

July 11, 2008: EF-3 Tornado Strikes South of Willmar

Event Synopsis

Severe weather plagued a large portion of Minnesota and western Wisconsin once again on the afternoon and evening of July 11th, as a squall line of thunderstorms would form and race across the state. A significantly unstable air mass developed in Minnesota that afternoon, with temperatures in the 90s and dew points in the mid to upper 70s. Several individual supercell-like thunderstorms were the first to develop during the mid to late afternoon in western Minnesota. This is where an EF-3 tornado occurred just south of Willmar in Kandiyohi County. As the rotating storms merged they remained embedded within a squall line, creating wind damage and continuing to pose a tornado threat. Widespread damaging winds were reported through the duration of this event.

Tornado touchdowns were also reported across northwest Minnesota, including in Mahnomon, Polk, Becker, and Otter Tail Counties.



Pictures of the Willmar tornado complements of Benson County Skywarn spotter Joyce Nokleby



Willmar area tornado rated EF-3...

A damage survey team completed its inspection of the tornado damage from the storm south of Willmar, and the tornado was rated as as low end EF-3. An EF-3 tornado correlates with winds of 136 to 165 mph, and this particular tornado is most likely in the range of 136 to 150 mph.

The tornado touched down about 5 to 6 miles southwest of downtown Willmar. The tornado traveled east, crossing Highway 71 near 45th Avenue, or about 2.5 miles south of downtown Willmar. It continued moving eastward along and just north of County Road 19. The most severe damage took place 1.5 miles east of Highway 71 and 1/3 mile north of County Road 19.

The tornado dissipated 4 miles southeast of Willmar, 2.5 miles east of Highway 71 and ½ mile north of County Road 19.

The total path length was 8 miles, and the maximum width was 200 yards.

Two minor injuries occurred at a turkey bard along County Road 19 and just east of Highway 71. There were no fatalities associated with the tornado.



Damage to a turkey barn near the community of Priam, about three miles southwest of Willmar



Convergent corn damage where the tornado tracked in a field south of Willmar



Damage to an outbuilding south of Willmar



Significant tree damage south of Willmar



Projectile damage to a truck south of Willmar



Split level house destroyed by the tornado two and a half miles south southeast of Willmar (EF-3 damage)



