

CROW WING COUNTY

Snow Event 12-2022-1 Nov. 14 - 19, 2022



Reported Event Conditions	
Date:	11/14-11/19/22
Event No:	12-2022-1
Begin Time:	11/14 4 AM
End Time:	11/19 2 AM
Weather:	Rain/Snow
Precipitation:	.5 Rain/6" Snow
Temperature:	32-5
Wind:	5 - 15 MPH

Event Costs	
Salt	\$46,248
Sand	\$0
Brine	\$4,671
Equipment/Fuel	\$75,038
Personnel Reg.	\$19,008
Personnel OT	\$4,981
Total	\$149,946
Cost Mile	\$268
Season Total:	\$165,853

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

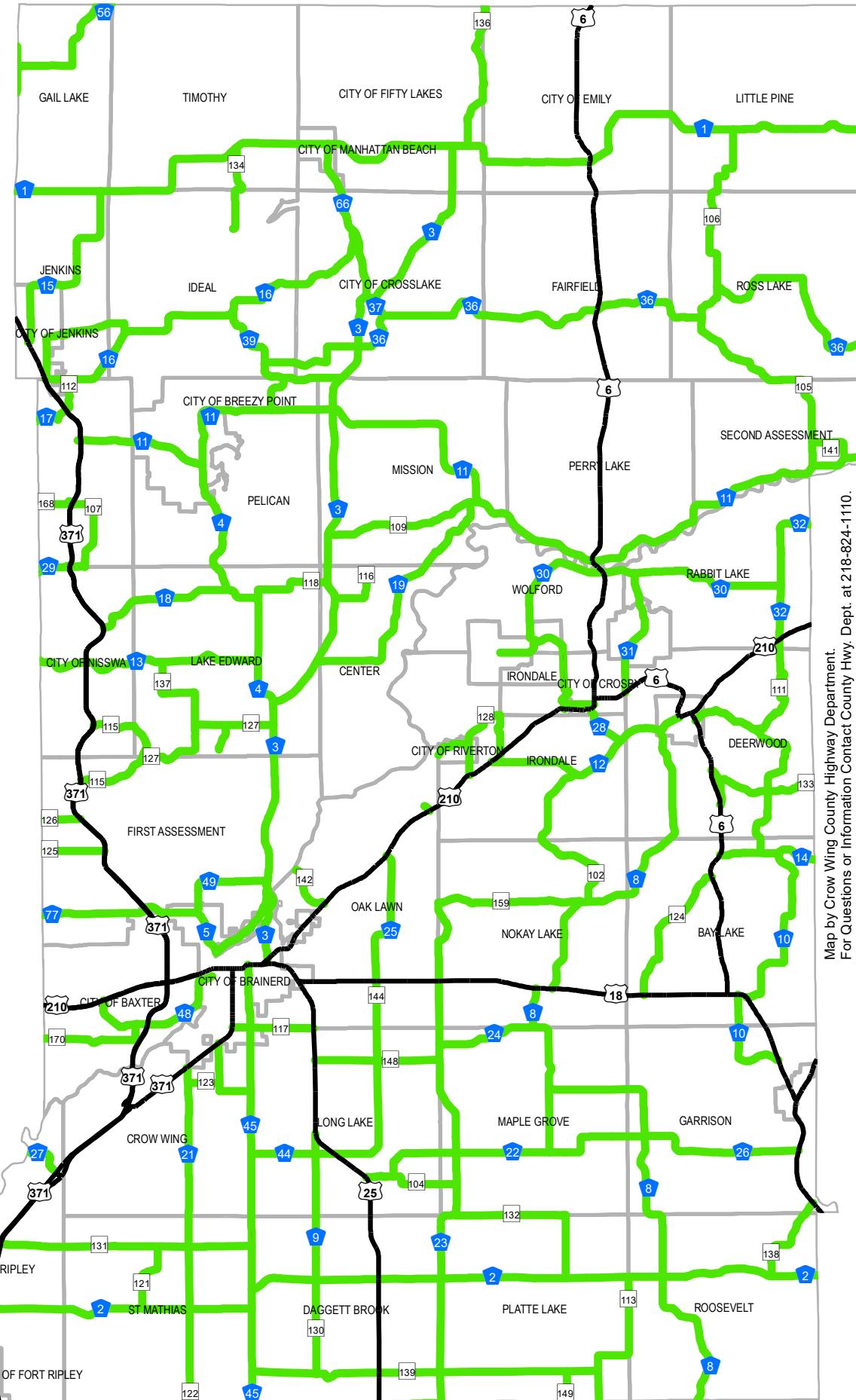
Route Priority

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

Route Target

- Target Achieved
- Target Partly Achieved
- Target Not Achieved

Report Date: 12/2/2022



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.

