

Appendix B

Steele County Critical Facilities

Agriculture & Food				
Bushel Boy Farms	215 NW 32nd Ave	Owatonna	MN	55060
Central Farm Service	900 30th Place NW	Owatonna	MN	55060
Coca-Cola Enterprises	2505 Alexander St SW	Owatonna	MN	55060
Farmers Feed & Pet Supply	616 N Cedar Ave	Owatonna	MN	55060
Gandy Company	815 Rice Lake St	Owatonna	MN	55060
Lakeside Foods	900 N Cedar Ave	Owatonna	MN	55060
Pro Pet	800 24th Ave NW	Owatonna	MN	55060
SunOpta Grains & Foods	3824 SW 93rd St	Hope	MN	56046

Banking & Finance				
Farmers & Merchants State Bank	245 Main St E	Blooming Prairie	MN	55917
U.S. Bank Branch	236 Main St E	Blooming Prairie	MN	55917
First National Bank	119 5th Ave	Ellendale	MN	56026
First National Bank	9087 SW 37th Ave	Hope	MN	56046
First State Bank	115 1st St NE	Medford	MN	55049
Bremer Bank	730 W Bridge St	Owatonna	MN	55060
Community Bank Owatonna	640 W Bridge St	Owatonna	MN	55060
Federated Employees Credit	1929 S Cedar Ave	Owatonna	MN	55060
First United Bank	495 W North St	Owatonna	MN	55060
Hometown Credit Union	2400 W Bridge St	Owatonna	MN	55060
Hometown Credit Union	1620 S Cedar Ave	Owatonna	MN	55060
Premier Bank Owatonna	209 E Main St H	Owatonna	MN	55060
Profinium, Inc.	1080 Frontage Rd W	Owatonna	MN	55060
United Prairie Bank	110 W Rose St	Owatonna	MN	55060
United Prairie Bank	1801 S Cedar Ave	Owatonna	MN	55060
Wells Fargo Bank	101 N Cedar Ave	Owatonna	MN	55060
Wells Fargo Bank	1400 S Oak Ave	Owatonna	MN	55060
Wells Federal Bank	496 W North St	Owatonna	MN	55060
U.S. Bank Branch	132 W Broadway St	Owatonna	MN	55060

Chemical and Hazardous Materials				
Arkema Inc.	157 Hwy Ave N	Blooming Prairie	MN	55917

Commercial Facilities				
Cabela's	3900 Cabela Dr NW	Owatonna	MN	55060
Medford Outlet Center	6750 W Frontage Rd #315	Medford	MN	55049

Communications				
KOWZ/KRUE Radio	255 Cedardale Avenue	Owatonna	MN	55060
KRFO Radio	245 18th St. SE	Owatonna	MN	55060
Jaguar Communications	215 Oak Ave S	Owatonna	MN	55060
Qwest	122 Mill St W	Owatonna	MN	55060
Charter Communications	1110 School St E	Owatonna	MN	55060

Dams				
Anderson Pond				
Beaver Lake Diversion				
Beaver Lake Outlet				
Maple Creek				
Maple Creek				
Morehouse Park		Owatonna	MN	55060
Standke Pond				
Swan Lake				
Wavrin Wetland				
Beaver Lake Outlet				

Education Facilities				
Area Learning Center	515 W Bridge St	Owatonna	MN	55060
Community Services - Roosevelt Bldg.	515 W Bridge St	Owatonna	MN	55060
Educational Services Center	515 W Bridge St	Owatonna	MN	55060
El Shaddai Private School	509 12th St NE	Owatonna	MN	55060
Kid's Corner EduCare	600 Florence Ave	Owatonna	MN	55060
Owatonna Christian School	265 26th St NE	Owatonna	MN	55060
St. Isidor School	9970 Se 24th Ave	Owatonna	MN	55060
St. Mary's Catholic School	730 S Cedar	Owatonna	MN	55060
Blooming Prairie Elementary School	123 2nd St NW	Blooming prairie	MN	55917
Blooming Prairie High School	202 4th Ave NW	Blooming prairie	MN	55917
Medford Public School	750 2nd Ave. SE	Medford	MN	55049
College of St Thomas	2480 County Road 45	Owatonna	MN	55060
Lincoln Elementary School - Owatonna	747 Havanna Road	Owatonna	MN	55060
McKinley Elementary School - Owatonna	423 14th St NE	Owatonna	MN	55060
Owatonna Alternative Learning Center	130 East Vine St.	Owatonna	MN	55060
Owatonna High School	333 E. School St.	Owatonna	MN	55060

Education Facilities				
Owatonna Junior High School	500 15th St. NE	Owatonna	MN	55060
Pillsbury Baptist Bible College	315 South Grove Ave.	Owatonna	MN	55060
Riverland Community College - Owatonna	965 Alexander Drive Sw	Owatonna	MN	55060
Washington Elementary School - Owatonna	338 Main St. E	Owatonna	MN	55060
Willow Creek Intermediate School	1050 22nd Street NE	Owatonna	MN	55060
Wilson Elementary School - Owatonna	325 Meadow Lane	Owatonna	MN	55060
Litomysl School	9946 Se 24th Ave	Owatonna	MN	55060
St. Columbanus Catholic School	107 Main St E	Blooming Prairie	MN	55917
Ellendale Public School	600 School St	Ellendale	MN	56026

Emergency Services				
Blooming Prairie Ambulance Service	333 2nd Ave. N.E., Po Box 363	Blooming Prairie	MN	55917
Blooming Prairie Fire Department	138 Hwy Ave S	Blooming Prairie	MN	55917
Blooming Prairie Police Dept.	Hwy 218 South	Blooming Prairie	MN	55917
Ellendale Ambulance Service	505 3rd. Street	Ellendale	MN	56026
Ellendale Fire Department	705 2nd. Street	Ellendale	MN	56026
Gold Cross - Owatonna	1005 South Cedar Street	Owatonna	MN	55060
Owatonna Fire Department	107 West Main Street	Owatonna	MN	55060
Owatonna Police Dept.	204 East Pearl	Owatonna	MN	55060
Steele Co. Sheriff's Office	204 East Pearl Street	Owatonna	MN	55060
Steele County Emergency Management	107 West Main Street	Owatonna	MN	55060
Steele County Sheriff	204 E. Pearl	Owatonna	MN	55060
Medford Fire Department	408 2 nd Ave SE	Medford	MN	55049

Energy				
(AA Draft) Owatonna Bcd'''	7702 Southwest 18 St	Owatonna	MN	55060
Bixby Substation		Bixby	MN	55917
Blooming Prairie Public Utilities	146 3rd Ave. SE	Blooming Prairie	MN	55060
Blooming Prairie SubStation		Blooming Prairie	MN	55917
East Owatonna Substation	1200 Main St E	Owatonna	MN	55917
Mansfield SubStation		Bixby	MN	55917

Energy				
North Storage Facility	280 Bridge St W	Owatonna	MN	55060
Owatonna A	7702 Southwest 18 Street	Owatonna	MN	55917
Owatonna Public Utilities	208 South Walnut Ave.	Owatonna	MN	55060
Owatonna Substation		Owatonna	MN	55060
Pratt SubStation		Pratt	MN	55060
Pressure Monitoring Station #30	1810 Kenyon Rd	Owatonna	MN	55060
Propane Plant	350 32nd Ave NW	Owatonna	MN	55060
Regulator Station # 10	133 Vine St W	Owatonna	MN	55060
Regulator Station #11	216 Grove Ave N	Owatonna	MN	55060
Regulator Station #20	1062 Lincoln Ave S	Owatonna	MN	55060
Regulator Station #21	316 School St W	Owatonna	MN	55060
Regulator Station #22	1068 Smith Ave S	Owatonna	MN	55060
Regulator Station #23	1409 Cedar Ave S	Owatonna	MN	55060
Regulator Station #31	2575 4th Ave NW	Owatonna	MN	55060
Regulator Station #32	1895 Cedar Ave N	Owatonna	MN	55060
Regulator Station #33	485 14th St NE	Owatonna	MN	55060
South Storage Facility	309 School St W	Owatonna	MN	55060
South Storage Facility	309 School St W	Owatonna	MN	55060
South Town Border Station	104 18th St SW	Owatonna	MN	55060
Steele-Waseca Cooperative Electric	2411 W. Bridge St.	Owatonna	MN	55060
West Owatonna - Substation		Owatonna	MN	55060
West Owatonna Regulator Station	3141 Bridge St W	Owatonna	MN	55060
West Owatonna SubStation		Owatonna	MN	55060
West Owatonna Substation	3141 Bridge St W	Owatonna	MN	55060
West Town Border Station	7702 18th St SW	Owatonna	MN	55060
Medford Natural Gas	2412 76th St NW	Medford	MN	55060
Ellendale Natural Gas	15432 52nd Ave SW	Ellendale	MN	55060
Blooming Prairie Electric	146 3rd Ave SE	Blooming Prairie	MN	55049
Blooming Prairie Natural Gas	8301 158th St SE	Blooming Prairie	MN	56026

Government Facilities				
Medford City Hall	408 2nd Ave Se	Medford	MN	55049
Medford Post Office	223 Main St N	Medford	MN	55049
Owatonna Airport	3400 Frontage Rd	Owatonna	MN	55060
Owatonna City Hall	540 West Hills Circle	Owatonna	MN	55060
Owatonna Library	105 Elm Ave	Owatonna	MN	55060
Owatonna National Guard Armory	2323 W Bridge St	Owatonna	MN	55060
Owatonna Post Office	209 Broadway	Owatonna	MN	55060
Steele County Administration	630 Florence Ave	Owatonna	MN	55060

Government Facilities				
Steele County Courthouse	111 East Main St.	Owatonna	MN	55060
Steele County Detention Center	2500 Alexander Dr	Owatonna	MN	55060
Steele County Four Season Centre	1525 S Elm Ave.	Owatonna	MN	55060
Steele County Courthouse Office Bldg	303 S Cedar Ave	Owatonna	MN	55060
Steele County Highway Department - County Shop		Owatonna	MN	55060
Steele County Highway Department - Testing		Owatonna	MN	55060
Steele County Highway Department - Storage		Owatonna	MN	55060
Steele County Highway Department - Grader Storage		Owatonna	MN	55060
Steele County Annex	635 Florence Ave	Owatonna	MN	55060
Steele County Community Building	1380 Elm Ave S	Owatonna	MN	55060
Blooming Prairie City Hall	138 Hwy Ave S	Blooming Prairie	MN	55917
Blooming Prairie Post Office	450 2nd St Se	Blooming Prairie	MN	55917
Ellendale City Hall	108 6th Ave W	Ellendale	MN	56026
Ellendale Post Office	508 2nd St Se	Ellendale	MN	56026
Hope Post Office	9064 37th Ave Sw	Hope	MN	56046

Healthcare and Public Health				
Blooming Prairie Clinic - Mayo Health System	405 East Main St., PO Box 158	Blooming Prairie	MN	55917
Bonnerup Funeral and Cremation Service - Ellendale Chapel	308 7th Ave.	Ellendale	MN	56026
Brick-Meger Funeral Home	1603 Austin Rd.	Owatonna	MN	55060
Koda Living Community	2255 30th St NW	Owatonna	MN	55060
Homestead Hospice House	2350 26 th St NW	Owatonna	MN	55060
Infinia	201 18th St SW	Owatonna	MN	55060
Medford Funeral Home	310 Central Ave.	Medford	MN	55049
Michaelson Funeral Home - Owatonna	1930 Austin Rd.	Owatonna	MN	55060
Owatonna Clinic - Mayo Health System	2200 26th St. NW	Owatonna	MN	55060
Owatonna Hospital	2250 NW 26th Street	Owatonna	MN	55060
Steele County Public Health and Human Services	635 Florence Ave.	Owatonna	MN	55060
Worlein Blooming Prairie Funeral Home	418 Highway Ave. S	Blooming Prairie	MN	55917

Postal and Shipping				
United States Postal Service	450 2nd St SE	Blooming Prairie	MN	55917
United States Postal Service	514 S 2nd St	Ellendale	MN	56026
United States Postal Service	9064 SW 37th Ave	Hope	MN	56046
United States Postal Service	221 N Main St	Medford	MN	55049
United States Postal Service	209 E Broadway St	Owatonna	MN	55060
FedEx	1060 26th Pl NW	Owatonna	MN	55060
UPS	3350 Park Dr	Owatonna	MN	55060