Same split-level house destruction

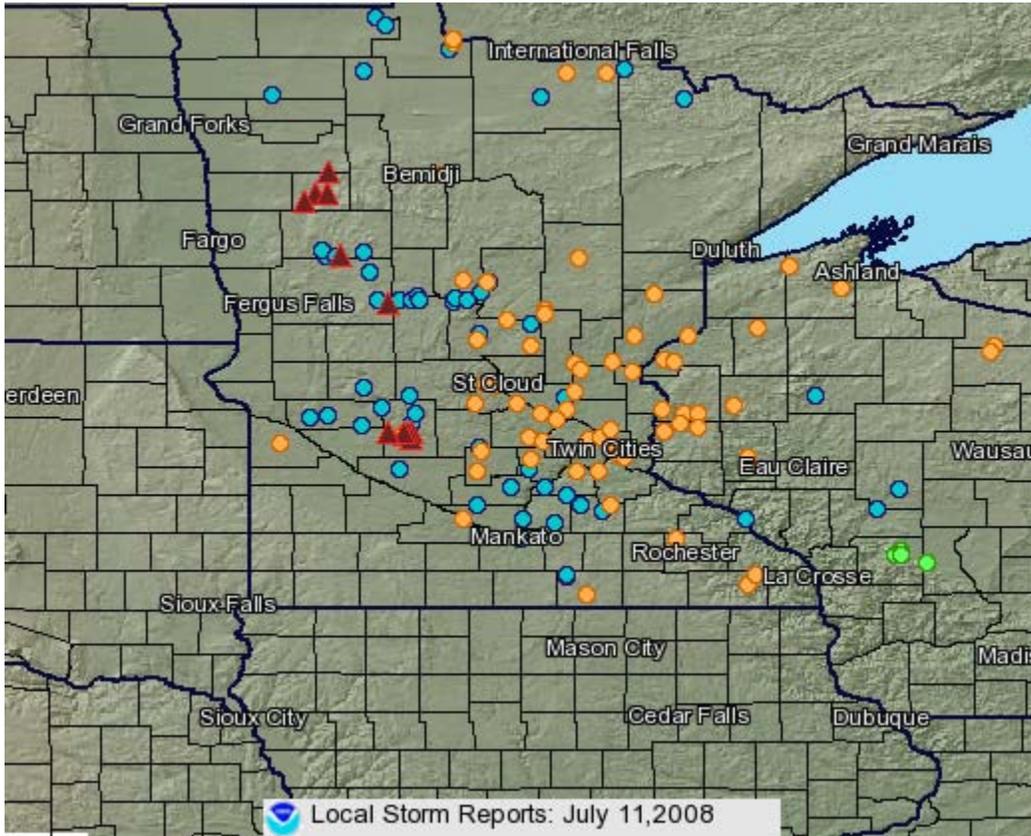


Same split-level house destruction with significant hardwood tree damage in the background



Root bulb of a large uprooted tree with a floorboard projectile in it two miles south southeast of Willmar

Storm Reports



NWUS53 KMPX 130139
LSRMPX

PRELIMINARY LOCAL STORM REPORT...SUMMARY
NATIONAL WEATHER SERVICE TWIN CITIES/CHANHASSEN MN
838 PM CDT SAT JUL 12 2008

..TIME...	...EVENT...	...CITY LOCATION...	...LAT.LON...
..DATE...MAG....	..COUNTY LOCATION..ST..	...SOURCE....
	..REMARKS..		
0504 PM	HAIL	HEWITT	46.32N 95.09W
07/11/2008	M0.75 INCH	TODD MN	FIRE DEPT/RESCUE
0515 PM	HAIL	5 E HEWITT	46.32N 94.98W
07/11/2008	M0.75 INCH	TODD MN	LAW ENFORCEMENT
		NEAR INTERSECTION OF 210/11.	
0516 PM	HAIL	6 WSW STAPLES	46.33N 94.92W
07/11/2008	M1.00 INCH	TODD MN	EMERGENCY MNGR
0530 PM	HAIL	3 SW MURDOCK	45.19N 95.44W
07/11/2008	E0.75 INCH	SWIFT MN	STORM CHASER

0535 PM	HAIL	8 SE STARBUCK	45.53N 95.42W
07/11/2008	M2.75 INCH	POPE	MN PUBLIC
0550 PM	HAIL	1 W SUNBURG	45.35N 95.26W
07/11/2008	M0.75 INCH	SWIFT	MN LAW ENFORCEMENT
0554 PM	HAIL	3 SE MOTLEY	46.31N 94.60W
07/11/2008	M1.00 INCH	MORRISON	MN TRAINED SPOTTER
0607 PM	HAIL	BELGRADE	45.45N 95.00W
07/11/2008	E0.88 INCH	STEARNS	MN FIRE DEPT/RESCUE
0609 PM	HAIL	NEW LONDON	45.30N 94.95W
07/11/2008	M1.00 INCH	KANDIYOHI	MN TRAINED SPOTTER
0611 PM	HAIL	BELGRADE	45.45N 95.00W
07/11/2008	M0.88 INCH	STEARNS	MN FIRE DEPT/RESCUE
0625 PM	HAIL	3 SW SPICER	45.20N 94.98W
07/11/2008	M0.75 INCH	KANDIYOHI	MN TRAINED SPOTTER
0626 PM	TORNADO	PRIAM	45.07N 95.14W
07/11/2008	F3	KANDIYOHI	MN NWS STORM SURVEY

*** 2 INJ *** TORNADO TRACKED FROM 0.5 MILE NORTH OF
PRIAM TO 4.0 MILES SOUTHEAST OF DOWNTOWN WILLMAR. THREE
HOUSES WERE DESTROYED AND EIGHT OTHERS WERE DAMAGED.
BARN AND SHEDS DESTROYED...ALONG WITH TWO BUSINESSES.
TWO MINOR INJURIES OCCURRED AT A TURKEY BARN 2.5 MILES
SOUTH OF DOWNTOWN WILLMAR. TORNADO DISSIPATED AT ABOUT
645 PM AFTER BEING ON THE GROUND FOR EIGHT MILES. MAXIMUM
PATH WIDTH WAS 200 YARDS.

0629 PM	TORNADO	1 SW WILLMAR	45.11N 95.06W
07/11/2008		KANDIYOHI	MN TRAINED SPOTTER

ONE QUARTER MILE SW OF WILMAR WITH DEBRIS IN THE AIR.
STILL ON THE GROUND MOVING EAST AT 15 MPH.

