cedar River or Marinette. All but one (1) property is permitted. This property  
6 she noted was a time share week at a large local resort. As of yet she had not found owner information, but she  
7 stressed that there have been no rentals nor any reviews.

8 Roberts went on to discuss TripAdvisor and Flipkey, she said that there were forty three (43) rentals on the sites and  
9 with the exception of one (1) property, all rentals were permitted. She added that a compliance letter was out to  
10 the owner of the one (1) unpermitted property.

11 Nelson asked if Roberts felt that Airbnb would overtake VRBO.

12 Roberts said that she felt that if Airbnb could make it easier for hosts to collect taxes it would. She explained that  
13 currently hosts either have to increase their nightly rates to include sales and room tax, but then have to pay Airbnb  
14 their percentage with the tax included or they would have to send the prospective lodger a “special offer” to  
15 include the taxes in the lodging quote. She noted that it was a confusing process on Airbnb.

16 Nelson expressed how lucky we were to have a local marketing entity.

17 Roberts agreed and shared the effort on the behalf of the DCVB to remind permit holders of the option to local  
18 marketing especially with the recent addition of service fees with VRBO. Roberts expressed on behalf of a permit  
19 holder, some frustration with the recent email that was sent to permit holders. She explained that while the  
20 intention on behalf of the DCVB was absolutely in the right place by educating permit holders of the local marketing  
21 opportunities for their properties, the wording of the email could have been better. She went on to say that for a lot  
22 of our permit holders VRBO is the main business generator for their rental properties and while the email header  
23 indicated “Say no to VRBO and Yes to the DCVB” caused one permit holder to be upset, the situation was forwarded  
24 to Moneypenny.

25 Starr felt that the response was appropriate coming from the DCVB.

26 Roberts said the permit holder was addressed directly by Moneypenny. She felt his concerns were answered  
27 thoroughly.

### 28 **Discussion on Current Comparable Occupancy numbers**

29 Van Lieshout said all he could say was wow!

30 Nelson said that one wouldn't think there was that much room to grow in such a tough month to grow. He went on  
31 to say that August this year was (4) four weekends and last year it was (5) five weekends which could affect  
32 numbers.

### 33 **Consideration of approving reports and payables plus receipts**

34 **Weddig moved and Starr seconded to approve reports and payables plus receipts.** Motion carried.

### 35 **Discussion and consideration of survey results**

36 Van Lieshout said that the survey effort had wrapped up with Hillstrom PR. Van Lieshout asked Roberts to present the  
37 findings and the recommended action steps from Hillstrom PR.

38 Roberts spoke about the findings and recommended next steps.

39 Starr responded that the biggest take away from the survey is we need to work harder to engage permit holders,  
40 especially one and two unit permit holders.

41 All agreed that in order to support the need and desire from permit holders the 2017 budget should reflect a line item for  
42 producing a quarterly newsletter. There was no desire to do bios or pictures of the Commission, but all felt that the  
43 requests for reminders prior to filing dates was something that could have a high impact on permit holder satisfaction  
44 while the cost was relatively low.

1 Although Van Lieshout was in favor of moving towards electronic filing, Wedding stressed that with such limited access  
2 and connectivity issues he preferred to keep the option of paper filing available. All agreed that the Commission would  
3 look for incentives to move permit holders towards filing online.

4 All agreed to ask Hillstrom PR to present their findings to the full Commission in October and to allow dialogue. Hillstrom  
5 could discuss action steps and present a proposal for doing a quarterly newsletter. They asked Roberts to continue to  
6 work on the survey response letter to permit holders.