Transportation				
ABF Freight System	2234 County Road 45 North	Owatonna	MN	55060
DM & E RR - MSAS 119	Riverside Ave	Owatonna	MN	55060
DM & E RR MSAS 118	Oak Ave	Owatonna	MN	55060
DM & E RR, CR 80		Owatonna	MN	55060
DM&E RR; CSAH 56	Hoffman Dr	Owatonna	MN	55060
Greyhound Bus Transportation - Owatonna	1418 South Oak Ave.	Owatonna	MN	55060
I & M Rail, DM & E RR, MSAS 136		Owatonna	MN	55060
Jefferson Lines Bus Service	1418 S Oak Ave., Oakdale Motel	Owatonna	MN	55060
Steele County Area Transit - SCAT	635 Florence Ave.	Owatonna	MN	55060
Yellow Freight - Owatonna	1500 Park Drive	Owatonna	MN	55060

Water				
Blooming Prairie Municipal Utilities	333 2nd Ave NE	Blooming Prairie	MN	55917
Ellendale Municipal Utilities	106 6th Ave W	Ellendale	MN	56026
Medford Water Supply	209 1st St SW	Medford	MN	55049
Owatonna Wastewater Treatment	1200 Industrial Road	Owatonna	MN	55060
Academy Street Tower	337 Academy St	Owatonna	MN	55060
Booster #7	1604 Austin Rd	Owatonna	MN	55060
Central Water Works	309 School St W	Owatonna	MN	55060
Circulating Pump Station	3175 County Rd 45 N	Owatonna	MN	55060
Well #10	311 School St W	Owatonna	MN	55060
Well #3	208 Walnut Ave S	Owatonna	MN	55060
Well #1	349 School St W	Owatonna	MN	55060
Well #5	1115 Park Dr	Owatonna	MN	55060
Well #6	440 Dunnell Dr	Owatonna	MN	55060
Well #7	1600 Austin Rd	Owatonna	MN	55060
Well #7 Tower	1602 Austin Rd	Owatonna	MN	55060

Water				
Well #8	1390 Rose St E	Owatonna	MN	55060
Well #9	2595 Hemlock Ave	Owatonna	MN	55060
Well #9 Tower	1395 26th St NE	Owatonna	MN	55060
Well #8 Tower	1750 Rose St E	Owatonna	MN	55060
14th St Tower	306 14th St NE	Owatonna	MN	55060
Well #4	349 School St W	Owatonna	MN	55060
Well #2	349 School St W	Owatonna	MN	55060

Appendix C

Steele County Hazard Events

The National Centers for Environmental Information Severe Storm Events database was queried for all notable events since 1950. However, some categories of events do not have records prior to 1996. Data was available through March of 2017.

Table C - 1. All tornadoes recorded by the NCEI, 1950-March 2017

Location or County	Date	Magnitude	Deaths	Injuries	Property Damage
Ellendale	3/6/2017	EF0	0	0	0
Ellendale	6/17/2010	EF2	0	0	0
Ellendale	6/17/2010	EF1	0	0	0
Blooming Prairie	6/17/2010	EF3	0	0	0
Blooming Prairie	6/17/2010	EF2	0	1	0
Blooming Prairie	6/17/2010	EF0	0	0	0
Medford	7/18/2002	F1	0	0	0
Hope	5/1/2001	F0	0	0	0
Merton	8/9/1999	F0	0	0	0
Blooming Prairie	7/20/1997	F0	0	0	0
Morristown	9/6/1995	F0	0	0	0
Clinton Falls	9/6/1995	F0	0	0	0
Steele Co.	5/24/1989	F0	0	0	0
Steele Co.	7/16/1984	F1	0	0	\$25,000
Steele Co.	6/7/1984	F1	0	0	\$2,500,000
Steele Co.	5/17/1982	F3	0	0	\$250,000
Steele Co.	5/17/1982	F3	0	0	\$250,000
Steele Co.	7/23/1973	F0	0	0	\$2,500
Steele Co.	5/15/1968	F1	0	0	\$25,000
Steele Co.	4/30/1967	F1	0	0	\$25,000,000
Steele Co.	4/30/1967	F4	2	0	\$25,000,000
Steele Co.	5/22/1962	F1	0	0	\$250,000
Highest Value Property Damage					\$25,000,000

Table C - 2. All severe hail storm events recorded by the NCEI, 1950-March 2017

Location or County	Date	Size in Inches	Deaths	Injuries	Property Damage
Pratt	8/4/2016	1.5	0	0	0
Meriden	9/20/2014	0.88	0	0	0
Ellendale	9/8/2014	1	0	0	0

Location or County	Date	Size in Inches	Deaths	Injuries	Property Damage
Meriden	8/18/2014	0.88	0	0	0
Ellendale	5/7/2014	0.75	0	0	0
Ellendale	5/21/2011	0.88	0	0	0
Ellendale	5/10/2011	1	0	0	0
Blooming Prairie	9/21/2010	0.88	0	0	0
Owatonna	9/15/2010	0.75	0	0	0
Medford	7/24/2009	1.25	0	0	0
Blooming Prairie	6/17/2009	3.25	0	0	0
Blooming Prairie	6/17/2009	1.75	0	0	0
Meriden	6/17/2009	2.75	0	0	0
Owatonna	6/17/2009	0.88	0	0	0
Owatonna	6/17/2009	1.5	0	0	0
Owatonna	8/11/2007	0.75	0	0	0
Owatonna	6/21/2007	1	0	0	0
Owatonna	6/20/2007	1	0	0	0
Steele Center	3/21/2007	1.25	0	0	0
Medford	8/24/2006	0.75	0	0	0
Meriden	7/19/2006	1	0	0	0
Owatonna	7/19/2006	0.88	0	0	0
Deerfield	7/19/2006	1.75	0	0	0
Owatonna	7/19/2006	0.88	0	0	0
Merton	6/7/2005	0.75	0	0	0
Steele Center	3/30/2005	0.75	0	0	0
Bixby	6/11/2004	0.75	0	0	0
Lemond	7/30/2002	0.75	0	0	0
Blooming Prairie	7/30/2002	0.75	0	0	0
Owatonna	6/12/2002	0.88	0	0	0
Owatonna	5/27/2002	0.75	0	0	0
Hope	5/27/2002	0.88	0	0	0
Blooming Prairie	5/27/2002	1	0	0	0
Owatonna	6/18/2001	1	0	0	0
Owatonna	5/9/2001	0.75	0	0	0
Meriden	5/1/2001	0.88	0	0	0
Owatonna	9/7/1999	1.75	0	0	0
Owatonna	9/7/1999	1.75	0	0	0
Blooming Prairie	6/20/1998	0.75	0	0	0

Location or County	Date	Size in Inches	Deaths	Injuries	Property Damage
Owatonna	3/29/1998	1	0	0	0
Blooming Prairie	3/27/1998	0.75	0	0	0
Merton	6/29/1996	0.75	0	0	0
Medford	9/6/1995	1	0	0	0
Merton	9/6/1995	1.75	0	0	0
Owatonna	5/30/1994	0.75	0	0	\$500
Steele Co.	8/4/1989	1.75	0	0	0
Steele Co.	8/21/1987	1.75	0	0	0
Steele Co.	4/3/1981	1.75	0	0	0
Steele Co.	7/15/1978	0.75	0	0	0
Steele Co.	5/11/1973	1.75	0	0	0
Steele Co.	5/15/1968	1.75	0	0	0
Steele Co.	6/15/1967	1.75	0	0	0
Steele Co.	6/8/1967	0.75	0	0	0
Steele Co.	10/14/1966	1.75	0	0	0
Steele Co.	8/25/1965	1	0	0	0
Highest Value Property Damage					\$500

Table C - 3. All severe thunderstorm wind events recorded by NCEI, 1950-March 2017

Location or County	Date	Type	Magnitude (knots)	Deaths	Injuries	Property Damage
Merton	6/22/2016	Thunderstorm Wind	52	0	0	0
Ellendale	5/26/2016	Thunderstorm Wind	56	0	0	0
Lemond	7/24/2015	Thunderstorm Wind	52	0	0	0
Hope	6/17/2015	Thunderstorm Wind	52	0	0	0
Ellendale	6/17/2015	Thunderstorm Wind	52	0	0	0
Owatonna Arpt	8/18/2014	Thunderstorm Wind	50	0	0	0
Lemond	6/16/2014	Thunderstorm Wind	52	0	0	0
Hope	6/16/2014	Thunderstorm Wind	52	0	0	0
Hope	6/16/2014	Thunderstorm Wind	52	0	0	0
Hope	6/16/2014	Thunderstorm Wind	54	0	0	0
Bixby	5/19/2013	Thunderstorm Wind	52	0	0	0
Lemond	9/4/2012	Thunderstorm Wind	50	0	0	0
Ellendale	7/1/2011	Thunderstorm Wind	52	0	0	0
Steele (Zone)	10/26/2010	High Wind	55	0	0	0
Owatonna	9/15/2010	Thunderstorm Wind	52	0	0	\$5,000

Location or County	Date	Type	Magnitude (knots)	Deaths	Injuries	Property Damage
Ellendale	8/13/2010	Thunderstorm Wind	56	0	0	\$50,000
Ellendale	6/17/2010	Thunderstorm Wind	55	0	0	0
Steele (Zone)	10/26/2008	High Wind	50	0	0	0
Owatonna	7/31/2008	Thunderstorm Wind	62	0	0	0
Owatonna	7/31/2008	Thunderstorm Wind	63	0	0	0
Medford	7/31/2008	Thunderstorm Wind	64	0	0	0
Owatonna	7/31/2008	Thunderstorm Wind	52	0	0	0
River Pt	7/17/2008	Thunderstorm Wind	54	0	0	0
Ellendale	5/2/2008	Thunderstorm Wind	55	0	0	0
Owatonna	8/11/2007	Thunderstorm Wind	50	0	0	0
Ellendale	7/3/2007	Thunderstorm Wind	60	0	0	0
Steele (Zone)	5/6/2007	High Wind	50	0	0	0
Medford	8/24/2006	Thunderstorm Wind	55	0	0	0
Steele Center	7/13/2006	Thunderstorm Wind	57	0	0	0
Bixby	7/13/2006	Thunderstorm Wind	57	0	0	0
Owatonna	6/24/2006	Thunderstorm Wind	55	0	0	0
Meriden	6/29/2005	Thunderstorm Wind	52	0	0	0
Owatonna	6/8/2005	Thunderstorm Wind	57	0	0	0
Steele (Zone)	12/12/2004	High Wind	40	0	0	0
Ellendale	10/29/2004	Thunderstorm Wind	52	0	0	0
Hope	10/29/2004	Thunderstorm Wind	55	0	0	0
Owatonna	10/29/2004	Thunderstorm Wind	55	0	0	0
Steele (Zone)	4/18/2004	High Wind	52	0	0	0
Owatonna	7/4/2003	Thunderstorm Wind	52	0	0	0
Owatonna	8/3/2002	Thunderstorm Wind	50	0	0	0
Owatonna	7/28/2002	Thunderstorm Wind	52	0	0	0
Owatonna	6/12/2001	Thunderstorm Wind	65	0	0	\$10,000
Steele (Zone)	4/7/2001	High Wind	69	0	0	0
Steele (Zone)	4/5/2000	High Wind	64	0	0	0
Blooming Prairie	6/5/1999	Thunderstorm Wind	63	0	0	0
Steele (Zone)	3/17/1999	High Wind	55	0	0	0
Steele (Zone)	11/10/1998	High Wind	47	0	0	0
Owatonna	6/27/1998	Thunderstorm Wind	58	0	0	0
Owatonna Arpt	6/27/1998	Thunderstorm Wind	54	0	0	0
Ellendale	6/27/1998	Thunderstorm Wind	61	0	0	0
Owatonna	6/26/1998	Thunderstorm Wind	50	0	0	0
Blooming Prairie	7/17/1997	Thunderstorm Wind	55	0	0	0
Owatonna	7/13/1997	Thunderstorm Wind	58	0	0	0