0632 PM	TORNADO	SE WILLMAR	45.12N 95.05W
07/11/2008		KANDIYOHI	MN TRAINED SPOTTER

NEAR INTERSECTION OF COUNTY ROAD 8 AND 19.

0632 PM	FUNNEL CLOUD	5 N WILLMAR	45.20N 95.05W
07/11/2008		KANDIYOHI	MN TRAINED SPOTTER

0635 PM	TORNADO	4 S WILLMAR	45.07N 95.05W
07/11/2008		KANDIYOHI	MN TRAINED SPOTTER

SHED FLATTENED. SMALL TRAILER TURNED ON ITS SIDE. SEVERAL
FARM TRACTORS TURNED ON THEIR SIDES. OCCURRED AT HIGHWAY
71 AND COUNTY RD. 19.

0638 PM	TORNADO	1 E WILLMAR	45.12N 95.03W
07/11/2008		KANDIYOHI	MN TRAINED SPOTTER

APPROXIMATELY 200 YARDS WIDE. HIT A FARM AND PICKED UP A LARGE AMOUNT OF METAL DEBRIS. MOVING 40 TO 50 MPH TOWARD THE EAST.

0638 PM TORNADO 1 E WILLMAR 45.12N 95.03W
07/11/2008 KANDIYOHI MN TRAINED SPOTTER

ONE HOUSE SEVERELY DAMAGED. TWO TURKEY BARNs FLATTENED.

0642 PM TORNADO 3 E WILLMAR 45.12N 94.99W
07/11/2008 KANDIYOHI MN TRAINED SPOTTER

TORNADO WEAKENED INTO THE ROPE STAGE. MOVING ENE AT APPROXIMATELY 40 TO 50 MPH.

0645 PM TORNADO 4 SE WILLMAR 45.08N 95.01W
07/11/2008 KANDIYOHI MN LAW ENFORCEMENT

2 HOUSES HEAVILY DAMAGED ON SW 26TH AVE NEAR 40TH ST SOUTHEAST. FARM MACHINERY DAMAGED. MAIN SWATH OF DAMAGE OCCURRED ALONG COUNTY ROAD 19, BETWEEN HWY 71 AND COUNTY ROAD 8.

0648 PM FUNNEL CLOUD BELVIEW 44.61N 95.33W
07/11/2008 REDWOOD MN PUBLIC

0648 PM FUNNEL CLOUD DELHI 44.60N 95.21W
07/11/2008 REDWOOD MN PUBLIC

0648 PM FUNNEL CLOUD 1 SW GROVE CITY 45.14N 94.70W
07/11/2008 MEEKER MN TRAINED SPOTTER

0653 PM TSTM WND GST 1 SW LITTLE FALLS 45.97N 94.38W
07/11/2008 M62.00 MPH MORRISON MN TRAINED SPOTTER

62 MPH GUST RECORDED WITH DOZENS OF TREES DOWN IN VICINITY.

0655 PM HAIL DANUBE 44.79N 95.10W
07/11/2008 M0.88 INCH RENVILLE MN FIRE DEPT/RESCUE

0658 PM HAIL 5 WNW OLIVIA 44.79N 95.10W
07/11/2008 M0.75 INCH RENVILLE MN TRAINED SPOTTER

0700 PM HAIL 3 N LITTLE FALLS 46.02N 94.36W
07/11/2008 M1.00 INCH MORRISON MN TRAINED SPOTTER

0700 PM TSTM WND DMG 1 ESE ST JOSEPH 45.56N 94.31W
07/11/2008 STEARNS MN TRAINED SPOTTER

TIME ESTIMATED. 1 FT TREE DOWNED.

0702 PM TSTM WND GST 3 WNW HARDING 46.14N 94.11W
07/11/2008 M67.00 MPH MORRISON MN MESONET

MEASURED BY MNDOT ROAD SENSOR ON HWY 25 AT MILE POST 140.

0710 PM TSTM WND DMG 2 N VINELAND 46.21N 93.77W
07/11/2008 MILLE LACS MN TRAINED SPOTTER

TREES DOWN BETWEEN VINELAND AND PINE CENTER. OCCURRED ON COUNTY ROAD 25.

0714 PM TSTM WND GST 7 S HILLMAN 45.91N 93.89W
07/11/2008 M67.00 MPH MORRISON MN TRAINED SPOTTER

0714 PM TSTM WND GST WAITE PARK 45.55N 94.22W
07/11/2008 M84.00 MPH STEARNS MN TRAINED SPOTTER

0717 PM TSTM WND DMG 5 N WATKINS 45.39N 94.41W
07/11/2008 STEARNS MN TRAINED SPOTTER

FIFTEEN FOOT TREE DOWNED.

