

CROW WING COUNTY

December 9, 2019 Snow Event #21 - 2019 - 07

Reported Event Conditions	
Date:	12/9/2019
Event No:	#21 2019 07
Begin Time:	12/8/19 9PM
End Time:	12/9/19 10AM
Weather:	Snow
Precipitation:	6
Temperature:	32
Wind:	10-25 MPH

Event Costs	
Salt	\$10,044
Sand	\$0
Brine	\$1,055
Equipment/Fuel	\$21,345
Personnel Reg.	\$7,433
Personnel OT	<u>\$3,028</u>
Total	\$42,905
Cost Mile	\$77
Season Total:	\$299,516

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%

Legend

— MnDOT Highway

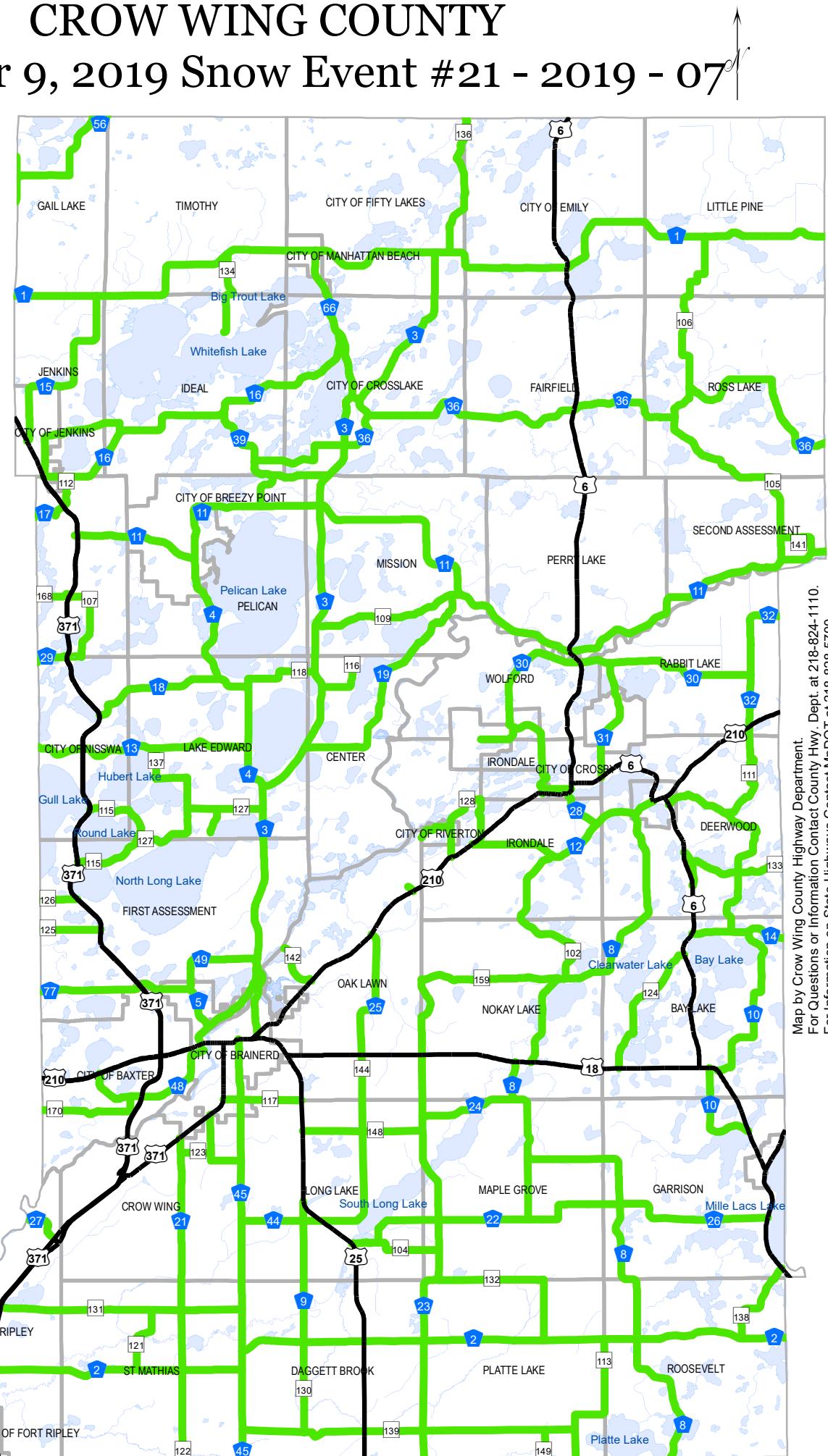
Route Priority

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

Route Target

- Target Achieved
- Target Partly Achieved
- Target Not Achieved

Report Date: 12/11/2019



2019/2020 Summary For Snow Event #21 - 2019 07

Date 12-9-19

Salt Tons	Salt \$	Sand Tons	Sand \$	Brine gal	Brine \$	Mat. Total	Equip \$	Reg. Personnel	OT \$
124	\$10,044	0	\$0	1599	\$1,055	\$11,099	\$21,345	\$7,433.00	\$3,028

Total \$42,905

13 Plow hrs.

\$3,300 per/hr.

302 Man hrs.

\$77 per/CL/mile

\$1.62 per/household for entire County

Forecast

Snow expected to start at 9 PM 12-8-19 and continue to fall until 9 AM 12-9-19. 6" of snow forecasted with temperatures plummeting on 12-9-19 with strong winds.

Pre Plan

Begin plowing at 4 AM 12-9-19 and continue late into the evening to get as much snow off the roads as possible before it freezes down and we are not able to get it off. Apply 500 lbs. to centerlines. Concentrate on drive lanes to keep traffic moving as the snow continues to fall. After getting through the routes, turn around and replow because the snow should be ending. Continue plowing into the evening to get material working and as much snow and ice off the road before temps drop below zero.

Actual Event