7 **Consider motion to convene into Closed Session pursuant to Wisconsin State Statutes, Section 19.85(1)(g) to confer with**  
8 **legal counsel for the governmental body who is rendering oral or written advice concerning strategy to be adopted by**  
9 **the body with respect to litigation in which it is or likely to become involved; to wit: enforcement actions against**  
10 **lodging providers who have failed to obtain lodging permits and to timely remit monthly room tax reports and tax**  
11 **payments. Starr moved to convene into Closed Session as per statutes named; Weddig seconded. Motion carried.**

12 **CLOSED SESSION**

13 **Consider a Motion to Reconvene into Open Session**

14 **Nelson moved to reconvene into Open Session; Starr seconded. Motion carried.**

15 **Adjournment**

16 **Starr moved to adjourn; Nelson seconded. Motion carried.**

17 The meeting adjourned at 10:44 AM.

18  
19 Respectfully submitted,  
20



21 Kim Roberts  
22 Administrator  
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**DOOR COUNTY TOURISM ZONE  
EXECUTIVE COMMITTEE MEETING  
Minutes of September 15<sup>th</sup>, 2016  
City of Sturgeon Bay, 421 Michigan Street, Sturgeon Bay**

7 The closed session of the Tourism Zone Executive Committee was convened by Chairperson Van Lieshout at the City  
8 of Sturgeon Bay, Sturgeon Bay.

9 **Committee Members Present by Roll Call:** Bob Starr, Elizabeth LeClair, Bryan Nelson, Bill Weddig, and Josh Van  
10 Lieshout.

11 **Also present:** Kim Roberts/Administrator

12 **Consider motion to convene into Closed Session pursuant to Wisconsin State Statutes, Section 19.85(1)(g) to confer with**  
13 **legal counsel for the governmental body who is rendering oral or written advice concerning strategy to be adopted by**  
14 **the body with respect to litigation in which it is or likely to become involved; to wit: enforcement actions against**  
15 **lodging providers who have failed to obtain lodging permits and to timely remit monthly room tax reports and tax**  
16 **payments. Starr moved to convene into Closed Session as per statutes named; Weddig seconded. Motion carried.**

---

17 Discussion took place in regard to non-compliant properties.

18 **Consider a Motion to Reconvene into Open Session**

19 **Nelson moved to reconvene into Open Session; Starr seconded. Motion carried.**

20 The meeting reconvened in open session.

21 Respectfully submitted,

*Kim Roberts*

22  
23 Kim Roberts

24 Administrator

1           **JOINT MEETING OF THE WATER, SEWER COLLECTION, AND STORM SEWER**  
2           **COMMITTEE WITH THE WASTEWATER TREATMENT PLANT COMMITTEE**  
3           **MEETING MINUTES**

4                           **TUESDAY, SEPTEMBER 6, 2016**

5                           **SISTER BAY WASTEWATER TREATMENT PLANT - 2124 AUTUMN COURT**  
6

7           The September 6, 2016 joint meeting of the Water, Sewer Collection, and Storm Sewer  
8           Committee with the Wastewater Treatment Plant Committee was called to order by Committee  
9           Chair Pat Duffy at 7:47 A.M.

10  
11           **Present:** Committee Chair Pat Duffy, Members: Scott Baker, Denise Bhirdo, Hugh Mulliken,  
12           and Peter Sauer.

13  
14           **Staff Members:** Utility Manager Mike Schell, Village Administrator Zeke Jackson, Finance  
15           Director Tasha Rass, and Utility Clerk Anastasia Bell.

16  
17           **Excused:** Utility Supervisor Dave Alberts, and Fred Anderson

18  
19           **Approval of the Agenda for the September 6, 2016 Joint meeting of the Water, Sewer**  
20           **Collection, and Storm Sewer Committee with the Wastewater Treatment Plant Committee**  
21           **Meeting:**

22           *A motion was made by Bhirdo, seconded by Baker, that the Agenda for the September 6, 2016 joint*  
23           *meeting of the Water, Sewer Collection, and Storm Sewer Committee with the Wastewater Treatment*  
24           *Plant Committee be approved as presented. Motion carried – All ayes.*

25  
26           **Approval of the August 9, 2016 Water, Sewer Collection, and Storm Sewer Committee**  
27           **meeting minutes:**

28           Minutes are to be amended as follows:

- 29           • Correct the spelling of Bhirdo on page 2, line 41.  
30           • Add additional information pertaining to the history of the engineering issue of the  
31           swamp pump on page 5.  
32           • Correct the typing error that 'neem' should be 'been' on page 4, line 38.