Location or County	Date	Type	Magnitude (knots)	Deaths	Injuries	Property Damage
Steele (Zone)	4/6/1997	High Wind	51	0	0	0
Steele (Zone)	10/29/1996	High Wind	64	0	0	0
Owatonna	8/6/1996	Thunderstorm Wind	52	0	0	0
Owatonna	6/5/1996	Thunderstorm Wind	50	0	0	0
Owatonna	5/19/1996	Thunderstorm Wind	70	0	0	\$5,000,000
Steele (Zone)	2/10/1996	High Wind	48	0	0	0
Steele (Zone)	5/30/1994	Thunderstorm Wind	0	0	0	\$500
Steele (Zone)	4/29/1991	Thunderstorm Wind	0	0	0	0
Steele (Zone)	4/22/1991	Thunderstorm Wind	0	0	0	0
Steele (Zone)	5/23/1989	Thunderstorm Wind	61	0	0	0
Steele (Zone)	6/14/1988	Thunderstorm Wind	57	0	0	0
Steele (Zone)	7/11/1987	Thunderstorm Wind	0	0	0	0
Steele (Zone)	4/26/1986	Thunderstorm Wind	0	0	0	0
Steele (Zone)	4/26/1984	Thunderstorm Wind	0	0	0	0
Steele (Zone)	4/26/1984	Thunderstorm Wind	63	0	0	0
Steele (Zone)	6/30/1983	Thunderstorm Wind	0	0	0	0
Steele (Zone)	6/26/1979	Thunderstorm Wind	70	0	0	0
Steele (Zone)	6/16/1979	Thunderstorm Wind	0	0	0	0
Steele (Zone)	6/4/1977	Thunderstorm Wind	0	0	0	0
Steele (Zone)	6/20/1974	Thunderstorm Wind	0	0	0	0
Steele (Zone)	4/20/1974	Thunderstorm Wind	0	0	0	0
Steele (Zone)	8/29/1970	Thunderstorm Wind	0	0	0	0
Steele (Zone)	7/13/1969	Thunderstorm Wind	65	0	0	0
Steele (Zone)	7/13/1969	Thunderstorm Wind	0	0	0	0
Steele (Zone)	7/13/1969	Thunderstorm Wind	0	0	0	0
Steele (Zone)	5/28/1969	Thunderstorm Wind	0	0	0	0
Steele (Zone)	7/7/1957	Thunderstorm Wind	0	0	0	0
Highest Value Property Damage						\$5,000,000

Table C - 4. All flood events recorded by the NCEI, 1997-March 2017

Location or County	Date	Type	Deaths	Injuries	Property Damage
Meriden	9/22/2016	Flood	0	0	0
Owatonna Arpt	6/18/2014	Flood	0	0	\$2,400,000
Pratt	6/16/2014	Flash Flood	0	0	0
Pratt	6/16/2014	Flash Flood	0	0	0
Blooming Prairie	7/15/2011	Flash Flood	0	0	0

Location or County	Date	Type	Deaths	Injuries	Property Damage
Merton	9/23/2010	Flash Flood	0	0	0
Ellendale	9/23/2010	Flood	0	0	\$28,400,000
Owatonna	6/26/2010	Flash Flood	0	0	0
Merton	6/17/2010	Flash Flood	0	0	0
Owatonna	10/1/2007	Flash Flood	0	0	\$3,000,000
Owatonna	9/30/2007	Flash Flood	0	0	0
Owatonna	8/18/2007	Flash Flood	0	0	\$2,500,000
Owatonna	6/9/2006	Flash Flood	0	0	\$500,000
Owatonna	9/24/2005	Flash Flood	0	0	0
Countywide	9/14/2004	Flash Flood	0	0	0
Steele (zone)	6/14/2004	Flood	0	0	\$2,800,000
Steele (zone)	6/10/2004	Flood	0	0	0
Blooming Prairie	7/21/2002	Flash Flood	0	0	0
Steele (zone)	4/1/2001	Flood	0	0	0
Blooming Prairie	7/8/2000	Flood	0	0	0
Blooming Prairie	8/18/1999	Flood	0	0	0
Medford	8/14/1997	Flash Flood	0	0	0
Highest Value Property Damage					\$28,400,000

Table C - 5. All severe winter weather events recorded by NCEI, 1996-March 2017

Location or County	Date	Type	Deaths	Injuries	Property Damage
Steele (Zone)	3/12/2017	Winter Storm	0	0	0
Steele (Zone)	2/23/2017	Winter Storm	0	0	0
Steele (Zone)	1/24/2017	Winter Storm	0	0	0
Steele (Zone)	3/23/2016	Winter Storm	0	0	0
Steele (Zone)	2/2/2016	Winter Storm	0	0	0
Steele (Zone)	12/28/2015	Winter Storm	0	0	0
Steele (Zone)	3/22/2015	Winter Storm	0	0	0
Steele (Zone)	1/8/2015	Blizzard	0	0	0
Steele (Zone)	11/26/2014	Winter Storm	0	0	0
Steele (Zone)	3/4/2014	Heavy Snow	0	0	0
Steele (Zone)	2/26/2014	Blizzard	0	0	0
Steele (Zone)	2/20/2014	Blizzard	0	0	0
Steele (Zone)	1/26/2014	Blizzard	0	0	0
Steele (Zone)	1/16/2014	Blizzard	0	0	0
Steele (Zone)	4/11/2013	Winter Storm	0	0	0
Steele (Zone)	3/10/2013	Winter Storm	0	0	0

Location or County	Date	Type	Deaths	Injuries	Property Damage
Steele (Zone)	3/4/2013	Winter Storm	0	0	0
Steele (Zone)	2/21/2013	Heavy Snow	0	0	0
Steele (Zone)	1/27/2013	Winter Storm	0	0	0
Steele (Zone)	12/19/2012	Winter Storm	0	0	0
Steele (Zone)	2/20/2011	Winter Storm	0	0	0
Steele (Zone)	12/20/2010	Winter Storm	0	0	0
Steele (Zone)	12/15/2010	Winter Storm	0	0	0
Steele (Zone)	12/10/2010	Blizzard	0	0	0
Steele (Zone)	12/3/2010	Winter Storm	0	0	0
Steele (Zone)	2/7/2010	Winter Storm	0	0	0
Steele (Zone)	12/23/2009	Winter Storm	0	0	0
Steele (Zone)	12/8/2009	Blizzard	0	0	0
Steele (Zone)	1/12/2009	Winter Storm	0	0	0
Steele (Zone)	12/20/2008	Winter Storm	0	0	0
Steele (Zone)	12/9/2008	Winter Storm	0	0	0
Steele (Zone)	1/29/2008	Blizzard	0	0	0
Steele (Zone)	12/1/2007	Winter Storm	0	0	0
Steele (Zone)	3/1/2007	Winter Storm	0	0	0
Steele (Zone)	2/23/2007	Winter Storm	0	0	0
Steele (Zone)	1/14/2007	Heavy Snow	0	0	0
Steele (Zone)	11/10/2006	Heavy Snow	0	0	0
Steele (Zone)	3/12/2006	Winter Storm	0	0	0
Steele (Zone)	2/15/2006	Winter Storm	0	0	0
Steele (Zone)	12/13/2005	Heavy Snow	0	0	0
Steele (Zone)	3/18/2005	Winter Storm	0	0	0
Steele (Zone)	2/19/2005	Winter Storm	0	0	0
Steele (Zone)	1/21/2005	Blizzard	0	0	0
Steele (Zone)	1/1/2005	Winter Storm	0	0	0
Steele (Zone)	3/5/2004	Winter Storm	0	0	0
Steele (Zone)	2/1/2004	Winter Storm	0	0	0
Steele (Zone)	1/24/2004	Winter Storm	0	0	0
Steele (Zone)	12/9/2003	Winter Storm	0	0	0
Steele (Zone)	2/11/2003	Blizzard	0	0	0
Steele (Zone)	3/14/2002	Winter Storm	0	0	0
Steele (Zone)	3/8/2002	Winter Storm	0	0	0
Steele (Zone)	2/1/2002	Winter Storm	0	0	0
Steele (Zone)	1/31/2002	Winter Storm	0	0	0
Steele (Zone)	2/24/2001	Winter Storm	0	0	0
Steele (Zone)	1/29/2001	Winter Storm	0	0	0
Steele (Zone)	12/28/2000	Winter Storm	0	0	0

Location or County	Date	Type	Deaths	Injuries	Property Damage
Steele (Zone)	12/18/2000	Winter Storm	0	0	0
Steele (Zone)	1/19/2000	Heavy Snow	0	0	0
Steele (Zone)	10/1/1999	Winter Weather	0	0	0
Steele (Zone)	3/8/1999	Winter Storm	0	0	0
Steele (Zone)	1/22/1999	Winter Storm	0	0	0
Steele (Zone)	1/17/1999	Winter Storm	0	0	0
Steele (Zone)	1/1/1999	Heavy Snow	0	0	0
Steele (Zone)	1/4/1998	Ice Storm	0	0	0
Steele (Zone)	3/13/1997	Winter Storm	0	0	0
Steele (Zone)	1/15/1997	Blizzard	0	0	0
Steele (Zone)	12/23/1996	Winter Storm	0	0	0
Steele (Zone)	12/14/1996	Heavy Snow	0	0	0
Steele (Zone)	11/22/1996	Heavy Snow	0	0	0
Steele (Zone)	11/20/1996	Heavy Snow	0	0	0
Steele (Zone)	11/14/1996	Ice Storm	0	0	0
Steele (Zone)	3/23/1996	Heavy Snow	0	0	0
Steele (Zone)	1/28/1996	Blizzard	0	0	0
Steele (Zone)	1/25/1996	Heavy Snow	0	0	0
Steele (Zone)	1/17/1996	Heavy Snow	0	0	0
Steele (Zone)	1/10/1996	Heavy Snow	0	0	0
Highest Value Property Damage					0

Table C - 6. All severe cold/wind chill events recorded by NCEI, 1996-March 2017

Location or County	Date	Type	Deaths	Injuries	Property Damage
Steele (Zone)	12/18/2016	Extreme Cold/Wind Chill	0	0	0
Steele (Zone)	1/17/2016	Extreme Cold/Wind Chill	0	0	0
Steele (Zone)	1/27/2014	Extreme Cold/Wind Chill	0	0	0
Steele (Zone)	1/23/2014	Extreme Cold/Wind Chill	0	0	0
Steele (Zone)	1/5/2014	Extreme Cold/Wind Chill	0	0	0
Steele (Zone)	1/14/2009	Cold/Wind Chill	0	0	0
Steele (Zone)	2/19/2008	Cold/Wind Chill	0	0	0
Steele (Zone)	2/10/2008	Cold/Wind Chill	0	0	0
Steele (Zone)	1/15/1997	Cold/Wind Chill	0	0	0
Steele (Zone)	12/24/1996	Cold/Wind Chill	0	0	0
Steele (Zone)	2/1/1996	Cold/Wind Chill	0	0	0
Steele (Zone)	1/31/1996	Cold/Wind Chill	0	0	0

Location or County	Date	Type	Deaths	Injuries	Property Damage
Steele (Zone)	1/18/1996	Cold/Wind Chill	0	0	0
Highest Value Property Damage					0

Table C - 7. All extreme heat/heat events recorded by the NCEI, 1996-March 2017

Location or County	Date	Type	Deaths	Injuries	Property Damage
Steele (Zone)	7/21/2016	Excessive Heat	0	0	0
Steele (Zone)	8/25/2013	Excessive Heat	0	0	0
Steele (Zone)	7/18/2011	Excessive Heat	0	0	0
Steele (Zone)	7/30/2006	Heat	0	0	0
Steele (Zone)	8/4/2001	Heat	0	0	0
Steele (Zone)	8/1/2001	Heat	0	0	0
Steele (Zone)	7/30/2001	Heat	0	0	0
Steele (Zone)	7/29/1999	Heat	0	0	0
Steele (Zone)	7/23/1999	Heat	0	0	0
Highest Value Property Damage					0

Table C - 8. All lightning events recorded by the NCEI, 1996-March 2017

Location or County	Date	Deaths	Injuries	Property Damage
Havana	6/6/2006	0	0	\$1,000,000
Highest Value Property Damage				\$1,000,000

Appendix D

Adopting Resolutions

Resolutions to be added to Appendix D by Steele County following final approval of plan by FEMA.

Appendix E

Steering Committee Meetings

Minnesota 10-County Multi-Hazard Mitigation Update Project Kick-off Orientation Webinar

UNIVERSITY OF MINNESOTA GEOSPATIAL ANALYSIS CENTER

SWENSON COLLEGE
OF SCIENCE & ENGINEERING
UNIVERSITY OF MINNESOTA DULUTH
Driven to Discover

Webinar Purpose & Goals

Purpose:

The purpose of this webinar is provide an orientation kick-off meeting for the Emergency Managers participating in the Minnesota 10-County Multi-Hazard Mitigation Plan Update project.

