

CROW WING COUNTY

Jan. 2, 2017 Snow Event #8 2017-1 Gregory



Reported Event Conditions

Date:	1/2-1/3/17
Event No:	#8 2017-1
Begin Time:	1/2/17 1 A.M.
End Time:	1:30 AM
Weather:	Snow
Precipitation:	6" Snow
Temperature:	27\--21
Wind:	15-30

Event Costs

Salt	\$492
Sand	\$10,346
Brine	\$2,779
Equipment/Fuel	\$36,438
Personnel Reg.	\$12,386
Personnel OT	\$5,584
Total	\$68,024
Cost Mile	\$121
Season Total:	\$648,229

Priority By Route

Priority 1	
% Target 1A Met:	100%
% Target 1B Met:	77%
Priority 2	
% Target 2A Met:	100%
% Target 2B Met:	44%
Priority 3	
% Target 3A Met:	100%

Legend

MnDOT Highway

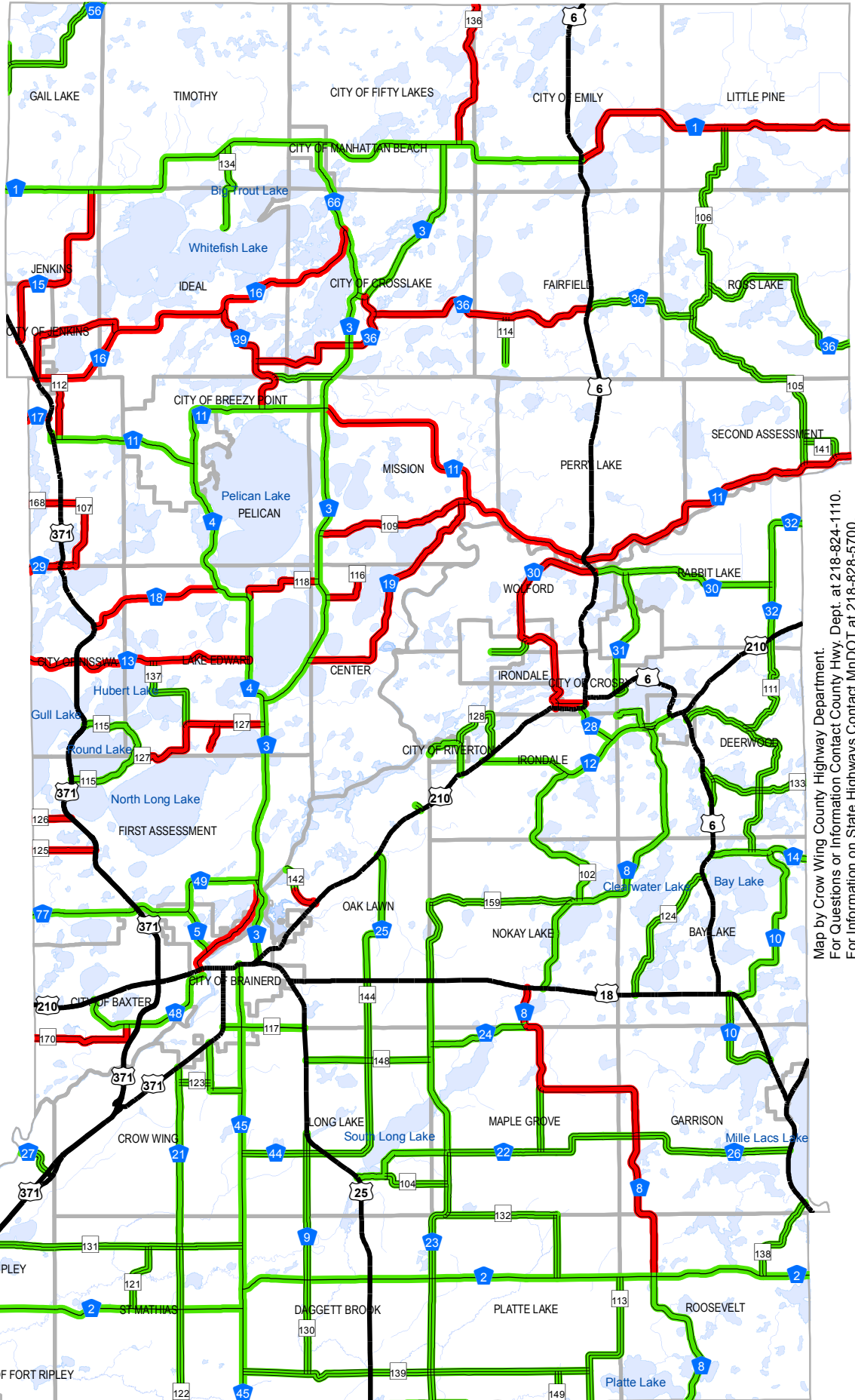
Route Priority

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

Route Target

- Target Achieved
- Target Not Achieved

Report Date: 1/6/2017



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.

2016/2017 Summary For Snow Event #8 2017-1 Gregory Date 1-2-17

Salt Cyds	Salt \$	Sand Cyds	Sand \$	Brine gal	Brine \$	Mat. Total	Equip \$	Reg. Personnel	OT \$
5.75	\$492	313.5	\$10,346	4210	\$2,779	\$13,616	\$36,438	\$12,386.00	\$5,584

Total \$68,024

Total \$68,024 21.75 hrs = \$3,128 per/hr 478 man hours
\$121 per/CL/Mile

Forecast

Winter Weather Advisory issued 9 P.M. 1-1-17 through 6 P.M. 1-2-17. 4"-8" of snow, temps dropping and winds at 15-30 MPH. Winter storm Gregory.

Pre Plan

Have plows start a 7 A.M. 1-2-17 after first wave of snow comes through. Apply 500 lbs. of sand on intersections and corners.

Start again at 4 A.M. on 1-3-17. Apply 500 lbs. of sand at intersections and corners because of negative temps and winds.

Comments

1.5" of snow at 6 A.M. 1-2-17. Roads cleaned up well. Snow started again late morning on 1-2-17.