Event start: 12/8/2019 9PM

Event ended 12-9-19 10AM

Comments

4" of snow when the plows started at 4 AM 12-09-19. 2 additional inches fell as forecasted until 10 a.m. We started to apply salt at 500 lbs. per lane mile but then suspended applying salt due to pavement temperatures falling 6 hours sooner than expected. North area used 400 lbs. magnesium treated salt and the south used regular sodium salt. Same results in each region.

Conditions

Moderate snow fell until 10 a.m. with 15 mph north winds. 6" of dry snow. Winds created drifting on north south roads that snowplows had to contend with. The temps dropped steadily throughout the day.

Road	Road Temp	Date	Time	Air Temp
Hwy 6	14	12\9\19	4:00 AM	11
Hwy 25	23	12\9\19	4:00 AM	12
Hwy 6	3	12\10\19	8:00 AM	-6
Hwy 25	2	12\10\19	8:00 AM	-5
Hwy 371	-8	12\11\19	7:00 AM	-16

Date	High	Low
12/7/2019	34	19
12/8/2019	32	28
12/9/2019	23	-2
12/10/2019	1	-14
12/11/2019	4	1

Source: weather.com. Monthly Weather. 56401

Summary

We suspended salt application around 8 a.m. due to pavement temperatures falling sooner than forecasted. The roads started to freeze dry and clean up effectively without salt because of frigid temperatures and strong wind.

Decisions Made

Apply 400 mag. treated salt and 500 lbs. sodium salt. Suspend both applications around 8 a.m. due to rapidly falling temps that would have made salt ineffective and an inefficient use.

Lessons Learned

Watching road temps, taking operator road reports and their recommendations into consideration was valuable for suspending salt application to conserve salt. Roads started to freeze dry and cleaned up well.

Goals Met/Not Met

Plowing	Goals
Priority 1 Met	6 hr.
Priority 2 Met	12 hr.
Priority 3 Met	18 hr.

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