2022/2023 Summary For Snow Event 12-2022-1

Date 11/14/22 - 11/19/22

Salt Tons	Salt \$	Sand Tons	Sand \$	Brine gal	Brine \$	Mat. Total	Equip \$	Reg. Personnel	OT \$
564	\$46,248	0	\$0	7078	\$4,671	\$50,919	\$75,038	\$19,008.00	\$4,981

Total \$149,946

42.125 Plow hrs.

\$3,560 per/hr.

674.00 Man hrs.

\$268 per/CL/mile

\$5.66 per/household for entire County

Forecast

Snow forecasted to start falling at 4 a.m. 11/14 and end 3 a.m. 11/16. 4-5" snow expected. Temps 22-28 degrees. Winds 5-10 mph.

Pre Plan

Begin plowing at 7:30 a.m. 11/14 and stay late past the evening commute if needed. Apply 300 lbs of salt on centerline to get continuous melting with the falling snow. Begin at 5:00 a.m. 11/15 and continue into the evening if needed. Begin at 5:00 am 11/16 if needed to clean up additional snow not melted with salt.

Actual Event

Event start: 4:00 a.m. 11/14/22

Event ended 2:00 a.m. 11/19/22

Comments

Plowing began @ 7:30 a.m. & continued until 3:00 p.m. 11/14. Roads cleaned up well with 300 lbs. of salt. Plowing began @ 5:00 a.m. & continued until 3:00 p.m. 11/15. Roads cleaned up well with 300 lbs. of salt. Plowing began @ 3:00 a.m. & continued until 11:00 a.m. 11/16. Roads cleaned up well w/ 300 lbs. of salt. Plowing began @ 7:30 a.m. & continued until 2:30 p.m. 11/17. Roads cleaned up well with 200 lbs. of salt. Plowing began @ 3:00 a.m. & continued until 11:00 a.m. 11/18. Roads cleaned up well w/ 300 lbs. of salt at intersections due to the colder temps and dryer snow.

Conditions

Mid 20's temps and light snow allowed salt to keep working well. Roads refroze after 5:00 p.m. 11/14 with the continued snowfall. Snow continued to fall lightly from 11/14 to 11/16. About 5" of snow total. Light wind. Snow flurries continued through 11/19, accumulating about 3/4" each day.

Road	Road Temp	Date	Time	Air Temp
Hwy 371	24	11\14\22	7:00 AM	22
TH 25	27	11\14\22	7:00 AM	22
Hwy 371	26	11\15\22	5:00 AM	26
TH 25	26	11\15\22	5:00 AM	26
Hwy 6	27	11\16\22	3:00 AM	26
TH 25	32	11\16\22	3:00 AM	27
Hwy 6	29	11\17\22	3:00 PM	23
TH 25	29	11\17\22	3:00 PM	24
Hwy 6	19	11\18\22	3:00 AM	18
TH 25	19	11\18\22	3:00 AM	16

Date	High	Low
11/13/2022	26	21
11/14/2022	29	26
11/15/2022	32	26
11/16/2022	30	17
11/17/2022	25	14
11/18/2022	16	13
11/19/2022	15	5
11/20/2022	29	19
11/21/2022	27	16

Source: weather.com. Monthly Weather. 56401

Summary

Snow fell lightly for two days. The roads were clear and wet by noon Monday - Wednesday. Roads became snow covered again after the sun set each day. Layers of compaction in slow moving areas were observed 11/15 and 11/16 as the plows began plowing each day. Mild temps and salt helped to melt the ice and snow compaction. We did have three different plow trucks go out of service on 11/15 for mechanical issues. This delayed plowing to certain areas as the operators waited for service repair or switched to other trucks. Snow continued to fall with the flurries and 5 straight days of plowing was needed to clear the roads and keep compaction and ice from forming.

Decisions Made

Start early when there was enough snow to begin plowing and before the morning commutes. Apply 300 lbs. of salt per best practice guidelines for the precipitation type and road temperatures. Plowing each morning when the flurries tapered off allowed for the roads to clean up well.

Lessons Learned

Early plowing, mild temps and appropriate salt application led to roads clearing quickly. Crew's dedication to getting the roads plowed and clear as soon as there was enough snow led to success.

Goals Met/Not Met

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

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