 4" of snow at 2 A.M. 1-3-17. Plows started at 3 A.M. Applied 500 lbs of sand on critical areas both days.
 Plow operators rolled their plows all the way forward to aggressively cut compaction.

Conditions

Temps in the 20's on 1-2 & 1-3 when the plows started. Temps dropped rapidly on 1-3-17.
 Blowing snow causing drifts and temps below freezing on 1-3-17.
 Most roads still packed with ice from the 12/25/16 rain storm.

Road	RDTemp	Date/Time		Air Temp
142	30	1\2\17	6 A.M.	21
Hwy 6	21	1\2\17	9 A.M.	23
Hwy 210	30	1\3\17	3 A.M.	26
16	0	1\4\17	8 A.M.	-9
18	-2	1\5\17	11 A.M.	-16
142	-9	1\6\17	5 A.M.	-21

Date	High	Low
1/1/2017	24	17
1/2/2017	27	17
1/3/2017	27	-6
1/4/2017	-2	-13
1/5/2017	-3	-19
1/6/2017	1	-21

Summery

Initial plowing went well. Roads cleaned up well. Snow started again late morning on 1-2-17.
 Roads cleaned up well. Most roads still had ice from the 12/25/17 storm but some of that freeze dried.

Decisions Made

We decided to use sand because of the forecasted continued snowfall. We saw salt working on state roads early 1-2-17 but felt with the continued snowfall and forecasted temperatures that the salt would melt the snow and refreeze hard, creating more issues.

Sent the blades out with Sharq edges on 1-4-17 to try and cut ice again. It worked surprising well.

Tried MNDOTs ice breaker but did not have any luck breaking the ice.

Lessons Learned

The plowing times we chose were close to the end of both waves of snow. Roads cleaned up well. Ice in December is very challenging to break the bond with the pavement.

Goals Met/Not Met

Plowing
Priority 1 Met
Priority 2 Met
Priority 3 Met

Bare wheel paths
Priority 1
Priority 2