

CROW WING COUNTY

December 21, 2017 Snow Event #9 2017-18



Reported Event Conditions

Date:	12/21/2017
Event No:	#9 2017-18
Begin Time:	12-20-17 12AM
End Time:	12-21-17 6AM
Weather:	Snow
Precipitation:	3" - 5" Snow
Temperature:	15-12
Wind:	0-5 MPH

Event Costs

Salt	\$28,930
Sand	\$1,581
Brine	\$6,394
Equipment/Fuel	\$20,931
Personnel Reg.	\$8,457
Personnel OT	\$2,932
Total	\$31,073
Cost Mile	\$120
Season Total:	\$359,546

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%
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Legend

MnDOT Highway

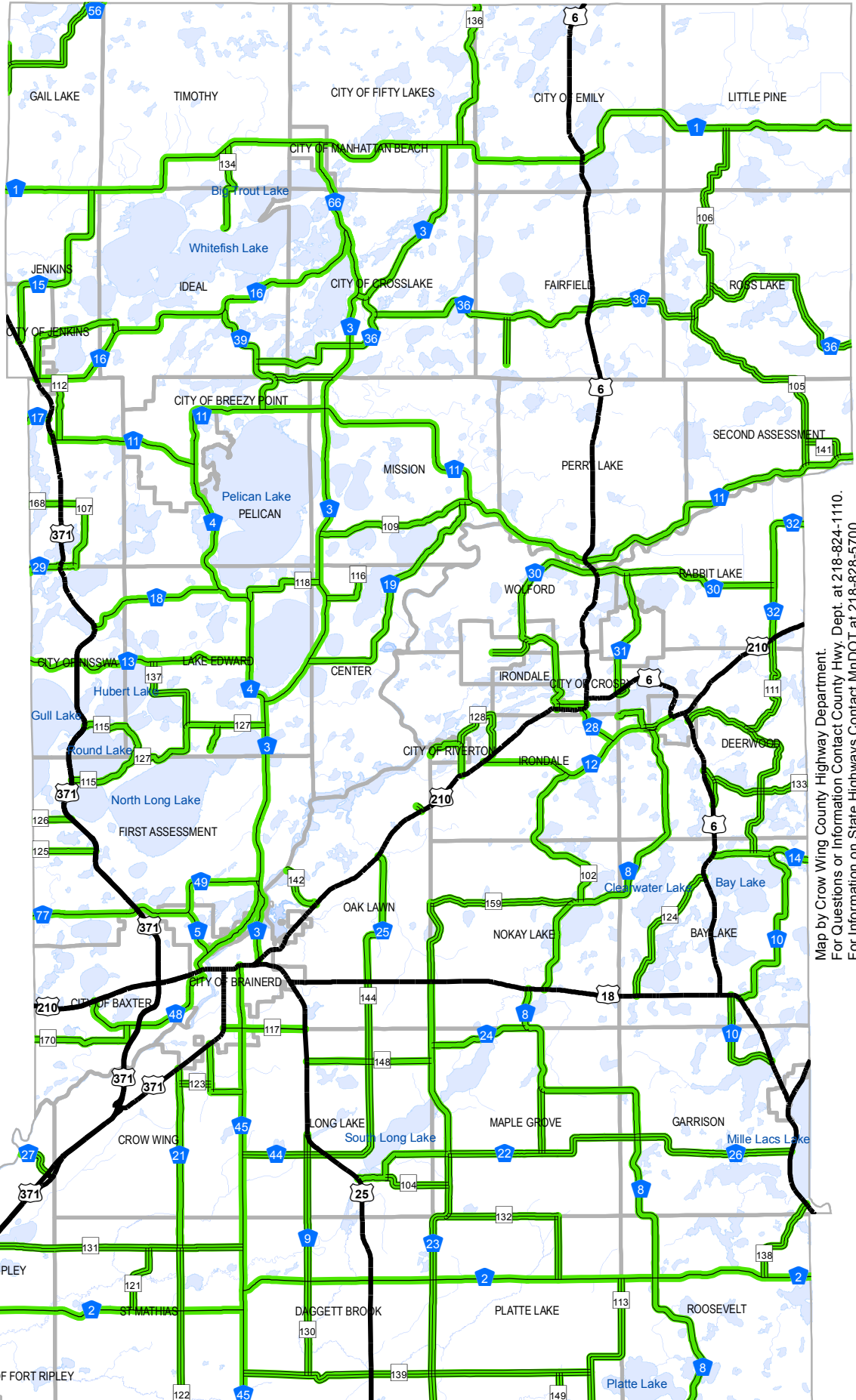
Route Priority

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

Route Target

- Target Achieved
- Target Partly Achieved
- Target Not Achieved

Report Date: 12/27/2017



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.

2017/2018 Summary For Snow Event #9 2017-18

Date 12-21-17

Salt Tons	Salt \$	Sand Tons	Sand \$	Brine gal	Brine \$	Mat. Total	Equip \$	Reg. Personnel	OT \$
325.5	\$28,930	46.5	\$1,581	6393.5	\$4,220	\$34,731	\$20,931	\$8,457.00	\$2,932

Total \$67,051

Total \$67,051 20.25 hrs = \$3,311 per/hr 324.5 man hours
\$120 per/CL/Mile

Forecast

Snow starting at 12:00 p.m. 12-20-17 and ending 4:00 a.m. 12-21-17. NE winds at 6 mph.

2" of snow south and 5" north.

Pavement temps forecasted to be mid teens.

Pre Plan

Start plowing early afternoon 12-20 and continue until 7:00 p.m. or 8:00 p.m.

Come back at 3:00 a.m. 12-21-17.

Apply 500 lbs of salt on cl if it is still snowing, 600 lbs if it is not.

Try treated salt on a few high priority routes

Comments

There didn't seem to be a difference in how the regular and treated salt reacted. Both worked initially but stopped working half way through the lanes. Centers burned open quickly

At 10:30 a.m. it started to work again. Crews rescraped priority 1 roads and they cleaned off well.

Crews checked roads again on 12-22, scraped and applied 50/50 mix to a few areas that needed material.

Conditions

3"-5" of power snow. Roads had a 1/4"-3/8" of ice underneath. The scraped well but burning the ice was a challenge because of the pavement temps were around 12-16 degrees.

Snow ended at 6:00 a.m. 12-21-17.

Temps dropped below zero 12-21-17 in the evening

Road	RDTemp	Date/Time		Air Temp
12	19	12\20\17	6:00 AM	4
25	12	12\20\17	4:00 PM	12
45	15	12\21\17	2:30 AM	13
22\8	21	12\21\17	5:00 AM	13
117	12	12\22\17	1:00 PM	14

Date	High	Low
12/19/2017	33	11
12/20/2017	13	5
12/21/2017	18	-2
12/22/2017	19	-9

Summery

Snow pack came off well with plows rolled forward. The ice layer underneath helped it from sticking.

Roads cleaned up well even with the cold temps.

Decisions Made

Start at 3 a.m. 12-21-17. Spoke with MNDOT rep. and he though there was no difference between state and county roads and MNDOT had plows plowing until 11:30 p.m. 12-20-17.

Using salt vs sand worked well.

We used a 50/50 mix on a few priority 2 and 3 areas that had compaction.

Lessons Learned

Salt, early plowing and rescraping worked well.

Goals Met/Not Met

Plowing

Priority 1 Met
Priority 2 Met
Priority 3 Met

Bare wheel paths

Priority 1 Met
Priority 2 Met