

CROW WING COUNTY

February 10, 2022 Snow Event #4 - 2022 - #11



Reported Event Conditions

Date: 2/11/2022
Event No: #4-2022-#11
Begin Time: 2/10 1PM
End Time: 2/11 6AM
Weather: Snow
Precipitation: 2.5" Snow
Temperature: 34-20
Wind: 15 -35 MPH

Event Costs

Salt	\$22,773
Sand	\$0
Brine	\$1,133
Equipment/Fuel	\$17,850
Personnel Reg.	\$3,279
Personnel OT	\$4,813
Total	\$49,848
Cost Mile	\$89
Season Total:	\$843,819

Priority By Route

Priority 1

% Target 1A Met: 100%
% Target 1B Met: 100%

Priority 2

% Target 2A Met: 100%
% Target 2B Met: 100%

Priority 3

% Target 3A Met: 100%

— MnDOT Highway

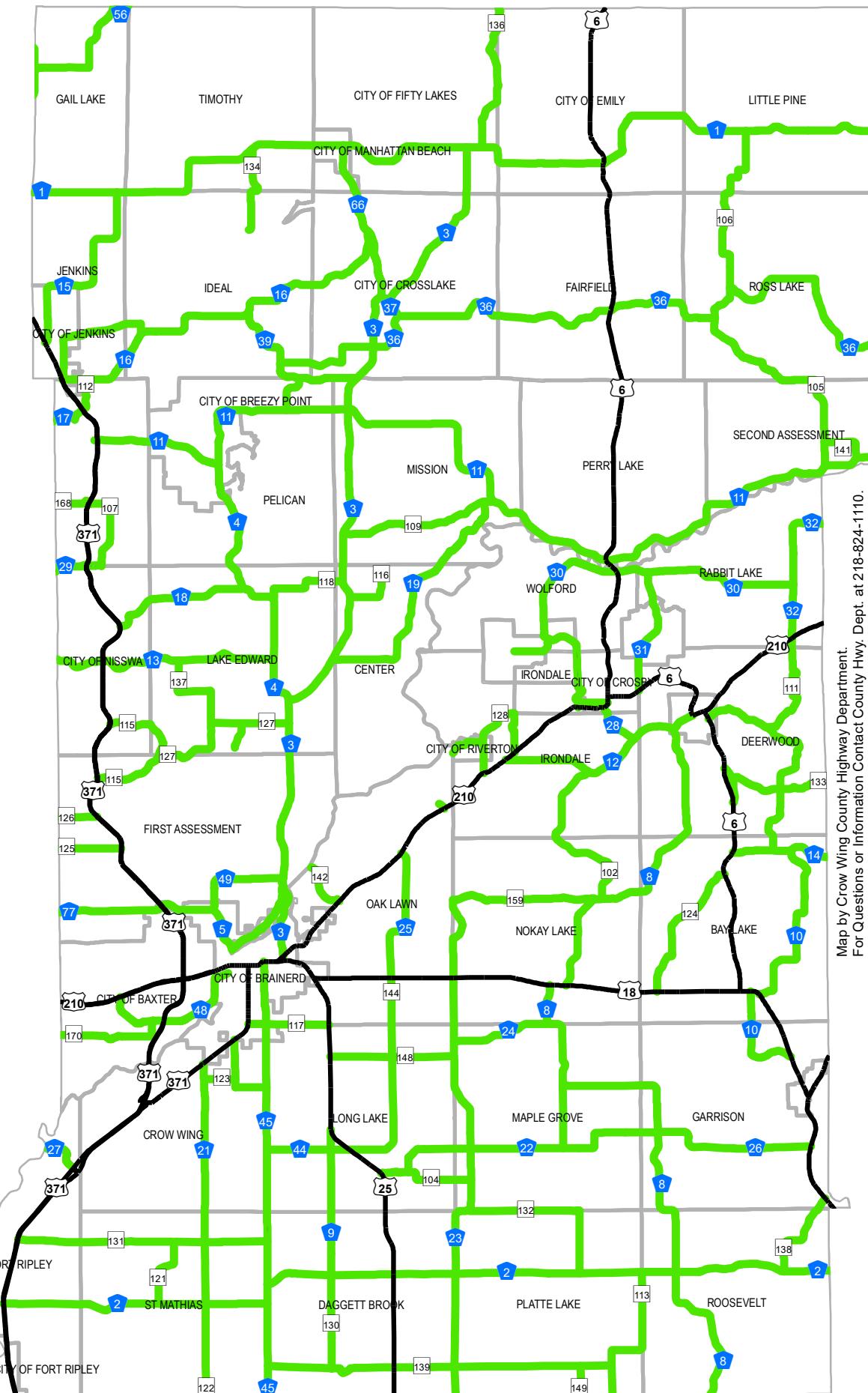
Route Priority

- 1 (ADT>5000)
- 2 (500>ADT<5000)
- 3 (ADT<500)

Route Target

- Target Achieved
- Target Partly Achieved
- Target Not Achieved

Report Date: 2/14/2022



Map by Crow Wing County Highway Department.
For Questions or Information Contact County Hwy. Dept. at 218-824-1110.
For Information on State Highways Contact MnDOT at 218-828-5700.

2021/2022 Summary For Snow Event #4 - 2022 - #11

Date 2-10-22

Salt Tons	Salt \$	Sand Tons	Sand \$	Brine gal	Brine \$	Mat. Total	Equip \$	Reg. Personnel	OT \$
250.25	\$22,773	0	\$0	1717	\$1,133	\$23,906	\$17,850	\$3,279.00	\$4,813

Total \$49,848

12.1 Plow hrs.

\$4,122 per/hr.

193.50 Man hrs.

\$89 per/CL/mile

\$1.88 per/household for entire County

Forecast

3" of snow forecasted to fall starting at noon on 2-10 and continuing until 7:00 PM, with flurries until Friday morning. Strong winds 15-35 mph through 2-12. Rain forecasted at 6:00 PM 2-10-22.

Pre Plan

Start plowing at 12:00 AM 2-11 and apply 500 lbs. of treated salt on centerlines of snow covered areas, not effected by wind. Turnaround and replot all roads that need it.

Actual Event

Event start: 2/10/22 1:00PM

Event ended 2-11-22 6:00AM