0720 PM TSTM WND DMG WAITE PARK 45.55N 94.22W
07/11/2008 STEARNS MN TRAINED SPOTTER

POWER LINES TOPPLED, MULTIPLE TREES DOWNED.

0720 PM TSTM WND GST ELK RIVER 45.33N 93.57W
07/11/2008 E65.00 MPH SHERBURNE MN TRAINED SPOTTER

0721 PM TSTM WND DMG HECTOR 44.74N 94.71W
07/11/2008 RENVILLE MN LAW ENFORCEMENT

TREE DOWN ACROSS COUNTY ROAD FOUR. SEVERAL OTHER TREES DOWN IN TOWN. GRAIN BINS DAMAGED.

0726 PM TSTM WND GST 4 NNE HUTCHINSON 44.94N 94.35W
07/11/2008 E62.00 MPH MCLEOD MN MESONET

62 MPH WIND GUST MEASURED AT HOOK LAKE RD.

0730 PM TSTM WND DMG 3 NW BROWNTON 44.76N 94.39W
07/11/2008 MCLEOD MN EMERGENCY MNGR

PORTION OF CATTLE SHED WALL WAS BLOWN OFF. A GRAIN BIN WAS PARTIALLY CRUMPLED NEAR ITS TOP.

0734 PM HAIL 7 N HUTCHINSON 44.99N 94.37W
07/11/2008 M0.75 INCH MEEKER MN TRAINED SPOTTER

0743 PM TSTM WND GST 2 SE CLEARWATER 45.39N 94.02W
07/11/2008 M68.00 MPH WRIGHT MN MESONET

68 MPH WIND GUST AT MNDOT ROAD WEATHER SENSOR ON I94 AT MILE MARKER 180.

0745 PM TSTM WND DMG 7 SE PRINCETON 45.50N 93.49W
07/11/2008 ISANTI MN AMATEUR RADIO

6 INCH DIAMETER TREE DOWNED AT THE INTERSECTION OF CO RD 40 AND CO RD 28 1 MILE WEST OF SPENCER BROOK. TIME

ESTIMATED BY RADAR.

0745 PM TSTM WND DMG 3 W DALBO 45.69N 93.50W
07/11/2008 ISANTI MN LAW ENFORCEMENT

WIND DAMAGE ACROSS A SEVEN MILE WIDE SWATH OF NORTHERN ISANTI COUNTY...FROM THE MILLE LACS COUNTY LINE TO THE CHISAGO COUNTY LINE TWO MILES EAST OF STANCHFIELD. NUMEROUS TREES AND POWER LINES DOWN. ONE HOUSE SUSTAINED SIGNIFICANT DAMAGE IN SECTION 8 OF DALBO TOWNSHIP.

0750 PM TSTM WND DMG DELANO 45.04N 93.79W
07/11/2008 WRIGHT MN AMATEUR RADIO

8 INCH BRANCH DOWN AND 2 FOOT DIAMETER TREE DOWN AND BLOCKING ROAD. TIME WAS ESTIMATED ON RADAR.

0750 PM TSTM WND DMG 4 SE BOCK 45.75N 93.50W
07/11/2008 KANABEC MN TRAINED SPOTTER

5 PINE TREES DOWNED UP TO 1 1/2 FT DIAMETER. SOME ON POWER LINES. WIND GUST OF 48 MPH RECORDED.

0751 PM HAIL MONTICELLO 45.30N 93.80W
07/11/2008 M0.75 INCH WRIGHT MN TRAINED SPOTTER

OCCURRED AT INTERSECTION OF 25 AND 137TH.

0753 PM TSTM WND GST MONTICELLO 45.30N 93.80W
07/11/2008 E65.00 MPH WRIGHT MN TRAINED SPOTTER

DEBRIS ON ROAD, LARGE BRANCHES DOWNED.

0755 PM FUNNEL CLOUD MONTICELLO 45.30N 93.80W
07/11/2008 WRIGHT MN TRAINED SPOTTER

0755 PM TSTM WND DMG 1 E ALBERTVILLE 45.24N 93.65W
07/11/2008 WRIGHT MN AMATEUR RADIO

12 INCH TREE DOWN BLOCKING ROAD AT INTERSECTION OF HIGHWAY 37 AND I94. TIME ESTIMATED BY RADAR.

0757 PM FUNNEL CLOUD ELK RIVER 45.33N 93.57W
07/11/2008 SHERBURNE MN TRAINED SPOTTER

OCCURRED 1 MILE WEST OF ELK RIVER GOLF CLUB.