Goals:

- Introduce the UMD Team and County contacts.
- Provide an overview of the project.
- Clarify roles and responsibilities.
- Outline the planning process, discuss key tasks and timelines.
- Discuss next steps and answer your questions.

Introductions

Who We Are (UMD Project Team)



Stacey Stark, Director, Geospatial Analysis Center (GAC)



Micaella Penning, Research Associate, GIS Specialist, Cartographer, and Editor (GAC)



Steve Graham, Research Associate and Flood Modeling Specialist (GAC)



Bonnie Hundrieser, Emergency Management Planning Consultant (Hundrieser Consulting LLC)

Who You Are (County Emergency Managers):

*Name, Title, and County

*Past Experience with MHMP?

Minnesota HSEM:

Jennifer Nelson, MN HSEM
State Hazard Mitigation Officer

Project Overview

➤ 10 Counties

Jurisdiction	FEMA's Expiration Date
Becker	2/18/2017
Crow Wing	8/25/2016
Faribault	5/20/2013
Freeborn	5/18/2015
Grant	5/18/2015
Hubbard	3/23/2016
Olmsted	5/18/2015
Steele	12/5/2016
Wabasha	8/31/2015
Wilkin	8/30/2016





Why UMD-GAC?

➤ Proven experience

GAC has extensive experience in the comprehensive review and update of county MHMPs, as well as update of the State MHMP.

➤ Advanced Capabilities

GAC has expertise in the application of GIS, HAZUS, and research to support MHMP development and meeting all FEMA requirements.

➤ Ability to Expedite

GAC has the ability to expedite the MHMP update process for multiple counties through a consistent approach and format, which also supports State and FEMA review of draft plans.

➤ Planning Team

GAC project team includes working with advanced GIS students and experienced consultants to effectively complete tasks.

EM Roles & Responsibilities

➤ Act as main Point of Contact.

➤ Coordinate communication and outreach to engage local planning team, additional key stakeholders, and the public.

➤ Review past mitigation actions and provide status update.

➤ Provide information for Capabilities Assessment (Plans & Programs in Place / Program Gaps or Deficiencies) for each hazard.

➤ Assist in development of new mitigation action chart (must be county and jurisdictionally specific) that includes projects for HMA eligibility.

➤ Provide information for Critical Facilities forms.

➤ Provide coordination with GIS and assessor's data managers in order to obtain GIS and parcel information for GIS analyses.

➤ Assist in timely review of material throughout the plan update process via phone, email, and in-person meetings.

➤ Track required local match and submit to HSEM.

MHMP Updates & Crosswalk Requirements

Key Considerations for Discussion

HM Plan Contents

➤ Hazard Mitigation Planning overview and process

➤ County physical and social profile

➤ Asset Inventory

➤ Hazard Profiles

➤ Hazard Assessment and Vulnerability Analysis

➤ Mitigation Actions and Strategy

➤ Plan Maintenance

Planning Process

Each Emergency Manager will play a critical role in identification and engagement of a planning team and the public throughout the update process. The MHMP must document who was involved & how, and include representation from the county, each jurisdiction, neighboring communities, local and regional agencies.

Key Considerations for MHMP Updates:

- What tools do you use to communicate? (i.e., Facebook, email, etc.)
- What standing events or committees might you use in this process? (local emergency preparedness committees, County/City board meetings, county fair, etc.)
- How do you plan to address:
 - ☐ Jurisdictional Engagement
 - ☐ Stakeholder Engagement (who are they?)
 - ☐ Public Engagement

Hazard Identification and Risk Assessment

All plans will address the **natural hazards** identified to pose risk to the county and its jurisdictions. Non-natural hazards (technological and human-caused) will not be included in the risk and vulnerability assessment and development of mitigation strategies and actions.

Key Considerations for MHMP Updates:

- Identify specific impacts and vulnerabilities (at the county/jurisdiction level) due to natural hazards.
- Identify if and how any priorities changed since the last plan (i.e., financial, legal, political realities, and post-disaster conditions).
- Identify existing development or future development that may increase or decrease the community's vulnerability to natural hazard events.

Mitigation Strategy

Key activities to support the update of the Mitigation Strategy will include a capabilities assessment for mitigating against natural hazards, as well as a comprehensive review of the status of mitigation strategies and actions in the previously approved plan.

Key Considerations for MHMP Updates:

- Plans and Programs in Place that support mitigation.
- Program Gaps or Deficiencies that hinder mitigation.
- Identification of projects that may be eligible for HMA funding.
- Inclusion of other eligible agency or organizational stakeholders in development & implementation of mitigation actions (i.e., Public Utilities, MN DNR, School Districts, Boy Scouts of America).

Plan Adoption

After FEMA has provided "APA" status (Approval Pending Adoption), the county and all participating jurisdictions must formally adopt the plan.

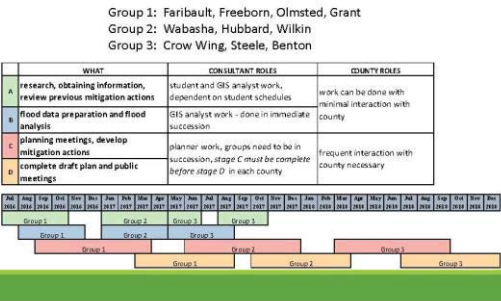
Key Considerations for MHMP Updates:

- This step is often a difficult challenge for Emergency Managers after the plan is completed, and can bog down the process of final plan adoption and thus eligibility for applying for FEMA HMA funding.
- Are there communication measures to be used during the planning process to minimize this issue? What steps do you think can be taken to make this process easier for your current plan update?

Project Timeline

- 36 - Month timeline
- Staggering of Counties will be required to complete UMD's update of risk assessments, research of hazard histories, etc. for each county.
- All county Emergency Managers will be provided with resources to work on independently. Customized worksheets and technical assistance will be provided to you to facilitate the process.
 - Capabilities Assessment by each Natural Hazard
 - Status Update on Prior Mitigation Actions
 - Compilation of Critical & Essential Facilities in each jurisdiction

Estimated Time-line



Questions?

What questions do you have for UMD or HSEM about the MHMP Update process?

Contact Information

Stacey Stark, MS, GISP
Geospatial Analysis Center
slstark@d.umn.edu
218-726-7438

Steele County Multi-Hazard Mitigation Plan Update

March 15, 2017 MHMP Planning Team Meeting
Steele County Administrative Building, Owatonna, MN
6:00 p.m. – 8:00 p.m.



Meeting Summary:

On Wednesday, March 15, 2017, key county, city, and township representatives, as well as other stakeholders were convened to participate in a Planning Team Meeting for the update of the Steele County Multi-Hazard Mitigation Plan (MHMP). The meeting was facilitated by the University of Minnesota – Duluth Geospatial Analysis Center (GAC) staff and Bonnie Hundrieser who are leading the update of the Hubbard County MHMP. A total of 25 people attended the meeting.

The opening presentation covered:

- The purpose of hazard mitigation planning.
- The role & responsibilities of the Planning Team.
- An overview of content in the MHMP (County physical & social profile, Asset Inventory, Hazard Assessment and Vulnerability Analysis, Capability Assessment and Mitigation Actions).
- Group review and discussion of hazard rankings for Steele County. (*Erosion was moved from moderate to high. Other natural hazards remained ranked as presented*).
- A review of mitigation strategies and considerations for developing local mitigation actions.
- An overview of the FEMA Hazard Mitigation Assistance (HMA) Grants program.

Following the presentation a facilitated Mitigation Action Working Session was held. Participants discussed the natural hazards of concern to their communities and filled out Mitigation Action Worksheets to identify new, jurisdictionally-specific mitigation actions to be included in the MHMP plan update. Mitigation actions were required to fall within one of the 5 mitigation action strategies:

1. Local Planning and Regulations
2. Structure and Infrastructure Projects
3. Natural Systems Protection
4. Education and Awareness Programs
5. Mitigation Preparedness and Response Support

Following the Mitigation Action Working Session, the group then discussed the upcoming process and anticipated timeline for engaging the public and other key stakeholders in an open plan review period and public meetings. Meeting attendees were told that they would be contacted for additional information as needed and kept informed on the upcoming steps in the planning process, including opportunities for draft plan review and final selection of mitigation actions for inclusion in the plan.

Attached to this meeting summary are the following documentation items:

- Steele County MHMP Meeting Email Invite
- 3-15-17 Meeting Agenda
- 3-15-17 Meeting Sign-in Sheets
- 3-15-17 Power Point Presentation Slides
- 3-15-17 Meeting Handouts (Mitigation Strategies & Mitigation Ideas Worksheet)
- 3-15-17 Mitigation Ideas Working Session notes

Meeting Summary Prepared By: Bonnie Hundrieser, UMD Project Team, (Hundrieser Consulting LLC)

From: Mike J. Johnson
To: [Commissioners; Emergency Management Dept; GIS Dept; Schrodt, Steve; Benson, Anita; Flyebak, Laura; Golberg, Scott; Andy Welti Medford City Administrator; Michael G. Jones \(CBP@SMIG.NED\); Jake Peterson \(bpod7605@smig.net\); Fire Department \(bpfd@smig.net\); Rick Hager \(mfd@medfordminnesota.com\); Mark Lee \(alshodyshop.ellendale@gmail.com\); Jerry Thiberson \(jerold222@yahoo.com\); Mark Fritsch \(fritschm@owatonnautilities.com\); Kim Huxford; Ron Johnson \(johnsonr@owatonnautilities.com\); Troy D. Klecker; Greg W. Kruschke; Kristen A. Kopp; Kris M. Busse; James P. Ebeling; Rick H. Smith; Kyle A. Skov; Elliot P. Keyes; Chris Gannon; Tom Kamauskas \(Tom.Kamauskas@pearson.com\); Bonnie Hundrieser \(hundrieserconsulting@gmail.com\); Brad Meier; rice.lake.statepark@state.mn.us; All City Council](#)
Subject: Steele County Multi-Hazard Mitigation Plan Meeting Invitation
Date: Thursday, February 16, 2017 11:14:08 AM
Attachments: image003.png

Greetings,

Your presence is requested at a Planning Team meeting for the update of the **Steele County Multi-Hazard Mitigation Plan** on:

Date: [Wednesday, March 15th, 2017](#)
Time: [6:00 p.m. – 8:00 p.m.](#)
Location: [Steele County Administrative Building – County Board Room \(638 Florence Ave., Owatonna, MN 55060\)](#)

The update of the County's hazard mitigation plan is a requirement by the State of Minnesota Department of Homeland Security & Emergency Management (HSEM) as well as the Federal Emergency Management Agency (FEMA) every 5 years. Our last 2011 plan is due for an update and our planning is currently underway. The plan addresses the natural hazards that face Steele County and will result in mitigation actions for implementation that will reduce or eliminate loss of life or damage to property as a result of natural hazard events. Your input is needed as being part of a County department or city jurisdiction within the county. Additional key stakeholders have also been invited.

Your participation in this hazard mitigation plan is important for several reasons:

1. You will have input on projects we can implement at the county and local level that will help to eliminate or reduce the impacts of future natural disaster events.
2. Participating cities and the County may be eligible to apply for significant federal mitigation funding from FEMA to implement specific projects that meet eligibility requirements.
3. Mitigation planning is a fundamental element in emergency management and local planning that we all must address to keep our communities safe and resilient.
4. FEMA and the State of Minnesota require that local jurisdictions participate in the planning process. Your participation is important so that the County can ensure that we meet this requirement.

During this 2 hour meeting we will discuss the natural hazards that face our county, discuss mitigation actions to include in the plan, and the funding that is available from FEMA for eligible mitigation projects. The meeting will be facilitated by the University of Minnesota – Duluth Geospatial Analysis Center and Bonnie Hundrieser, an emergency management planning consultant working closely with us on this project.

We request that you RSVP to this invitation by February 28th. If you cannot attend, we do ask that you seek to send someone in your stead to represent your county department/city jurisdiction/or other organization.

If you have any questions, please do not hesitate to contact me.

Thank you,
Mike Johnson
Emergency Management Director

"Knowing what to do before, during and after an emergency is a critical part of being prepared and may make all the difference when seconds count."