Comments

Snow started to stick to roads around 5:00 PM. We decided to leave the snow to soak up forecasted rain. Rain fell from 6:00 PM until 11:00 PM 2-10-22. Additional snow fell between 2:00 AM and 6:00 AM 2-11-22.

Conditions

Strong winds and blowing snow allowed roads to blow open initially. Snow continued to fall and they became snow covered by 4:00 PM.

Road	Road Temp	Date	Time	Air Temp
Hwy 6	20	2/10/22	1:00PM	17
Hwy 25	26	2/10/22	1:00PM	18
Hwy 6	30	2/10/22	11:00PM	35
Hwy 25	30	2/10/22	11:00PM	37

Date	High	Low
2/9/2022	32	4
2/10/2022	34	21
2/11/2022	21	-20
2/12/2022	3	-20
2/13/2022	3	-7

Source: weather.com. Monthly Weather. 56401

Summary

Snow came down at .75" an hour and started to stick to roads around 5:00 PM 2/10. Strong winds, rain and early morning snow on 2/11 created some challenges with this event. Temps began to fall when the plows started plowing.

Decisions Made

Started plowing at midnight 2/10/22 and applied treated salt at 500 lbs. on centerline. The trucks turned around and plowed again after covering their routes, reapplying salt to try and get as much ice and snow off the roads before the temps drop below zero, rendering the salt ineffective.

Lessons Learned

Although it wasn't ideal, waiting to plow until after the forecasted rain in the evening of 2-10 worked well. The snow absorbed the rain and prevented it from freezing to the roadway's surface. We observed slippery conditions on other roads that had been plowed prior to the rain. Salt was effective at 500 lbs. even with the falling temps. Snow caught in stuck in the open areas that were treated with salt, but melted the next day.

Goals Met/Not Met

Plowing	Goals
Priority 1	Met
Priority 2	Met
Priority 3	Met
	6 hr.
	8 hr.
	10 hr.

Bare wheel paths	Goals
Priority 1	Met
Priority 2	Met
	18 Hr.
	48 hr.