SUMMARY NOTES OF THE MAY 16TH, 2019 MEETING OF THE OZAUKEE COUNTY HAZARD MITIGATION PLAN LOCAL PLANNING TEAM

INTRODUCTION

The May 16, 2019, meeting of the Ozaukee County Hazard Mitigation Plan Local Planning Team was convened at the Ozaukee County Justice Center at 1:12 p.m. The meeting was called to order by Scott Ziegler, Director of Ozaukee County's Division of Emergency Management. Attendance was taken by circulating a sign-in sheet.

In attendance at the meeting were the following individuals:

Local Planning Team Members

Scott Ziegler, Chair Director, Ozaukee County Division of Emergency Management Megan Beauchaine, Secretary Planner, Southeastern Wisconsin Regional Planning Commission Tom Czaja Member, OZARES-Ozaukee County Amateur Radio Emergency

Service

Emergency Management, Village of Saukville Sarah DeBruijn

Laura Herrick Chief Environmental Engineer, Southeastern Wisconsin

Regional Planning Commission

Planner, Southeastern Wisconsin Regional Planning Commission Aaron Owens Patty Ruth

Emergency Preparedness Coordinator, Washington Ozaukee

Public Health Department

Mr. Ziegler welcomed the attendees, thanked them for their participation. Mr. Ziegler asked attendees to introduce themselves, their affiliations, and passed it onto Ms. Beauchaine from there. Ms. Beauchaine introduced herself, affiliation, and her role in the Hazard Mitigation Plan updating process for Ozaukee County. Ms. Beauchaine briefly reviewed the meeting's agenda and the summary notes of the August 28, 2018, Local Planning Team (LPT) meeting. Ms. Beauchaine noted that the August 28, 2018 summary notes were posted on the Southeastern Wisconsin Regional Planning Commission's (SEWRPC) website shortly after the meeting and document the meeting as well as the edits made to Chapters 1 and 2 of this plan update. She explained the August 28, 2018 summary notes and Chapter 1 and 2 edits will be considered final unless the LPT provide any additional changes to her by Thursday, May 23, 2019.

Related to discussion in Chapter 2 of the Report, Mr. Ziegler explained that there are on-going changes among staff and officers within City and Village police and fire stations and dispatch centers in the County. He indicated that he will email SEWRPC staff with the updated information. Mr. Ziegler also noted that several members of the Local Planning Team may have either retired or their affiliations may have changed. He said he would email SEWRPC staff with any changes to the LPT.

[Secretary's Note: Sarah DeBruijn, Emergency Manager, Village of Saukville was added to the Local Planning Team.]

CONSIDERATION OF DRAFT CHAPTER 3, "ANALYSIS OF HAZARDS"

Before Ms. Beauchaine started the review of preliminary draft Chapter 3, Mr. Owens explained to the LPT that the handouts consisted of draft Chapters 3 and 4 and that the tables, figures, and maps are attached at the end of the text for each chapter. He also noted that each packet is numbered in chronological order, and the page numbers will be referenced throughout the meeting.

Ms. Beauchaine next reviewed preliminary draft Chapter 3 "Analysis of Hazards". She began by summarizing the four main topics Chapter 3 provides. In addition, she explained the procedures for identifying the hazards that were specifically chosen for this plan update, which included local input; past county hazard mitigation plans; related plans, maps, and assessments; as well as the 2018 Hazard Vulnerability Assessment Tool which was completed by the LPT at the kickoff meeting. Ms. Beauchaine presented Table 3.3 "Weather Hazard Events Recorded in Ozaukee County, Wisconsin from 1950 through 2017 (Sorted by Number of Events)" which documents the number of weather related hazard events and the number of deaths, injuries, property damages, and crop damages that have occurred within Ozaukee County. Ms. Beauchaine also briefly discussed the additional hazards that were considered, but not fully profiled for this plan update. Related to Table 3.3, Ms. Ruth asked if the recent fog-related crash that caused a fatality was in Ozaukee County. Mr. Ziegler informed her that the accident occurred in Sheboygan County but the fatality was an Ozaukee County resident. Mr. Czaja asked how crop damages that are presented in the table were estimated. Mr. Owens responded that crop damage information was gathered by individual events from either the National Weather Service's (NWS) storm event database (NCDC) or from the USDA Risk Management Agency database, which reports data from crop insurance payouts. Regarding hazards that were considered, but not fully profiled in this plan update, Mr. Ziegler said that he had looked into landslides and mudslides that may have occurred in Ozaukee County and explained that everything he could find have been related to coastal bluff erosion, which is a fully profiled hazard in the plan.