Mike Johnson

Emergency Management Director, Steele County
107 W. Main Street
Owatonna, MN 55060
(507-444-2454 | Fax 507-444-2457

<http://www.steelecountyemergency.com/> <https://www.facebook.com/SCEmergencyManagement>

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Steele County

Multi-Hazard Mitigation Plan Update

Planning Team Meeting

Wednesday, March 15, 2017, 6:00 p.m. – 8:00 p.m.
Steele County Administrative Building – Owatonna, MN

Presenting:

- Micaella Penning, University of Minnesota –Duluth, Geospatial Analysis Center
- Bonnie Hundrieser, Hundrieser Consulting LLC (UMD MHMP Project Team)

Agenda:

1. Welcome and Introductions
2. Steele County MHMP Plan Update
 - *About the Plan*
 - *Planning Team*
 - *Plan Content*
3. Review of Mitigation Strategies and Developing Mitigation Actions
4. Hazard Mitigation Assistance (HMA) Grants
5. Mitigation Action Working Session

Contact:

For more information on the Steele County MHMP Update, please contact:

- Mike Johnson, Steele County Emergency Management Director
507-444-2454 / Mike.Johnson@ci.owatonna.mn.us
- Bonnie Hundrieser, UMD Project Team Member
218-343-3468 / hundrieserconsulting@gmail.com

Steele County 3/15/17 Planning Team Meeting
Participant Sign-in List (25 attendees)

Steele County MHMP Update Wednesday, March 15, 2017 Planning Team Meeting - 6pm-8pm Participant Sign-in List				
Last Name	First Name	Jurisdiction/Agency/Organization	Title	Email
Abbe	Jim	Steele County	Commissioner	jim.abbe@co.steele.mn.us
Benson	Anita	Steele County	County Engineer	anitaengineer2@gmail.com
Brady	James	Steele County	Commissioner	jim.brady@live.com
Busse	Kris	City of Owatonna	Administrator	kris.busse@ci.owatonna.mn.us
Elvebak	Laura	Steele County	Administrator	laura.elvebak@co.steele.mn.us
Flatgaard	Nick	Steele County GIS	GIS Coordinator	gisdept@co.steele.mn.us
Fountain	Karen	Steele County Public Health	Emergency Preparedness	karen.fountain@co.steele.mn.us
Gniemi	Rick	Steele County	Commissioner	n/a
Hardee - Hagen	Sandee	Steele County CAER	Board Member	hardyhagen@hotmail.com
Holberg	Lee Ann	City of Ellendale	City Council	cityofellendale@frontiernet.net
Iberson	Jerry	City of Ellendale	Emergency Management	jerold222@yahoo.com
Johnson	Iris	Steele County CAER	Board Member	iris1@hotmail.com
Johnson	Mike	Steele County	Emergency Management	mike.johnson@ci.owatonna.mn.us
Johnson	Ronnie	Owatonna Public Utilities	Director of Engineering	johnsonr@owatonnautilities.com
Karnauskas	Tom	Steele County CAER	President	Tom.Karnauskas@pearson.com
King	Jonathan	Allina Hospital	Safety & Security	Jonathan.King@allina.com
Klecker	Troy	City of Owatonna	Community Development Director	troy.klecker@ci.owatonna.mn.us
Krueger	Greg	Steele County	Commissioner	Greg.Krueger@co.steele.mn.us
Neubauer	Alec	Steele County CAER	Board Member	cap.spazzz@gmail.com
Okerberg	Jeff	City of Owatonna	City Council	Okerberg@charter.net
Pekuri	Bill	City of Owatonna	Assistant Engineer	William.Pekuri@ci.owatonna.mn.us
Smith	Rick	City of Owatonna	Park and Recreation	rick.smith@ci.owatonna.mn.us
Voss	Doug	City of Owatonna	City Council	ddyoss@charter.net
Welti	Andy	City of Medford	Administrator	medford@medfordminnesota.com
Whittaker	Karen	Rice / Steele 911 Center	Operations Manager	kwhittaker@rsc-psap.org

Steele County – Multi Hazard Mitigation Plan Update
Planning Team Meeting #1 – Wednesday, March 15, 2017 – 6pm-8pm

PARTICIPANT SIGN IN SHEET

Name	Agency/Organization	Title	Email
1. Laura Elvback	Steele County	Administrator	laura.elvback@co.steele.mn.us
2. Greg Krueger	Steele County	Commissioner	Greg.Krueger@co.steele.mn.us
3. James Brady	Steele County	Commissioner	James.Brady@live.com
4. Tom Karavanski	SCM	RACES OFFICER	Tom.Karavanski@peoples.com
5. Iris Johnson	Red Cross	DAT Leader	irisj@hotmail.com
6. Anita Benson	Steele Co.	DPW/Engineer	aniteengineer2@gmail.com
7. Jim Abbe	Steele Co.	Commissioner	Jim.Abbe@co.steele.mn.us
8. Bill Pekuri	City of Owatonna	Assistant Engineer	William.Pekuri@ci.owatonna.mn.us
9. Lee Ann Holber	City of Ellendale	City Clerk	cityofellendale@frontiernet.net
10. Sandra Fournier	City of Ellendale	Technician	hardy@agn@bottmail.com
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19. Troy Klecker	City of Owatonna	Com. Dev. Director	troy.klecker@ci.owatonna.mn.us

Name	Agency/Organization	Title	Email
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21. Nick Platberg	Steele Co	GIS Coordinator	gisdept@co.steele.mn.us
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23. Jonathan King	Alameda Health - Custodian	Safety Supervisor	Jonathan.King@allum.com
24. Karen Whitaker	Vice Steele 911	Operations Manager	Kwhitaker@vsc-psp.org
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4/6/2017

Steele County Multi-Hazard Mitigation Plan Update

March 15, 2017 Planning Meeting



Flooding at Lake Kohlmeier, June 2014

Agenda

1. Welcome and Introductions
2. MHMP Plan Update Overview
 - About the Plan
 - Planning Team
 - Plan Content
3. Review of Mitigation Strategies and Developing Mitigation Actions
4. Hazard Mitigation Assistance (HMA) Grants
5. Mitigation Action Working Session

About your UMD Project Team

SWENSON COLLEGE
OF SCIENCE & ENGINEERING
UNIVERSITY OF MINNESOTA DULUTH
Driven to Discover

- The **Geospatial Analysis Center (GAC) at the University of Minnesota Duluth** was contracted by Minnesota HSEM to facilitate the development of this plan and to conduct spatial analysis, mapping and research for the plan.
- The GAC has worked on 13 MHMP's (2011-2016) and is currently working on 10 county MHMP updates in Minnesota.
- Working with the GAC is **Bonnie Hundrieser**, who specializes in Emergency Management planning.

About the Plan

The Multi-Hazard Mitigation Plan (MHMP) is a requirement of the Federal Disaster Mitigation Act of 2000 (DMA 2000). **The development of a local government plan is required in order to maintain eligibility for certain federal disaster assistance and hazard mitigation funding programs.**

MHMP's must:

- Be updated every 5 years
- Identify hazards and conduct a risk assessment
- Include goals, strategies, and mitigation actions
- Address all jurisdictions (county/cities)
- Engage stakeholder and include public participation

What is Hazard Mitigation?

- HM is **sustained action** to reduce or eliminate long-term risk to people and their property from hazards.
- HM Planning is the process local government use to **identify risks and vulnerabilities** associated with natural disasters, and **develop long-term strategies for protecting people and property from future hazard events.**
- HM planning allows communities to strategically plan for and **work together** to implement activities that are cost effective, technically feasible and environmentally sound **BEFORE** a disaster strikes.
- A dollar spent on mitigation grants leads to an average of \$3.65 in avoided post-disaster relief costs and increased federal tax revenues.

The MHMP Planning Team

An MHMP **must** be developed with the participation of jurisdictional (county/city) representatives and other key stakeholders. This group is referred to as the "Planning Team".

The role of the Planning Team is to help:

1. Rank hazards, prioritize mitigation strategies and identify specific projects for implementation.
2. Assist with public outreach and participate in public meetings.
3. Review the draft plan and provide feedback.
4. Facilitate final adoption of the MHMP by local government.

4/6/2017

Content of the MHMP

- County physical and social profile
- Asset Inventory
- Hazard Assessment and Vulnerability Analysis
- Capability Assessment
- Mitigation Actions

Steele County

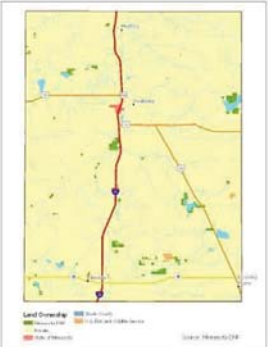
This is a multi-jurisdictional plan that covers Steele County, including the cities of Blooming Prairie, Ellendale, Medford, and Owatonna.

The County and Cities are required to adopt the final plan. Townships are covered under the umbrella of the County.

Steele County, 2010 pop.



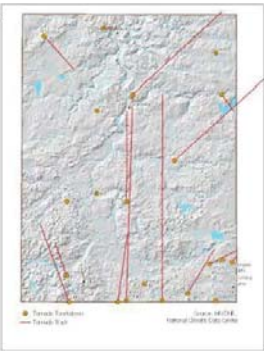
Land Ownership by Agency



Land Cover



Tornado History

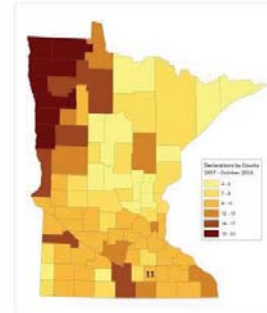


4/6/2017

Steele County Hazard History



FEMA-Declared Disasters in Steele County



What Hazards are Addressed?

A Multi-Hazard Mitigation Plan looks primarily at natural disasters, including:

Flooding	Hail	Drought
Dam/Levee Failure	Lightning	Extreme Heat
Wildfire	Winter Storms	Extreme Cold
Windstorms	Erosion	Earthquakes
Tornadoes	Land Subsidence (Sinkholes & Karst)	

Hazard Categories from the Minnesota State Plan

Manmade hazards are not required by the DMA 2000 to be addressed in the MHMP.

How are Hazards Identified & Ranked for a Community?

- Previous Hazard Events
- Historical Data (National Climatic Data Center)
- Previous MHMP's
- Calculated Priority Risk Index (CPRI)

CPRI Risk Factors
 PROBABILITY
 MAGNITUDE/SEVERITY
 WARNING TIME
 DURATION

CPRI Assessment for Hazard Risk Ranking

Priorities of Risks Faced by Steele County (2017)

The following hazards rankings for Steele County are based on the on the past MHMP and THIRA.

They are provided for discussion for inclusion in the 2017 MHMP Update.

Type	Risk Severity
Severe Summer Storms (thunderstorms, lightning, hailstorms, windstorms, tornadoes)	High
Severe Winter Storms (blizzards, ice, heavy snow)	High
Flash Flood & Riverine Flood	High
Extreme Heat & Extreme Cold	Moderate
Wildfire	Low
Drought	Low
Erosion / Land Subsidence (sinkholes & karst)	Moderate
Dam Failure	Low

Review of Mitigation Capabilities

Multi-Hazard Mitigation Plans require that each jurisdiction **must** document the existing authorities, policies, programs, and resources in place for mitigation.

- What **plans and programs** are in place to support mitigation against that hazard?
- What **program gaps or deficiencies** exist to support mitigation against that hazard?

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Mitigation Strategy #1: **Local Planning and Regulations**

Government, administrative, or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses.

Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and stormwater management regulations.

Local Planning & Regulations Examples



Acquisition of Flood Prone Properties and Conversion to Open Space



Acquisition of flood prone properties in Moorhead, MN (before)



Acquisition of flood prone properties in Moorhead, MN (after)



Mitigation Strategy #2: **Structure and Infrastructure Projects**

Actions that involve the construction of structures to reduce the impact of a hazard, such as dams, levees, floodwalls, seawalls, retaining walls, and safe rooms; and actions that involve the modification of existing buildings or structures to protect them from a hazard or remove them from the hazard area.

Examples include acquisition, elevation, structural retrofits, storm shutters, and shutter-resistant glass. Climate Resilient Mitigation Actions include flood diversion and storage and green infrastructure. This mitigation strategy includes road/bridge/culvert projects for local flood mitigation.