33  
34           *A motion was made by Baker, seconded by Mulliken, to approve the minutes for the August 9, 2016*  
35           *meeting of the Water, Sewer Collection, and Storm Sewer Committee as amended. Motion carried – All*  
36           *ayes.*

37  
38           **Approval of the August 9, 2016 Wastewater Treatment Plant Committee meeting minutes:**

39           Minutes are to be amended as follows: Baker never had banging in his pipes; line 48 shall be  
40           removed on page 7.

41  
42           *A motion was made by Bhirdo, seconded by Sauer, to approve the minutes for the August 9, 2016*  
43           *meeting of the Wastewater Treatment Plant Committee as amended. Motion carried – All ayes*

44  
45           **Public Comments and Correspondence**

1 Duffy noted that no correspondence had been received and asked if anyone wished to address a  
2 non-agenda item. No one responded.

3

#### 4 **Discussion Items**

#### 5 **1. Consider a motion to discuss the following items in the 2017 budget:**

##### 6 **a. Water System**

7 1. Rass commented that the primary reason for the salary and wage allocation increase is due to  
8 the approved Cola Adjustment of 0.68% which was based on the CPIU.

9

10 2. Rass commented that travel and training has increased across all funds, particularly the  
11 Water Fund for Dave Alberts to obtain certifications. Schell clarified that Alberts only needs  
12 water certification training, but all other crew members have required training due to relaxed  
13 training in the past few years and these seminars are typically only offered in Stevens Point,  
14 Wisconsin.

15

16 3. Rass commented that software support costs have increased across all funds due to  
17 upgrading from Caselle Classic to Caselle Clarity.

18

19 4. Rass commented that this is a short-term expense as Schell is working with Contronix who  
20 programming equipment and writing reports for future use.

21

22 5. Rass commented this change is due to a change in coding; just a movement of funds between  
23 accounts

24

25 6. Schell explained the process of removing the pumps through the top of the well for  
26 inspection. The motor is then sent to Appleton to be disassembled, inspected, repaired, and  
27 reassembled. The crew completes monthly generator maintenance and this was just the  
28 required 10-year maintenance. The costs seem high but the process took an average of 8.5 hours  
29 for each of the 6 generators.

30

31 7. Rass commented that this would be an optional billing system for customers. Mulliken  
32 asked about a discount available if people use this system; Jackson explained this process  
33 actually costs more for us to process. Sauer asked if this would be applicable to Liberty Grove;  
34 Rass explained it was not at this time, but could be if Liberty Grove had interest.

35

36 Duffy requested a big-picture for a possible rate increase. Rass confirmed Schenck will be  
37 doing the rate study in September and applicable increases will be applied as part of the fourth  
38 quarter billing process.

39

##### 40 **b. Wastewater Treatment Plant**

41 1. Rass confirmed this increase is primarily due to administration staff working on utilities more  
42 during the turnover of staff.

43

44 2. Rass confirmed the additional classes for employees are as previously explained.

45 3. Rass confirmed the accounting/software support is as previous explained.

46 4. Schell explained the main lift station is behind Bhirdo's on Scandia Rd. This expense is due to  
47 the changing of generator controls. Schell is working to understand the best option for

1 upgrading this system instead of replacing it. Once that is determined he will obtain engineer  
2 proposals for the process.

3  
4 5. Rass confirmed this will decrease as the grit cement work will be completed in 2016. Schell  
5 invited members to attend a meeting on September 12, 2016 at 10:00am about the progress of  
6 this project. It is expected to be completed by the end of September.