Ms. Beauchaine presented Table 3.5, "Summary of Hazards to be Considered in the Ozaukee County Hazard Mitigation Plan" to the LPT. She informed the planning team members that the table were ranked qualitatively, as either "high," "medium," or, "low" based on event data (occurrences and damages), past plans, Wisconsin Emergency Management's (WEM) 2016 Hazard Mitigation Plan, and local input. Ms. Beauchaine explained the importance of having the LPT review the suggested rankings before the table is finalized.

Ms. Beauchaine outlined how each hazard vulnerability assessment is structured for this plan update in Chapter 3. Ms. Beauchaine then reviewed the hazard vulnerability assessments for each profiled hazard, beginning with flooding and stormwater drainage problems.

While reviewing flooding hazards, the topic of ice jams was discussed. Ms. Beauchaine noted that ice jams can cause significant damage and are a known issue in Ozaukee County. Ms. Herrick pointed out that mapped floodplains were used to determine flood damage estimates and that ice jams are not accounted for in the floodplain, and thus the damages that these events may cause will not be included in the updated plan. Mr. Ziegler stated that ice jams are not so much of an issue at bridge or culvert crossings (i.e., blocking the opening of the crossing), rather ice jams tend to divert the river channel at natural locations between crossings. Mr. Ziegler explained that islands in the Milwaukee River, in particular, tend to become blocked by ice jams on one side, diverting all flow to the un-blocked side of the river and pushing the flow out of it bank.

Ms. Beauchaine explained the sources of the floodplains within the County. She noted that updates to the floodplains and floodplain mapping within Ozaukee County are currently being worked on by others and should be available within the five year life cycle of this plan update. Mr. Ziegler stated that floodplain updates in downtown Port Washington, at the mouths of Sauk and Sucker Creeks, are also being updated

and should be completed soon. Mr. Czaja asked about the dates of the current floodplain data used for this plan update. Ms. Herrick replied that modeling and updating of floodplains are routinely done and the dates are often different for each stream, however the majority of the data that was used for this plan update came from the County's flood insurance study, which was current as of 2015.

Ms. Beauchaine explained that the main estimation for flood damages for this plan update was from a parcel based analysis using FEMA and SEWRPC floodplains to determine specific floodprone structures. First floor elevations were compared to flood elevations in the event of a one-percent-annual-probability flood to estimate damages that would occur. Ms. DeBruijn commented that there are several structures in the Village of Saukville that continue to experience flood damage, including from the last major flood event in the spring of 2019. She said the Village is exploring the feasibility of an acquisition and demolition project for these affected areas, citing the WDNR's Municipal Flood Control Grant Program. Mr. Ziegler replied that unless the buildings are considered repetitive loss structures by FEMA, the Village may face eligibility issues for that specific program. Mr. Owens informed the LPT that there is discussion later in this section regarding repetitive loss structures and added that FEMA currently lists one repetitive loss structure for the Village of Saukville, however that number may change due to the last major flood event. He also noted that other grant money is available for projects related to mitigating flood damages for structures that are not considered repetitive loss. Mr. Czaja asked if the repetitive loss structures listed for the City of Mequon were located along the Milwaukee River. Mr. Ziegler answered that most were along the Milwaukee River, and described the roads and locations of concentrated repetitive loss structures in Mequon.

While discussing critical facilities estimated to be located within the one-percent-annual-probabilityfloodplain, Ms. DeBruijn questioned whether the Saukville Post Office is within the floodplain, as stated in the text and Table 3.9. "Communities in Ozaukee County with Special Flood and Related Stormwater Drainage Considerations: 2018." Ms. DeBruijn mentioned that it was recently built and was away from any major rivers.

[Secretary's Note: Subsequent to the LPT meeting, SEWRPC staff determined that the Village of Saukville Post Office was outside of the one-percent-annual-probability floodplain. References of this building being within the floodplain were removed from the text of Chapter as well as Map 3.6 and Table 3.9.]