4/6/2017

Community Safe Rooms
Wadena-Deer Creek School, June 17 2010



August, 2012 – 1st school based
tornado safe room (Wadena)



Inver Grove Heights, MN
Green Infrastructure Projects



Power Line retrofit/burial



Mitigation Strategy #3: **Natural Systems Protection**

Actions that, in addition to minimizing hazard losses, preserve or restore the functions of natural systems.

These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, aquifer storage and recovery and floodplain and stream restoration.

Natural Systems Protection
examples



4/6/2017

Mitigation Strategy #4: **Education and Awareness Programs**

Actions to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them.

Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.

Education & Awareness Program Examples



Mitigation Strategy #5: **Mitigation Preparedness & Response Support**

(HSEM added strategy for use in the state)

Actions that protect people and property prior to, during and immediately after a disaster or hazard event. Services include warning systems and emergency response services.

These activities are not typically considered mitigation, but support reduction of the effects of damaging events.

Mitigation Preparedness & Response Support examples



Mitigation Actions Update

So far, the following has been completed in the review of mitigation actions in the last MHMP:

1. What mitigation actions **have been completed** since the last plan was adopted.
2. What mitigation actions **should be deleted**.
3. What mitigation actions **have not been completed** or may be an on-going action to roll-over into the new plan.

Next Steps in Developing Actions

1. Identify specific mitigation strategies and actions at the jurisdictional level based on the community's risk and vulnerabilities.
2. Consider priority, timeframe, who's responsible, and what is in place to support implementation.
3. Consider potential funding and cost/benefit.
4. Engage key partners and stakeholders in providing local expertise and feedback.
5. Provide opportunities for public involvement and feedback in the planning process.

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FEMA's Hazard Mitigation Assistance (HMA) Grant Program

The Federal Emergency Management Agency (FEMA) provides grant funding to help communities to implement eligible mitigation projects that will help to reduce or eliminate the impact of future hazard or disaster events.



Not all mitigation actions are eligible for federal HMA funding. Identification of eligible projects for potential HMA funding is a critical part of the MHMP planning process!

Mitigation Grant Eligibility

- Local Units of Government
- All jurisdictions in State
 - City, County, Tribal, private non-profit
- Cost Share - 75%/25%
- **Project must be identified in local HM plan**

Application Process

- Notice of Available Funds
- Application
- Benefit Cost Analysis
- Environmental Historic Preservation
- State and FEMA review
- Award ~ 3 year period of performance
- Closeout

Eligible project types

- **Acquisition/Elevation/Relocation**
 - Substantially or repetitively damaged (flood or erosion)
 - Threat of imminent danger (slope failure)
- **Tornado Safe Rooms** (severe storms/tornadoes)
- **Powerline retrofit/strengthening** (severe storms/ice)
- **Wildfire sprinklers/defensible space/resistant materials**
- **Slope stabilization**
- **Flood risk reduction activities**

New! Climate Resilient Mitigation Actions (CRMA)

FEMA encourages communities to incorporate **climate resilience** in all mitigation actions through use of **green infrastructure methods** and designing projects to increase **ecosystem service benefits**

1. Aquifer Storage and Recovery (ASR)
2. Floodwater Diversion, Storage, and Recovery
3. Floodplain and Stream Restoration

Mitigation Strategies

For every community, there are a range of mitigation actions that can be taken to work to reduce or eliminate the impacts of future natural hazard and disaster events. Following are the four types of mitigation strategies recommended by the Federal Emergency Management Agency (FEMA) for the organization of mitigation actions:

- 1) **Local Planning and Regulations:** Government, administrative, or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and stormwater management regulations.
- 2) **Structure and Infrastructure Projects:** Actions that involve the construction of structures to reduce the impact of a hazard, such as dams, levees, floodwalls, seawalls, retaining walls, and safe rooms; and actions that involve the modification of existing buildings or structures to protect them from a hazard or remove them from the hazard area. Examples include acquisition, elevation, structural retrofits, storm shutters, and shatter-resistant glass. CRMA include flood diversion and storage (FDS) and green infrastructure.
- 3) **Natural Systems Protection:** Actions that, in addition to minimizing hazard losses, preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation. Aquifer storage and recovery (ASR) and floodplain and stream restoration (FSR).
- 4) **Education and Awareness Programs:** Actions to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.

A fifth strategy was added by Minnesota HSEM for use in the state:

- 5) **Mitigation Preparedness and Response Support:** Actions that protect people and property prior to, during and immediately after a disaster or hazard event. Services include warning systems and emergency response services.. These activities are typically not considered mitigation, but support reduction of the effects of damaging events.

MITIGATION ACTIONS WORKSHEET

HAZARD: _____ / JURISDICTION: _____

Mitigation Strategy:

- | | |
|--|---|
| <input type="checkbox"/> Local Planning & Regulations | <input type="checkbox"/> Education and Awareness |
| <input type="checkbox"/> Structure and Infrastructure Projects | <input type="checkbox"/> Mitigation Preparedness and Response Support |
| <input type="checkbox"/> Natural Systems Protection | |

Mitigation Action:

HAZARD: _____ / JURISDICTION: _____

Mitigation Strategy:

- | | |
|--|---|
| <input type="checkbox"/> Local Planning & Regulations | <input type="checkbox"/> Education and Awareness |
| <input type="checkbox"/> Structure and Infrastructure Projects | <input type="checkbox"/> Mitigation Preparedness and Response Support |
| <input type="checkbox"/> Natural Systems Protection | |

Mitigation Action:

HAZARD: _____ / JURISDICTION: _____

Mitigation Strategy:

- | | |
|--|---|
| <input type="checkbox"/> Local Planning & Regulations | <input type="checkbox"/> Education and Awareness |
| <input type="checkbox"/> Structure and Infrastructure Projects | <input type="checkbox"/> Mitigation Preparedness and Response Support |
| <input type="checkbox"/> Natural Systems Protection | |

Mitigation Action:

HAZARD: _____ / JURISDICTION: _____

Mitigation Strategy:

- | | |
|--|---|
| <input type="checkbox"/> Local Planning & Regulations | <input type="checkbox"/> Education and Awareness |
| <input type="checkbox"/> Structure and Infrastructure Projects | <input type="checkbox"/> Mitigation Preparedness and Response Support |
| <input type="checkbox"/> Natural Systems Protection | |

Mitigation Action:

HAZARD: _____ / JURISDICTION: _____

Mitigation Strategy:

- | | |
|--|---|
| <input type="checkbox"/> Local Planning & Regulations | <input type="checkbox"/> Education and Awareness |
| <input type="checkbox"/> Structure and Infrastructure Projects | <input type="checkbox"/> Mitigation Preparedness and Response Support |
| <input type="checkbox"/> Natural Systems Protection | |

Mitigation Action:

HAZARD: _____ / JURISDICTION: _____

Mitigation Strategy:

- | | |
|--|---|
| <input type="checkbox"/> Local Planning & Regulations | <input type="checkbox"/> Education and Awareness |
| <input type="checkbox"/> Structure and Infrastructure Projects | <input type="checkbox"/> Mitigation Preparedness and Response Support |
| <input type="checkbox"/> Natural Systems Protection | |

Mitigation Action:

Steele County
3-15-17 MHMP Planning Meeting
Mitigation Ideas Worksheet Notes

Following are notes from the Steele County 3-15-17 MHMP Planning Team Meeting “Mitigation Action Working Session” part of the meeting. Participants broke into discussion groups and used Mitigation Action Worksheets to brainstorm new mitigation ideas for their jurisdiction.

Participants used the worksheets to develop mitigation action ideas, identifying:

- Hazard – what natural hazard does the action focus on?
- Jurisdiction – what jurisdiction is for? (City/Township/County)
- Strategy – which mitigation strategy does this action relate to?
- Action – what is a description of the mitigation action?

The mitigation actions identified during this session will be used to support development of new mitigation actions to include in the Steele County MHMP Update.

Steele County

Contact: Laura Elvebak, Steele County Administrator

Hazard: Severe Winter & Summer Storms (Generation of County Admin Building)
Strategy: Mitigation Preparedness & Response Support
Action: Provide for generation of the Admin building which serves as a hub for County operations. (IT, Treasurer, Board of Commissioners, P&Z, Assessors, etc.) In the event of a disaster, the Admin Center is a local site which is identifiable within the community.

Hazard: Severe Winter & Summer Storms (Battery Backup of Traffic Lights)
Strategy: Mitigation Preparedness & Response Support
Action: Get battery backup to stop lights for power outages and raise the control panels above flood-level.

Hazard: Flood (SMC Berm)
Strategy: Natural Systems Protection
Action: Reinforce engineer at local gravel pit which was compromised during the last flood.

Steele County

Contact: (not listed)

Hazard: Flooding
Strategy: Local Planning & Regulations
Action: Upgrade culvert plan and prioritize most vulnerable areas. Include buffer strips in most vulnerable areas.

Hazard: Flooding
Strategy: Mitigation Preparedness & Response Support

Action: Make sure emergency media outlets stay on the air by protecting tower facilities from flooding, possibly through construction of a berm system.

Steele County

Contact: Jim Abbe, Steele County Commissioner

Hazard: Flooding
 Strategy: Structure and Infrastructure Projects
 Action: Identify areas of concern at areas around bridges, culverts to mitigate erosion and soil stabilization issues.

Hazard: Severe Winter & Summer Storms
 Strategy: Education & Awareness Programs
 Action: Continue to utilize technology to make citizens of Steele County aware of storm threats (we utilize Everbridge) (Ensure residents are signed up for Everbridge and understand why/when it is used).

Hazard: Severe Winter & Summer Storms (Power Outage)
 Strategy: Mitigation Preparedness & Response Support
 Action: County buildings (Admin & SCHA) need to have back up generators in the event of a power outage. Both are critical facilities. Admin building will serve as a command center in the event of a disaster.

Steele County (Public Health)

Contact: Karen Fountaine, Emergency Preparedness Coordinator

Hazard: All-Hazards
 Strategy: Education & Awareness Programs
 Action: Everbridge – educate the public on how & why to sign up for notifications. Use outreach means such as brochures, PSA's (radio), newspaper articles, charter TV interviews to get the word out.

Hazard: All-Hazards
 Strategy: Mitigation Preparedness & Response Support
 Action: Ensure there are multiple ways/methods to communicate information to the public.

Steele County (CAER)

Contact: Iris Johnson, Steele County CAER Board Member & Alec Neubauer, Steele County CAER

Hazard: All-Hazards
 Strategy: Mitigation Preparedness & Response Support
 Action: Educate and spread the word about Everbridge. (Can use CERT to go door-to-door to sign people up on the spot and understand their options). Continue to grow the CERT program. Improve participation at CAER by business and non-profit groups.

Hazard: All-Hazards
 Strategy: Mitigation Preparedness & Response Support
 Action: Purchase more 800 mhz radios for CERT and other groups to use after a disaster.

Hazard: All-Hazards
 Strategy: Education & Awareness Programs
 Action: Provide emergency preparedness presentations to cover information such as developing family emergency plans, develop go-kits, push for Everbridge sign up, etc.

City of Ellendale, MN

Contact: Jerry Iberson, City of Ellendale Emergency Management

Hazard: Severe Summer Storms (Tornado)
 Strategy: Structure and Infrastructure Projects
 Action: We need a community safe room for the city and also for the campground.

Hazard: Severe Winter & Summer Storms (Power Outage)
 Strategy: Mitigation Preparedness & Response Support
 Action: Generator or radio update for ambulance service. Also connect city building to generator.

City of Medford

Contact: Andy Welti, City Administrator

Hazard: Flooding
 Strategy: Structure and Infrastructure Projects
 Action: Relocate park infrastructure. The city's Straight River Park has flooded several times. Picnic tables, electrical infrastructure, wood chips, baseball field, fencing, volleyball court sand & equipment, etc has been damaged or washed away. The City may move the infrastructure to a different location or raise the infrastructure.

Hazard: Flooding
 Strategy: Structure and Infrastructure Projects
 Action: The city's wastewater treatment plan needs pumps and floats installed to pump treated water to the river when the river rises above the discharge pipe, preventing the water from being discharged to the river.

Hazard: Flooding
 Strategy: Structure and Infrastructure Projects
 Action: Stormwater pipes, rip-rap and other infrastructure has been damaged or washed away in past floods. The City may need to engineer solutions to keep the infrastructure in place or relocate the infrastructure.

Hazard: Flooding
 Strategy: Structure and Infrastructure Projects / Natural Systems Protection
 Action: Streambank Stabilization. The riverbank within the City of Medford is eroding. Streambank stabilization must occur to prevent city stormwater infrastructure and private residential properties from falling into the river and washing away.