7

### 8 **c. Wastewater Collection System**

9 1. Rass confirmed the travel and training expenses are as previously explained.

10

11 2. Rass confirmed the software support expenses are as previous explained.

12

### 13 **d. Utilities CIP**

14 Rass commented that the capital plan for the past couple of years has been updated by  
15 removing the completed plans and adding new items this is part of the budget document.  
16 Items are separated by fund and resource fund information has been added. Highlighted items  
17 are anticipated to be completed in 2017. Rass is working on obtaining the equation from the  
18 DNR to compute the replacement fund amounts.

19

20 Schell commented that the \$400,000.00 is a high estimate for the generator for the worst possible  
21 scenario on the generator replacement. Rass confirmed the replacement fund currently has  
22 approximately \$600,000.00 which could be severely depleted by the generator.

23

24 Duffy asked what happens to the old trucks when they are replaced. Schell currently has  
25 interested parties for the current vehicles. Schell confirmed the cost estimate includes a new  
26 vehicle with the current box being remounted.

27

28 Schell commented that the telemetry units were originally suggested to be part of the 2017  
29 budget. Rass confirmed there are enough funds available to expense these units in the 2016.  
30 Schell confirmed the costs will be approximately \$3,200.00 for each unit, or \$9,600.00 total. The  
31 annual expense will be total of \$1044.00 for the three years. The support system is also very  
32 reliable.

33

34 *A motion was made by Bhirdo, seconded by Baker, to expense the telemetry units to the 2016 budget.*  
35 *Motion carried – All ayes.*

36

37 Rass commented that the Utilities Capital plan will be amended to reflect the purchase of the  
38 telemetry units in 2016.

39

### 40 **e. Storm Sewer System**

41 Jackson commented that this committee has the oversight of this item. The storm water utility  
42 is currently run out of the general fund. This will be reviewed during the finance committee.  
43 Duffy requested clarification as to a percentage that should be allocated for in this fund.  
44 Jackson clarified that there are many options currently available for installation and repairs  
45 throughout the Village and each area would cost significantly different amounts so the best  
46 option at this time may be to start by adding a set amount to the fund annually.

47

1 Schell confirmed that the regulating process needs to be monitored better. The example explained  
2 was pertaining to driveways installed without culverts. This could be regulated by driveway  
3 permits. Mulliken and Sauer confirmed that culverts are issued in Liberty Grove with the  
4 driveway permit.

5  
6 Bhirdo and Duffy commented it would be best to create a written policy at the Village Board  
7 level.

8  
9 *A motion was made by Duffy, seconded by Baker, to present the budget information as amended to the*  
10 *Finance Committee. Motion carried – All ayes.*

11  
12 **2. Review of preliminary engineering work on the Braun Redevelopment Site; consider a**  
13 **motion to take plans to bid and recommend construction begin as soon as acceptable low bid**  
14 **has been received.**

15 Due to the desire for five of the developments to be operational by the spring of 2017 Jackson  
16 has requested that the information be passed onto the Village Board as appropriate. The bids  
17 are currently set to go out in the beginning of October.

18  
19 **3. Directors Report**

20 Schell reported that chlorine scales were purchased and the invoice was included as page 30 of  
21 the meeting packet. These were purchased because they were original with the plant and they  
22 had stopped working and they are used to test the chlorine at the plant on a daily basis. This  
23 cost was taken from the replacement fund.

24  
25 Schell reported that Robert E. Lee has been in contact with him for information which confirms  
26 that they are now focusing on the Liberty Grove water study. There haven't been many  
27 complaints since the improvements discussed at the last meeting were put into place.

28  
29 **4. Report of Quarterly Billing Status**

30 Bell reported that we're preparing for the fourth quarter billing. Many of the large delinquent  
31 accounts have been taken care of through the title company when the property was sold.