During discussion of the thunderstorm related hazard impacts on Ozaukee County, Ms. Ruth asked if boater safety should be considered as a topic of concern. Mr. Ziegler commented that issues related to that topic are mostly covered under maritime/coastal weather alerts broadcasted out to boats on Lake Michigan during severe weather. He also stated that there are frequent strong wind events that occur on Lake Michigan that are not experienced over land.

Ms. Beauchaine had asked Mr. Ziegler to review a paragraph on page 52 of draft Chapter 3 related to the County's severe weather watch and warning procedures. Mr. Ziegler reviewed the paragraph and acknowledged that it was correct.

In relation to the review of the vulnerability and community impact assessment for extreme temperatures in the County, both Ms. Ruth and Mr. Ziegler highlighted that power outages and propane shortages are the major concerns during this type of hazard event.

[Secretary's Note: Discussion regarding the concern and risks of propane shortages and power outages during extreme temperature events was added to the "Vulnerability Assessment for Extreme Temperatures" section for this hazard.]

Ms. Ruth asked how property damages related to extreme temperature events occur. Mr. Owens and Mr. Ziegler replied that pipes bursting, water main breaks, and irrigation system damages are the most common damages to property related to extreme cold temperature events.

Mr. Owens presented and reviewed the vulnerability assessment for Lake Michigan coastal hazards. Mr. Czaja asked if there are any regulations in regards to bluff slope grading. Mr. Ziegler mentioned that the City of Mequon and Ozaukee County have adopted bluff setback ordinances. Ms. Ruth asked if Lake levels affect beach loss. Mr. Owens explained that higher Lake levels can result in more severe beach recession, as is being experienced now in several areas in the northern part of the County.

During discussion regarding coastal flooding, Mr. Owens asked Mr. Ziegler if illustrating parcel boundaries on Map 3.19, "Location of Structures Along the lake Michigan Coast that are within the One-Percent-Annual-Probability Flood Hazard Area: 2015" which shows properties along the Lake Michigan coast that contain structures within the one-percent-annual-probability flood hazard area, was acceptable to the County. Mr. Owens indicated that points could be used in place of parcel boundaries to be more discrete, if desired. Mr. Ziegler and Ms. DeBruijn both thought that showing the parcel boundaries was acceptable as that information is available to anyone as public record. Mr. Owens agreed and said that the parcel boundaries would remain on Map 3.19.

While discussing the Wisconsin Shoreline and Oblique Photo Viewer website and tool, Mr. Owens stated that in addition to the 1976 and 2007 shoreline data, an analysis of 2018 conditions has recently been completed. Mr. Owens added that the new data has not yet been added to the tool on the website but that he is attempting to acquire the data from Wisconsin Coastal Management. He said that there was a possibility a brief summary of the 2018 analysis could be added to this section in Chapter 3 if the data can be obtained soon.

During discussion of Table 3.22, "Communities in Ozaukee County with Special Coastal Hazard Concerns" which describes special coastal hazard conditions in communities in Ozaukee County, Ms. Ruth noted that St. John XXIII Elementary School was listed as being a critical community facility that is within the high risk coastal hazard area. She indicated that the school building had been sold and is planned to be converted to an apartment or condominium complex.

[Secretary's Note: A footnote was added to St. John XXIII Elementary School in Table 3.22 stating that the building is no longer a school and is planned to be converted to an apartment complex.]

Regarding discussion on the assessment for utility failure in Chapter 3, Mr. Ziegler stated that the Washington Ozaukee Public Health Department had indicated to him that the loss and/or contamination of water supply was a concern that they would like addressed in this plan update. Mr. Ziegler also cited an incident that occurred during a flood event in which flood waters overtopped several wells in the unincorporated Village of Waubeka. He stated that some of those wells tested positive for sources of contamination.

While discussing the pipeline that ruptured in 2012 in Washington County, Mr. Ziegler mentioned that the pipeline associated that event has been completely abandoned and that the event caused a ripple effect associated with an increase in oil transport to the affected area.

Regarding the vulnerability assessment for fog in Chapter 3, Mr. Ziegler indicated that he had additional fog information related to maritime events that could be added to the plan update, and that he would email the information to SEWRPC staff.

[Secretary's Note: Ms. Beauchaine added text that describes historical maritime fog events in the "Vulnerability Assessment for Fog" section of Chapter 3.]