Hazard: Flooding
 Strategy: Structure and Infrastructure Projects
 Action: Groundwater seeps into the wastewater treatment plant sludge building during floods. The basement of the sludge building becomes flooded and pumps are used to discharge the water. Any engineered solution may be needed to prevent future flooding.

Hazard: Flooding
 Strategy: Structure and Infrastructure Projects
 Action: Buyout of Property. Approximately 6 homes face flooding of basements. Buyout of severely damaged homes should be considered, or installing berms may prevent flooding.

City of Owatonna, MN

Contact: Doug Voss, City Council Member & Jeff Okerberg, City Council Member

Hazard: Flooding
 Strategy: Local Planning & Regulations / Structure and Infrastructure Projects / Natural Systems Protection
 Action: Flooding on Hofeman Drive. Remove buildings and raise ground level. Build berm on east side.

Hazard: Flooding
 Strategy: Natural Systems Protection
 Action: Flooding of Brooktree Golf Course. Build home water retention areas on the golf course. Raise tee boxes and lower areas of the fairways.

Hazard: Flooding
 Strategy: Local Planning & Regulations / Natural Systems Protection
 Action: Continue to purchase homes on the flood plain. Try to work with farmers about drainage from the northeast farm properties draining into the Maple Creek and causing local flooding.

Hazard: Flooding
 Strategy: Local Planning & Regulations/Structure and Infrastructure Projects
 Action: Prioritize and plan for upgrading of bridges and roads.

City of Owatonna, MN

Contact: Kris Busse, City Administrator

Hazard: Flooding
 Strategy: Natural Systems Protection
 Action: Erosion control on Maple Creek, Mineral Springs Park.

Hazard: Severe Winter & Summer Storms (Power Failure)
 Strategy: Mitigation Preparedness & Response Support
 Action: Need larger generator for law enforcement center so we can run the Police/Sheriff department center. Current generator provides coverage for Dispatch only.

Hazard: Flooding
 Strategy: Natural Systems Protection
 Action: Erosion control at Lake Kohlmier. Recent floods have damaged the retaining wall.

City of Owatonna, MN

Contact: Rick Smith, Park Director/Golf

Hazard: Flooding
 Strategy: Natural Systems Protection
 Action: Erosion control along Maple Creek that runs through parks system and golf course.

Hazard: Flooding
 Strategy: Structure and Infrastructure Projects
 Action: Irrigation re-routing through golf course to prevent damage from flooding.

City of Owatonna, MN (Owatonna Public Utilities)

Contact: Ronnie Johnson, Director of Engineering

Hazard: Severe Winter & Summer Storms (Power Lines)
 Strategy: Structure and Infrastructure Projects
 Action: Power line storm strengthening. Convert overhead power lines to underground lines.

Hazard: Flooding
 Strategy: Structure and Infrastructure Projects
 Action: Build berm to divert high water from buildings. Relocate a couple of buildings to higher ground.

City of Owatonna, MN

Contact: (not listed)

Hazard: Flooding
 Strategy: Local Planning & Regulations
 Action: We have homes and businesses within the floodplain that need to be removed and some cases re-developed. Areas include Hoffman Dr., North Oak Ave., North St., Maple Dr., Cherry St., Lemond Road, Riverside Ave, N. Elm, and W. Bridge St.

City of Medford/City of Owatonna

Contact: Sandee Hardee – Hagen, Steele County CAER Board Member

Hazard: All-Hazards
 Strategy: Mitigation Preparedness & Response Support
 Action: Promote, Grow, and Strengthen local CAER: Update with education/classes. Continue to improve manpower. 800 mg. training (and available radios/handsets). Promote Everbridge for all residents. Newsletters. Keep our name/purpose/group current “out there”. Work to promote emergency preparedness for local residents.

City of Ellendale, MN

Contact: Lee Ann Hoiberg, City Clerk

Hazard: Severe Summer Storms (Tornado)
Strategy: Education & Awareness Programs
Action: Need to come up with an education plan to get the information out on what to do when a tornado comes here. How to work with the local assisted living community to get the awareness out to them? They need to have generator to power their elevator in case of loss of power.

**Steele County Multi-Hazard Mitigation Plan Update
MHMP Planning Team Meeting #2
5/10/17, Steele County Administrative Center, 2:00 p.m. – 4:00 p.m.**

Meeting Summary:

On Wednesday, May 10, 2017 members of the Steele County Multi-Hazard Mitigation (MHMP) Planning Team convened to conduct a review and discussion of the draft mitigation action charts developed for Steele County and the city jurisdictions participating in the plan. The meeting was facilitated by Bonnie Hundrieser, a member of the University of Minnesota – Duluth Geospatial Analysis Center (GAC) planning team that is leading the update of the Steele County MHMP. A total of 13 people attended the meeting, representing Steele County departments, city personnel and other key stakeholders.

The opening Power Point presentation covered a re-cap of key points regarding the MHMP plan update (purpose of the plan, who the plan covers, who needs to participate, what hazards are addressed and how they are ranked, mitigation strategies to be used, and what projects may be eligible for FEMA HMA funding). The presentation also provided a detailed breakdown of the Mitigation Action Chart to explain the relevance of each column to be addressed in the chart.

Following the presentation, the planning team participated in a facilitated discussion of the County's draft master Mitigation Action Chart which included mitigation actions for the county as well as for the cities participating in the plan. Mitigation actions included in the chart were identified through the County's review of past mitigation actions (actions to continue), as well as new mitigation actions that were identified during the first planning team meeting "Mitigation Actions Ideas Working Session." County and city representatives discussed each of the mitigation actions, adding comments, corrections, and identifying where cities would be listed to implement particular items in their respective jurisdictions.

Following the Mitigation Action Chart review, the group was informed that they would be emailed drafts of the mitigation action charts for county and city level review and input. The group also discussed the upcoming process of posting the final draft of the plan for the public to review and comment on, and then submission of the draft plan to HSEM and FEMA for final review and approval.

Attached to this meeting summary are the following documentation items:

- Steele County HMP Mtg. #2 Email Invite
- 5-10-17 Meeting Agenda
- 5-10-17 Meeting Sign-in Sheets
- 5-10-17 Power Point Presentation Slides

*Meeting Summary Prepared By:
Bonnie Hundrieser, UMD Project Team, (Hundrieser Consulting LLC)*

From: Bonnie Hundrieser
To: "Mike J. Johnson"; "Commissioners"; "Emergency Management Dept"; "GIS Dept"; "Schroht, Steve"; "Benson, Anita"; "Elvebak, Laura"; "Golberg, Scott"; "Andy Welti Medford City Administrator"; "Michael G. Jones"; "Jake Peterson"; "Fire Department"; "Rick Hager"; "Mark Lee"; "Jerry Ibberson"; "Mark Fritsch"; "Kim Huxford"; "Ron Johnson"; "Troy D. Klacker"; "Greg W. Kruschke"; "Kristen A. Kopp"; "Kris M. Busse"; "James P. Ebeling"; "Rick H. Smith"; "Kyle A. Skov"; "Elliot P. Keyes"; "Chris Gannon"; "Tom Karnauskas"; "Brad Meier"; rice.lake.statepark@state.mn.us; "All City Council"
Cc: andrea.wegener@co.steele.mn.us
Subject: Steele County MHMP Planning Team Meeting #2 Invitation for 5/10/17
Date: Friday, April 28, 2017 2:41:58 PM

(Note: The following meeting invitation is being sent on behalf of Mike Johnson, Steele County Emergency Management Director. Please make your RSVP's directly to me by responding to this email. Thank you! – Bonnie Hundrieser)

Greetings,

Your presence is requested at the **2nd Planning Team meeting** for the update of the **Steele County Multi-Hazard Mitigation Plan** on:

Date: Wednesday, May 10, 2017
Time: 2:00 p.m. – 4:00 p.m.
Location: Steele County Administration Building, County Board Room (630 Florence Ave, Owatonna, MN 55060)

During this meeting we will be reviewing the draft Mitigation Action Chart to be included in the plan. Your feedback will be needed to identify & discuss the mitigation actions that will be listed for your city/county department/agency/or organization. This is a State and Federal requirement we must cover for the plan to be approved. The meeting will be facilitated by Bonnie Hundrieser, an emergency management planning consultant working closely with us on this project.

Please RSVP your attendance to me via reply to this email. If you cannot attend, please seek to send someone else in your stead as your representation at this meeting is important.

If you have any questions, please do not hesitate to contact me.

Thank you,
Mike

"Knowing what to do before, during and after an emergency is a critical part of being prepared. It may make all the difference when seconds count."



Mike Johnson,
Fire Chief, City of Owatonna
107 W. Main Street
Owatonna, MN 55060

O (507)-444-2454 | C (507)-456-0513

<http://fire.ci.owatonna.mn.us/> <https://www.facebook.com/OwatonnaFireDepartment>

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Steele County

Multi-Hazard Mitigation Plan (MHMP) Update

Planning Team Meeting #2

Wednesday, May 10th, 2:00 p.m. - 4:00 p.m.

Steele County Administrative Building – Owatonna, MN

Presenting:

Bonnie Hundrieser, UMD MHMP Project Team Member

Agenda:

1. **Welcome & Introductions**
2. **MHMP - Recap of Key Points**
3. **Mitigation Action Chart (MAC) Presentation**
Explanation of all columns of the MAC and content to be identified.
4. **MAC Working Session: Group Review & Feedback**
Group review and feedback of the Steele County Master Mitigation Action Chart. This will include identification of specific mitigation actions for jurisdictions / review and feedback of jurisdictional MAC's.
5. **Discussion of Next Steps**
 - Completion of all Mitigation Action Charts
 - Planning Team review of draft MHMP
 - Public news release, posting draft MHMP, and public review

Contact:

For more information on the Steele County MHMP Update, please contact:

- Mike Johnson, Steele County Emergency Management Director
507-444-2454 / Mike.Johnson@ci.owatonna.mn.us
- Bonnie Hundrieser, UMD Project Team Member
218-343-3468 / hundrieserconsulting@gmail.com

Steele County 5/10/17 Planning Team Meeting
Participant Sign-in List (13 attendees)

Steele County MHMP Update Planning Team Meeting #2, Wednesday May 10, 2017, 2:00 p.m. - 4:00 p.m. Participant Sign-in List			
Name	Agency/Organization	Title	Email
Rick Gnemi	County Commissioner	Commissioner	rick.gnemi@co.steele.mn.us
Tom Karnauskas	CAER	President	tom.karnauskas@person.com
Lori Read	SWCE	Compliance Coord.	lread@fmcs.coop
Jeff Okerberg	City Council - City of Owatonna	Council Person	N/A
Mike Johnson	Steele County Emergency Management	EM Director	mike.johnson@ci.owatonna.mn.us
Mike Jones	City of Blooming Prairie	City Administrator	CBP@SMIC.net
Jerold Ibberson	City of Ellendale	Emergency Manager	jerold222@yahoo.com
Rick Smith	City of Owatonna	Park Director/Golf	rick.smith@ci.owatonna.mn.us
David Olson	OPU Engineer	Electric Engineer	olsond@owatonnautilities.com
Nick Flatgard	Steele County	GIS Coordinator	gisdept@co.steele.mn.us
Scott Golberg	Steele County Environmental Services	Environmental Director	sgolberg@co.steele.mn.us
Andy Welti	City of Medford	Administrator	medford@medfordminnesota.com
Troy Klecker	City of Owatonna	Comm. Dev. Director	troy.klecker@ci.owatonna.mn.us

Steele County – Multi Hazard Mitigation Plan Update
Planning Team Meeting #2
Wednesday, May 10, 2017, 2:00 p.m. – 4:00 p.m.