32  
33 **5. Consider a motion to convene into Executive Session pursuant to Wisconsin State Statutes,**  
34 **Section 19.85(1)(c) to discuss personnel and employee benefits**

35 *At 8:32a.m. a motion was made by Bhirdo, seconded by Baker to convene into executive Session pursuant*  
36 *to Wis. Stats. §19.85(1) (e). A roll call vote was taken and the Board members voted in the following*  
37 *fashion: Baker-Aye; Bhirdo-Aye; Duffy-Aye; Mulliken-Aye; Sauer-Aye. Motion carried.*

38 **6. Consider a motion to reconvene into Open Session**

39 *At 8:32a.m. a motion was made by Mulliken, seconded by Baker to reconvene into open session. No*  
40 *discussion. A roll call vote was taken and the Board members voted in the following fashion: Baker-Aye;*  
41 *Bhirdo-Aye; Duffy-Aye; Mulliken-Aye; Sauer-Aye. Motion carried.*

42  
43 **7. Consider a motion to take action, if required.**

44 Duffy commented that the Water, Sewer Collection, and Storm Sewer Committee, with the  
45 Wastewater Treatment Plant Committee will direct staff to approve the suggested personnel  
46 changes for the 2017 budget.

47

1 **8. Matters to be placed on a future agenda r referred to a Committee, Official, or Employee.**

2 Jackson commented the next step will be for this information to go onto Finance and asked if  
3 Schell had any additional input. Schell would like the next scheduled meeting to remain as  
4 previously discussed.

5  
6 *The next joint meeting of the Water, Sewer Collection, and Storm Sewer Committee with the Wastewater  
7 Treatment Plant Committee has been scheduled for Tuesday, September 20, 2016 at 7:30 AM.*

8  
9 **Adjournment:**  
10 *A motion was made by Bhirdo, seconded by Baker, to adjourn the September 6, 2016 joint meeting of the  
11 Water, Sewer Collection, and Storm Sewer Utilities Committee with the Wastewater Treatment Plant  
12 Committee at 8:46 A.M. Motion carried – All ayes.*

13  
14 Respectfully submitted,



15  
16 Anastasia Bell  
17 Utility Clerk



1 **Item No. 2 Report on the progress of the Liberty Grove water pressure updates:**

2 Schell reported that due to budgetary constraints he will be asking for the water pressure study  
3 to be completed by November. This study is meant to address volume issues. Anderson  
4 commented that pressure is much better than it used to be.  
5

6 **Item No. 3 Report on the odor complaint which was received since the last meeting:**

7 Schell reported that only one odor complaint was received since the last meeting, and the odors  
8 were detected between 11:00 A.M. and 1:00 PM on a Sunday. (The complaint was received from  
9 the Village View Motel.) The smoke test will be conducted on October 25, 2016, and that should  
10 put an end to the complaints. There have been no modifications to the sewer system to make  
11 this Sister Bay's fault; the odors may be occurring due to the motel's location under the bluff.  
12 Anderson asked if there was a pool system on the property, as he has had odor problems at his  
13 motel when flushing the pool system.  
14

15 **Item No. 4 Discussion regarding the smoke test occurring October 25, 2016:**

16 As was previously stated, the smoke test will occur on October 25, 2016. Testing will be done  
17 along North Bay Shore Drive from the intersection with Highway 42 & Highway 57 to the  
18 intersection of North Bay Shore Drive and Scandia Road. There will be enough personnel  
19 working to collect data at all the businesses in the test area while the test is occurring.  
20

21 **Item No. 5 Discussion regarding the swamp pump; consider an appropriate motion for action  
22 if necessary:**

23 The swamp pump was installed in 1973, and Schell was able to locate the original drawings.  
24 Crane Engineering and Energetics have been asked to provide quotes for the cost of repairs or a  
25 replacement pump. One quote has been received for new controls, and they would cost  
26 \$3,400.00.  
27

28 **Item No. 6 Discussion regarding extensions; consider an appropriate motion for action if  
29 necessary.**