0800 PM TSTM WND DMG MAYER 44.88N 93.89W
07/11/2008 CARVER MN TRAINED SPOTTER

TWO TO THREE INCH TREE LIMBS SEVERED.

0800 PM TSTM WND DMG 2 SSE GRASSTON 45.77N 93.14W
07/11/2008 KANABEC MN TRAINED SPOTTER

AT LEAST 6 TREES WERE DOWNED 4 MILES NORTH OF BRAHAM.

0800 PM TSTM WND DMG MONTROSE 45.07N 93.91W
07/11/2008 WRIGHT MN TRAINED SPOTTER

COMMERCIAL GREENHOUSE TOPPLED OVER NEAR COUNTY ROAD 12
AND HIGHWAY 12.

0804 PM FUNNEL CLOUD 1 NW ELK RIVER 45.34N 93.58W
07/11/2008 SHERBURNE MN TRAINED SPOTTER

0808 PM TSTM WND DMG MONTICELLO 45.30N 93.80W
07/11/2008 WRIGHT MN TRAINED SPOTTER

SEVENTEEN INCH DIAMETER TREE DOWN. FIFTEEN INCH DIAMETER
TREE TOPPLED. TOTAL OF 5 TREES DOWNED.

0814 PM TSTM WND GST 2 W NEW ULM 44.32N 94.51W
07/11/2008 M59.00 MPH BROWN MN MESONET

59 MPH WIND GUST RECORDED AT THE NEW ULM AIRPORT.

0815 PM TSTM WND DMG RUSH CITY 45.68N 92.97W
07/11/2008 CHISAGO MN LAW ENFORCEMENT

SCATTERED TREES AND POWER LINES DOWNED.

0815 PM TSTM WND DMG DALBO 45.69N 93.44W
07/11/2008 ISANTI MN TRAINED SPOTTER

EIGHT TO 10 INCH DIAMETER TREES DOWN.

0816 PM HAIL NORWOOD/YOUNG AMERICA 44.78N 93.92W
07/11/2008 M0.75 INCH CARVER MN TRAINED SPOTTER

0816 PM HAIL ZIMMERMAN 45.44N 93.59W
07/11/2008 M0.75 INCH SHERBURNE MN TRAINED SPOTTER

OCCURRED 2 MILES SOUTH OF COUNTY ROAD 4.