PARTICIPANT SIGN IN SHEET

Name	Agency/Organization	Title	Email
1. <i>Ed McLean</i>	<i>County Community Dev</i>	<i>Comptroller</i>	<i>edmc@quincygaia.com</i>
2. <i>Tom Krounskas</i>	<i>Steele Co. Fire</i>	<i>Police Chief</i>	<i>tom.krounskas@steelecountyga.com</i>
3. <i>Jim Head</i>	<i>Steele</i>	<i>Compliance Coord.</i>	<i>head@jims.1000</i>
4. <i>Jeff Osterberg</i>	<i>City Council, City of Steele</i>	<i>Councilperson</i>	
5. <i>Mike Johnson</i>	<i>Steele Co.</i>	<i>EM Director</i>	<i>Mike.Johnson@ci.steelcountyga.us</i>
6. <i>Mike Jones</i>	<i>City of Blooming Trace</i>	<i>City Administrator</i>	<i>CRP@SMIC.NET</i>
7. <i>Gerold Ibberson</i>	<i>City of Ellendale</i>	<i>Emergency Manager</i>	<i>gerold222@yahoo.com</i>
8. <i>Rick Smith</i>	<i>City of Owatonna</i>	<i>Park Director / Golf</i>	<i>rick.smith@ci.owatonna.mn.us</i>
9. <i>DAVID OLSON</i>	<i>OPU ENGINEER</i>	<i>ELECTRIC ENG</i>	<i>olsond@owatonnautilities.com</i>
10. <i>Nick Flutberg</i>	<i>Steele County</i>	<i>GIS Coordinator</i>	<i>gisdept@co.steelcountyga.us</i>
11. <i>Scott Solberg</i>	<i>Steele Co. P.W. Serv.</i>	<i>P.W. Serv. Dir.</i>	<i>solberg@co.steelcountyga.us</i>
12. <i>Andy Cueliti</i>	<i>City of Medford</i>	<i>Administrator</i>	<i>medford@medfordmaine.com</i>
13. <i>Troy Klecker</i>	<i>City of Owatonna</i>	<i>Comm. Dev. Director</i>	<i>troy.klecker@ci.owatonna.mn.us</i>
14.			
15.			
16.			
17.			
18.			

5/2/2017

**Steele County
Multi-Hazard Mitigation Plan Update**
Wednesday, May 10, 2017
Planning Meeting #2: Mitigation Action Chart Review



Flooding at Lake Kohlmeier, June 2014

Agenda

1. Welcome and Introductions
2. MHMP – Recap of Key Points
3. Mitigation Action Chart (MAC) Overview
4. MAC Working Session
5. Overview of Next Steps

MHMP - Recap of Key Points

- Steele County is updating its **Multi-Hazard Mitigation Plan (MHMP)** to fulfill a state & federal requirement. The plan must be updated every 5 years.
- The purpose of the plan is to identify & assess natural hazards that pose risk to the County and it's jurisdictions and **develop long-term strategies and mitigation actions** that will help to reduce or eliminate the impact of future hazard or disaster events.

Who the Plan Covers

This is a multi-jurisdictional plan that covers Steele County, including the cities of Blooming Prairie, Ellendale, Medford, and Owatonna.

*The County and Cities are required to adopt the final plan.
Townships are covered under the umbrella of the County.*

Who Needs to Participate

Participation of **key county/city stakeholders** is **required**:

- County departments
- City Governments
- Townships
- Schools
- Electric Coops

Opportunities for **public participation** is also **required**:

- News Releases
- Facebook, Twitter, Web
- Draft Plan Review
- 2 Public Meetings

What Hazards are Addressed

The MHMP addresses the prioritized natural hazards that pose risk to Steele County.

Steele County Hazard Risk Ranking	
Type	Risk Severity
Severe Summer Storms (Thunderstorms, Lightning, Hailstorms, Windstorms, Tornadoes)	High
Severe Winter Storms (blizzards, hail, heavy snow)	High
Flash Flood & Riverine Flood	High
Extreme Heat & Extreme Cold	Moderate
Wildfire	Low
Drought	Low
Erosion / Land Subsidence (Sinkholes & Karst)	High
Dam Failure	Low

5/2/2017

What Mitigation Strategies Will Be Used to Develop Mitigation Actions

1. Local Planning & Regulations
2. Structure and Infrastructure Projects
3. Natural Systems Protection
4. Education and Awareness Programs
5. Mitigation Preparedness and Response Support

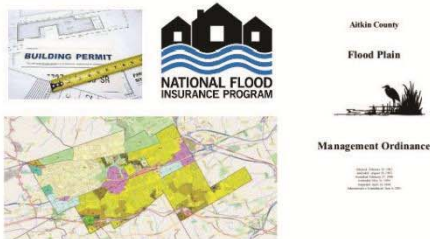
These strategies help communities to identify and implement long-term risk-reduction activities that will protect people and property from future hazard events.

Mitigation Strategy #1: Local Planning and Regulations

Government, administrative, or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses.

Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and stormwater management regulations.

Local Planning & Regulations Examples



Acquisition of Flood Prone Properties and Conversion to Open Space



Mitigation Strategy #2: Structure and Infrastructure Projects

Actions that involve the construction of structures to reduce the impact of a hazard, such as dams, levees, floodwalls, seawalls, retaining walls, and safe rooms; and actions that involve the modification of existing buildings or structures to protect them from a hazard or remove them from the hazard area.

Examples include acquisition, elevation, structural retrofits, storm shutters, and shatter-resistant glass. Climate Resilient Mitigation Actions include flood diversion and storage and green infrastructure. This mitigation strategy includes road/bridge/culvert projects for local flood mitigation.

Community Safe Rooms Wadena-Deer Creek School, June 17 2010



5/2/2017

August, 2012 – 1st school based tornado safe room (Wadena)



Green Infrastructure Projects



Power Line retrofit/burial

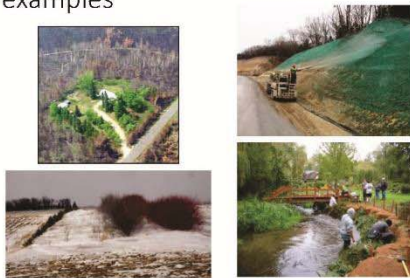


Mitigation Strategy #3: Natural Systems Protection

Actions that, in addition to minimizing hazard losses, preserve or restore the functions of natural systems.

These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, aquifer storage and recovery and floodplain and stream restoration.

Natural Systems Protection examples



Mitigation Strategy #4: Education and Awareness Programs

Actions to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them.

Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.

5/2/2017

Education & Awareness Program Examples



Mitigation Strategy #5: Mitigation Preparedness & Response Support

(HSEM added strategy for use in the state)

Actions that protect people and property prior to, during and immediately after a disaster or hazard event. Services include warning systems and emergency response services.

These activities are not typically considered mitigation, but support reduction of the effects of damaging events.

Mitigation Preparedness & Response Support examples



What Projects May be Eligible for FEMA HMA Funding

- Acquisition/Elevation/Relocation
 - Substantially or repetitively damaged (flood or erosion)
 - Threat of imminent danger (slope failure)
- Safe Room Construction/Retrofit
- Powerline strengthening/burying
- Wildfire Mitigation Activities
- Slope stabilization
- Flood risk reduction activities
- Additional Projects difficult to conduct a standard BCA



The Federal Emergency Management Agency (FEMA) provides grant funding to help communities to implement eligible mitigation projects that will help to reduce or eliminate the impact of future hazard or disaster events.

Projects must be indicated in the local mitigation plan.

Mitigation Action Chart Overview

- The MHMP results in a "Mitigation Action Chart" that outlines the specific mitigation measures that the County and each jurisdiction will seek to implement over the course of the next 5 years.
- Mitigation actions are drawn from the previous plan, identified capability gaps and feedback from jurisdictions on mitigation measures important to their community.
- Every city will have its own separate mitigation action chart. School districts and townships (as a group) may also have separate charts.

"Hazard" column



Hazard	Adopted Mitigation	Adopted Mitigation	Adopted Mitigation	Adopted Mitigation	Adopted Mitigation	Adopted Mitigation	Adopted Mitigation	Adopted Mitigation	Adopted Mitigation	Adopted Mitigation	Adopted Mitigation
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Each mitigation action must address a particular natural hazard.

"All-Hazard" mitigation actions relate to more than one type of natural hazard or may relate to other categories of technological and man-made threats/hazards.

5/2/2017

“Mitigation Strategy” column



#	Hazard	Mitigation Strategy	Mitigation Action	Status	Priority Ranking	Cost Estimate	Jurisdictions	Responsible Agency	Estimated Completion Date for Implementation	Priority Ranking
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Each mitigation action **must** identify which type(s) of mitigation strategies relate to the mitigation measure:

1. Local Planning & Regulations
2. Structure and Infrastructure Projects
3. Natural Systems Protection
4. Education and Awareness Programs
5. Mitigation Preparedness and Response Support

“Mitigation Action” column



#	Hazard	Mitigation Strategy	Mitigation Action	Status	Priority Ranking	Cost Estimate	Jurisdictions	Responsible Agency	Estimated Completion Date for Implementation	Priority Ranking
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Each mitigation action **must** include a description of what effort is to be implemented. Mitigation actions should be written to be clear, concise, and action-oriented (start with a verb). The action should seek help to reduce or eliminate long-term risk to life safety and property damage from future natural hazard events.

“Status” column



#	Hazard	Mitigation Strategy	Mitigation Action	Status	Priority Ranking	Cost Estimate	Jurisdictions	Responsible Agency	Estimated Completion Date for Implementation	Priority Ranking
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Each mitigation action **must** include an indication of current status. They are:

- “In-Progress” – a defined mitigation project or effort that is currently underway.
- “On-going” – a mitigation project or effort that continues without end.
- “New” – a new mitigation project or effort identified to include in the new plan.

“Priority Ranking” column



#	Hazard	Mitigation Strategy	Mitigation Action	Status	Priority Ranking	Cost Estimate	Jurisdictions	Responsible Agency	Estimated Completion Date for Implementation	Priority Ranking
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Each mitigation action **must** be ranked as being of High, Moderate, or Low priority to help provide guidance in implementation. Priority rankings should be based on key considerations, such as:

- Known effectiveness of the mitigation measure.
- Local capability to implement the mitigation measure.
- Cost effectiveness of the mitigation measure. (Benefit vs. Cost)
- Longevity of the mitigation measure.
- Community support for the mitigation measure.
- Eligibility for federal grants (FEMA HMA Grant Program).

“Timeline” column



#	Hazard	Mitigation Strategy	Mitigation Action	Status	Priority Ranking	Cost Estimate	Jurisdictions	Responsible Agency	Estimated Completion Date for Implementation	Priority Ranking
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Each mitigation action **must** indicate a timeframe for implementation.

- For mitigation actions that are “In-Progress” or “New” a known timeframe may be identified (i.e., 2017-2018).
- Some mitigation actions may be identified to be implemented within the 5 year period of the MHMP (2017-2021).

“Jurisdictions” column



#	Hazard	Mitigation Strategy	Mitigation Action	Status	Priority Ranking	Cost Estimate	Jurisdictions	Responsible Agency	Estimated Completion Date for Implementation	Priority Ranking
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Each mitigation action **must** identify what jurisdictions will seek to implement that action.

- Some mitigation actions will be specific to only the County for implementation.
- Other mitigation actions are those that all cities (or only some cities) would agree are important to include in their own jurisdictions.
- Schools and townships may be identified as well.


Important: During the MAC working session you will be asked to indicate where your jurisdiction should be included.

**"Comments on Planning Mechanisms
for Implementation" column**

#	Name of Strategy	Mission or Action	Series	Point of Marketing	Time Frame	Jurisdiction	Responsibility	Priority/Consistent with Planning/Hierarchy, for Implementation	Possible Funding
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Each mitigation action **must** include a description of how the mitigation measure will be incorporated into existing or future planning or project efforts by the jurisdiction provided. For example:

- Reference related plans or programs that relate to the mitigation measure (such as comprehensive land use plans, Capital Improvement Programs, public outreach and education programs)
- Reference existing partnerships that relate to the mitigation measure (such as "This is a standing effort of the County/City emergency management program in partnership with Public Health."

MAC Working Session

- We will go through the Master “MAC” together.
- We will discuss any changes or additions.
- Jurisdictions will confirm where they want to be listed for local implementation efforts.
- Cities without a draft MAC still have the opportunity to identify mitigation measures specific to their community.

Each mitigation action **must** include identification of what possible funding will be used to implement the mitigation action:

- In most cases, "County/City" budget generally implies staff time to work on the mitigation measure or internal funding to purchase equipment, etc.
- When applicable, other funding such as outside grants, state or federal funding that may support the mitigation measure should be identified.
- It is particularly important to identify mitigation measures that may be eligible for FEMA HMA grant funding.

- Draft MACs will be submitted to UMD.
- The draft MHMP will be completed.
- The draft plan will be posted for planning team and public review & comment. (News Release)
- Any resulting revisions will be made, and the plan will be submitted to HSEM and FEMA for review and approval.