30 Jackson reported there are currently bids out for the Old School property and coordination will  
31 have to occur with Mr. Garot when these bids are returned. The Braun property project will  
32 have to be re-bid as all the bids came in significantly higher than expected.  
33

34 **Item No. 7 Discussion regarding matters to be placed on a future agenda or referred to a  
35 Committee, Official, or Employee:**

36 There were no matters to be placed on a future agenda or referred to a committee, official or  
37 employee.  
38

39 **Adjournment:**

40 *A motion was made by Baker, seconded by Bhirdo, to adjourn the October 6, 2016 meeting of the Water,  
41 Sewer Collection, and Storm Sewer Utilities Committee at 7:54 A.M. Motion carried – All ayes.*  
42

43 Respectfully submitted,

44  
45 Anastasia Bell

1 Utilities Clerk

1                                   **UTILITIES (WASTEWATER TREATMENT PLANT - WWTP)**  
2                                   **COMMITTEE MEETING MINUTES**  
3                                   **TUESDAY, OCTOBER 6, 2016**  
4                                   **SISTER BAY WASTEWATER TREATMENT PLANT - 2124 AUTUMN COURT**  
5                                   **(APPROVAL PENDING)**  
6

7     The October 6, 2016 meetings of the Utilities (WWTP) Committee and the Water, Sewer  
8     Collection, and Storm Sewer Committee were called to order by Committee Chair Patrick Duffy  
9     at 7:47 A.M.

10  
11    **Present:** Committee Chair Pat Duffy, and Members Fred Anderson, Scott Baker, Denise Bhirdo,  
12    Hugh Mulliken, and Peter Sauer.

13  
14    **Staff Members:** Utilities Manager Mike Schell, Village Administrator Zeke Jackson and Utilities  
15    Clerk Anastasia Bell.

16  
17    **Excused:** Utilities Supervisor Dave Alberts

18  
19     *A motion was made by Duffy, seconded by Baker, that the October 6, 2016 meeting of the*  
20     *Utilities (WWTP) be recessed until such time as the meeting of the Water, Sewer Collection,*  
21     *and Storm Sewer Committee has been adjourned. Motion carried – All ayes.*

22  
23     *At 7:54 A.M. a motion was made by Baker, seconded by Bhirdo, that the October 6, 2016*  
24     *meeting of the Water, Sewer Collection, and Storm Sewer Committee be adjourned. Motion*  
25     *carried – all Ayes.*

26  
27     *The members of the Utilities (Wastewater Treatment Plant – WWTP) immediately reconvened,*  
28     *and their meeting was called back to order at 7:55 A.M.*

29  
30    **Approval of the Agenda for the October 6, 2016 Utilities (WWTP) Committee Meeting:**  
31    Bhirdo requested that the Agenda be corrected to reflect that she is a Committee member.

32  
33     *A motion was made by Mulliken, seconded by Bhirdo, that the Agenda for the October 6, 2016 meeting of*  
34     *the Utilities (WWTP) Committee be approved as amended. Motion carried – all Ayes.*

35  
36    **Approval of the minutes for the September 9, 2016 Joint Meeting of the Water, Sewer**  
37    **Collection, and Storm Sewer Committee and the Utilities (WWTP) Committee:**

38    *A motion was made by Bhirdo, seconded by Mulliken, that the minutes for the September 9, 2016 joint*  
39    *meeting of the Water, Sewer Collection, and Storm Sewer Committee and the Utilities, (WWTP),*  
40    *Committee be approved as presented. Motion carried – All Ayes.*

41  
42    **Public Comments and Correspondence**

43    Duffy noted that no correspondence had been received. He then asked if anyone wished to  
44    address a non-agenda item. No one responded.