There were no further questions or comments regarding Chapter 3, "Analysis of Hazards."

REVIEW AND CONSIDERATION OF DRAFT CHAPTER 4, "HAZARD MITIGATION GOALS"

Ms. Beauchaine reviewed preliminary draft Chapter 4 of the Report, explaining that the hazard mitigation goals within this chapter are intended to complement goals that were previously established in other past planning efforts that have occurred within the County. Ms. Beauchaine presented the six goals formulated for this plan update and explained that each goal had several objectives. She further explained that the goals were general guidelines that explained what a community desires to achieve, while the objectives are specific standards needed to achieve these goals. Ms. Beauchaine asked the LPT if they had any additions or objections to the goals and objectives presented in Chapter 4, none were given.

NEXT STEPS

Ms. Beauchaine indicated that Chapter 5 will present strategies to achieve the goals and objectives that are presented in Chapter 4. She further indicated that this process may require a considerable amount of input and feedback from the LPT, County officials, and municipal representatives in regards to the hazard mitigation strategies that will be recommended. Mr. Owens suggested that draft strategies for each hazard are provided—as they are completed—to Ozaukee County Emergency Management for their review and comments prior to being presented at the next LPT meeting and Mr. Ziegler agreed.

FIRST PUBLIC MEETING

Ms. Beauchaine indicated that the next step in the plan updating process is to hold the first of two required public meetings. She suggested the public meeting be held in June 2019. Mr. Ziegler agreed and stated that he will look into a date, time, and location. He also mentioned that he will review the LPT list members and send an updated list with recent changes. Ms. Beauchaine added that the updated Chapters and other meeting materials would be posted on the project website.

ADJOURNMENT

There being no further business, Mr. Beauchaine thanked everyone for attending and the meeting was adjourned at 3:35 p.m.

COMMENTS RECEIVED FROM THE WISCONSIN COASTAL MANAGEMENT PROGRAM MAY 28, 2019

At Mr. Owens' request, Mr. Adam Bechle, of the Wisconsin Coastal Management Program, reviewed and provided additional comments via email regarding the "Vulnerability Assessment for Lake Michigan Coastal Hazards" section in draft Chapter 3.

Mr. Bechle provided comments on the effects shoreline protection structures can have on coastal environments, such as redirecting wave energy to adjacent shorelines.

[Secretary's Note: The following sentence was added to the end of the first full paragraph on page 69:

"Some shoreline protection structures may redirect wave energy to adjacent shorelines, which can increase the potential for erosion at neighboring sites."]

With regards to the discussion on long-term bluff toe and crest recession and accretion, Mr. Bechle indicated that the construction of shoreline protection structures can advance the bluff *toe* lakeward causing accretion. Because bluff *crest* accretion does not occur naturally, Mr. Bechle suggested that bluff fill added to the top of the bluff as part of slope stabilization projects is the likely reason for the areas where the data show bluff crest accretion has taken place.

In regards to the discussion of "Potential Future Changes in Coastal Hazard Conditions," Mr. Bechle noted that since the 2011 WICCI Report, science of lake level projections for the Great Lakes has improved, and projections have changed for Lake Michigan. Mr. Bechle stated that the general consensus is now there may be a small drop or even a small rise in lake levels around the historic mean. Mr. Bechle commented that the significant drop in average lake levels of 0.8 to 1.4 feet, as stated in the draft Chapter 3, is no longer the scientific agreement. Mr. Bechle also provided a recent report on the impacts of climate change on the Great Lakes which supplements the current data on projected water levels.

[Secretary's Note: The text in Chapter 3 under the section, "Potential Future Changes in Coastal Hazard Conditions" was modified to reflect recent modeling projections for water levels in the Great Lakes.]

Mr. Bechle suggested to incorporate a discussion on the effects of reduced ice cover over the Great Lakes due to climate change. He noted that ice cover reduces the amount of open water which a storm needs to produce waves (i.e., lake fetch) and can protect the shoreline from strong wave action. However, with less ice cover in fall and winter, wave action on the coastline may increase.

[Secretary's Note: Discussion was added in Chapter 3 under the section, "Potential Future Changes in Coastal Hazard Conditions" regarding the effects climate change can have on ice cover on the Great Lakes, and the effects that reduced ice cover can have on wave action.]

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