0816 PM HAIL ZIMMERMAN 45.44N 93.59W
07/11/2008 M0.75 INCH SHERBURNE MN TRAINED SPOTTER

0817 PM HAIL LAFAYETTE 44.45N 94.39W
07/11/2008 M1.00 INCH NICOLLET MN BROADCAST MEDIA

0819 PM TSTM WND GST 4 S BROOKLYN PARK 45.06N 93.36W
07/11/2008 M58.00 MPH HENNEPIN MN ASOS

58 MPH WIND GUST RECORDED AT CRYSTAL AIRPORT.

0825 PM HAIL ARLINGTON 44.61N 94.08W
07/11/2008 M0.88 INCH SIBLEY MN TRAINED SPOTTER

0826 PM TSTM WND DMG 3 SE BLAINE 45.14N 93.16W
07/11/2008 ANOKA MN TRAINED SPOTTER

4 TO 6 INCH TREE LIMBS SNAPPED OFF 1 MILE EAST OF
LEXINGTON AND 35W INTERSECTION.

0827 PM 07/11/2008	TSTM WND DMG	1 N HILLTOP ANOKA	MN	45.07N 93.25W AMATEUR RADIO
7 INCH DIAMETER TREES DOWN AT HWY 65 AND I694.				
0835 PM 07/11/2008	TSTM WND DMG	SHAKOPEE SCOTT	MN	44.77N 93.48W LAW ENFORCEMENT
ONE TREE TOPPLED.				
0844 PM 07/11/2008	TSTM WND DMG	1 N ST PAUL RAMSEY	MN	44.96N 93.11W AMATEUR RADIO
6 INCH BRANCH DOWNED AT INTERSECTION OF RICE AND PENNSYLVANIA.				
0845 PM 07/11/2008	HAIL M0.75 INCH	BELLE PLAINE SCOTT	MN	44.62N 93.76W AMATEUR RADIO
0845 PM 07/11/2008	TSTM WND DMG	BURNSVILLE DAKOTA	MN	44.76N 93.28W TRAINED SPOTTER
FEW TREES TOPPLED.				
0850 PM 07/11/2008	TSTM WND DMG	WEST ST PAUL DAKOTA	MN	44.90N 93.09W TRAINED SPOTTER
FEW TREES TOPPLED.				
0855 PM 07/11/2008	HAIL M0.88 INCH	NEW PRAGUE SCOTT	MN	44.55N 93.57W TRAINED SPOTTER
0855 PM 07/11/2008	TSTM WND DMG	SOMERSET ST. CROIX	WI	45.13N 92.68W TRAINED SPOTTER
FEW TREE DOWNED.				
0855 PM 07/11/2008	TSTM WND DMG	SOUTH ST PAUL DAKOTA	MN	44.89N 93.04W TRAINED SPOTTER
A FEW TREES DOWNED.				
0855 PM 07/11/2008	TSTM WND DMG	OSCEOLA POLK	WI	45.32N 92.70W TRAINED SPOTTER
FEW TREES DOWNED.				
0900 PM 07/11/2008	HAIL M0.88 INCH	ST PETER NICOLLET	MN	44.33N 93.96W TRAINED SPOTTER
0900 PM 07/11/2008	TSTM WND DMG	1 S WANDEROOS POLK	WI	45.29N 92.49W TRAINED SPOTTER

TIME ESTIMATED BY RADAR. TREE DOWN ON POWER LINE ALONG 60TH AVE.

0900 PM TSTM WND DMG STAR PRAIRIE 45.20N 92.53W
07/11/2008 ST. CROIX WI LAW ENFORCEMENT

TREE DOWN.

0915 PM TSTM WND DMG NORTHFIELD 44.45N 93.17W
07/11/2008 RICE MN TRAINED SPOTTER

TREES DOWN, ONE TO TWO FEET IN DIAMETER.

0917 PM HAIL 2 S LONSDALE 44.45N 93.43W
07/11/2008 M0.75 INCH RICE MN TRAINED SPOTTER

REPORTED AT INTERSECTION OF CO RD 4 AND CO RD 1.

0919 PM HAIL 6 N ELYSIAN 44.29N 93.68W
07/11/2008 M0.88 INCH LE SUEUR MN TRAINED SPOTTER

0920 PM HAIL 2 S MANKATO 44.14N 93.99W
07/11/2008 M0.75 INCH BLUE EARTH MN TRAINED SPOTTER

AT CO RD 90 AND HWY 22 INTERSECTION.

0920 PM TSTM WND DMG AMERY 45.30N 92.36W
07/11/2008 POLK WI TRAINED SPOTTER

A FEW TREES TOPPLED.

0920 PM TSTM WND DMG 2 SE DEER PARK 45.17N 92.36W
07/11/2008 ST. CROIX WI TRAINED SPOTTER

TREES DOWN ACROSS ROAD.

0930 PM TSTM WND DMG 4 S ALMENA 45.36N 92.04W
07/11/2008 BARRON WI TRAINED SPOTTER

TREE TOPPLED.

0936 PM HAIL 5 SW NORTHFIELD 44.40N 93.24W
07/11/2008 M0.75 INCH RICE MN TRAINED SPOTTER

0945 PM HAIL MINNESOTA LAKE 43.84N 93.83W
07/11/2008 M0.75 INCH FARIBAULT MN TRAINED SPOTTER

1000 PM TSTM WND DMG MENOMONIE 44.89N 91.91W
07/11/2008 DUNN WI LAW ENFORCEMENT

6 TO 8 INCH TREE LIMBS DOWNED.

1011 PM HAIL 2 N FREEBORN 43.80N 93.56W
07/11/2008 M0.88 INCH FREEBORN MN TRAINED SPOTTER

1014 PM HAIL 3 N FREEBORN 43.81N 93.56W
07/11/2008 M0.75 INCH FREEBORN MN TRAINED SPOTTER

ESTIMATED WINDS OF 55 MPH ALSO OCCURRED.

1054 PM
07/11/2008

TSTM WND DMG

2 SW ALBERT LEA
FREEBORN

43.63N 93.39W
MN TRAINED SPOTTER

TWENTY FOUR INCH TREE TOPPLED.