45  
46  
47  
48

1 **Discussion Items**

2 **Item No. 1 Discussion regarding the Grease Trap Ordinance; consider an appropriate motion**  
3 **for action if necessary:**

4 Schell commented there are currently four (4) businesses that are non-compliant with the  
5 Village's grease trap regulations. The owners of Al Johnson's are arguing about the need to have  
6 a grease trap due to their inability to dispose of the grease. Baileys Harbor is accepting grease  
7 again and they have created a schedule to avoid another plant upset. Schell confirmed that the  
8 Sister Bay plant was able to handle grease in small quantities, but for the most part the sludge  
9 here doesn't like to "eat" the grease.

10

11 Jackson stressed that Schell will need the support of the Committee as he is going to have to see  
12 that penalties are imposed due to non-compliance. He also reminded the Committee members  
13 that grease traps are regulated by the State of Wisconsin.

14

15 Duffy stated that this Committee will support Schell in the process of upholding the Ordinance.  
16 He also stated that he wants Schell to issue additional compliance letters when necessary.

17

18 Jackson noted that if necessary, permits and licenses can be withheld if compliance issues arise.  
19 The owners of Al Johnson's were recently sent a compliance letter and Schell is in the process of  
20 verifying the calculations to ensure that the grease trap is the correct size for that establishment.

21

22 **Item No. 2 Discussion regarding the status of the clarifier repair:**

23 Schell reported that the clarifier repairs are done. He was able to save \$19,000.00 by using a  
24 different contractor.

25

26 **Item No. 3 Report about the update for the pretreatment plant:**

27 The pretreatment system was supposed to be up and running today, but the baffle had the  
28 wrong angle because it was set for a counterclockwise rotation and our system has a clockwise  
29 rotation. August Winters was able to get the correct part manufactured and will be installing it  
30 today. Because Hydrogen Sulfide is utilized in this area additional concrete work was required  
31 at a cost of \$1,500.00.

32

33 **Item No. 4 Report from the Utilities Director on the status of the Utilities:**

34 Everything is going well at the plant but the crew finds items which are in need of repair on a  
35 regular basis. For example, the Ferric Chloride tank manhole started to drip this morning, which  
36 could cause a disaster inside the plant if it opened. The sludge concentrator currently has parts  
37 from Egg Harbor and the pretreatment plant electrical panels are obsolete.

38

39 Schell commented that the plant was estimated to last 25 years, but due to the maintenance it  
40 receives it has survived well beyond this expectation. Bhirdo requested a list of items that are  
41 obsolete and also requested that Schell identify priorities. Schell stated that the main lift station  
42 is the number one priority for 2017. Engineers are currently working to increase the capacity of  
43 the generator.

44

45 Duffy expressed concerns about not depleting the replacement funds faster than anticipated  
46 except for emergent issues. Mulliken asked if our system could be connected to any other  
47 municipality's system if an emergency did occur. Jackson commented that this is a much

1 broader conversation and wouldn't be possible for 30-60 years. Schell stated that we can plan  
2 the best we can, but equipment will always have a lifespan. Whenever possible he will continue  
3 to have applicable conversations with engineers.  
4

5 **Item No. 5 Discussion regarding matters to be placed on a future agenda or referred to a**  
6 **Committee, Official, or Employee:**

7 It was the consensus that quarterly Utility and Water, Sewer Collection and Storm Sewer  
8 Committee meetings are too far apart and monthly meetings are too frequent. Therefore, the  
9 Committees will try alternating months to see if that type of schedule works better. It was the  
10 consensus that the next meeting should be scheduled after bids have been received for the  
11 swamp pump, the Braun Property, and the Gokey Projects. Therefore, it is possible that the next  
12 meeting could be conducted as early as November 15, 2016 at 7:30 A.M.  
13

14 **Adjournment:**

15 *At 8:35 A.M. a motion was made by Anderson, seconded by Baker, that the October 6, 2016 meeting of the*  
16 *Utilities (WWTP) Committee be adjourned. Motion carried – all Ayes.*  
17

18 Respectfully submitted,  
19  
20

21 Anastasia Bell

22 Utility Clerk