

CROW WING COUNTY

February 4, 2019 Snow Event #5 - 2019 Lucian

Reported Event Conditions	
Date:	2/4/2019
Event No:	#5-2019
Begin Time:	2/4/19 3AM
End Time:	2/4/19 3PM
Weather:	Rain/Snow
Precipitation:	.1"R/1"SN
Temperature:	26/-4
Wind:	5-25 MPH

Event Costs	
Salt	\$20,970
Sand	\$391
Brine	\$2,274
Equipment/Fuel	\$17,710
Personnel Reg.	\$7,546
Personnel OT	<u>\$882</u>
Total	\$49,773
Cost Mile	\$89
Season Total:	\$510,233

Priority By Route	
Priority 1	
% Target 1A Met:	100%
% Target 1B Met:	97%
Priority 2	
% Target 2A Met:	100%
% Target 2B Met:	100%
Priority 3	
% Target 3A Met:	100%

Legend

— MnDOT Highway

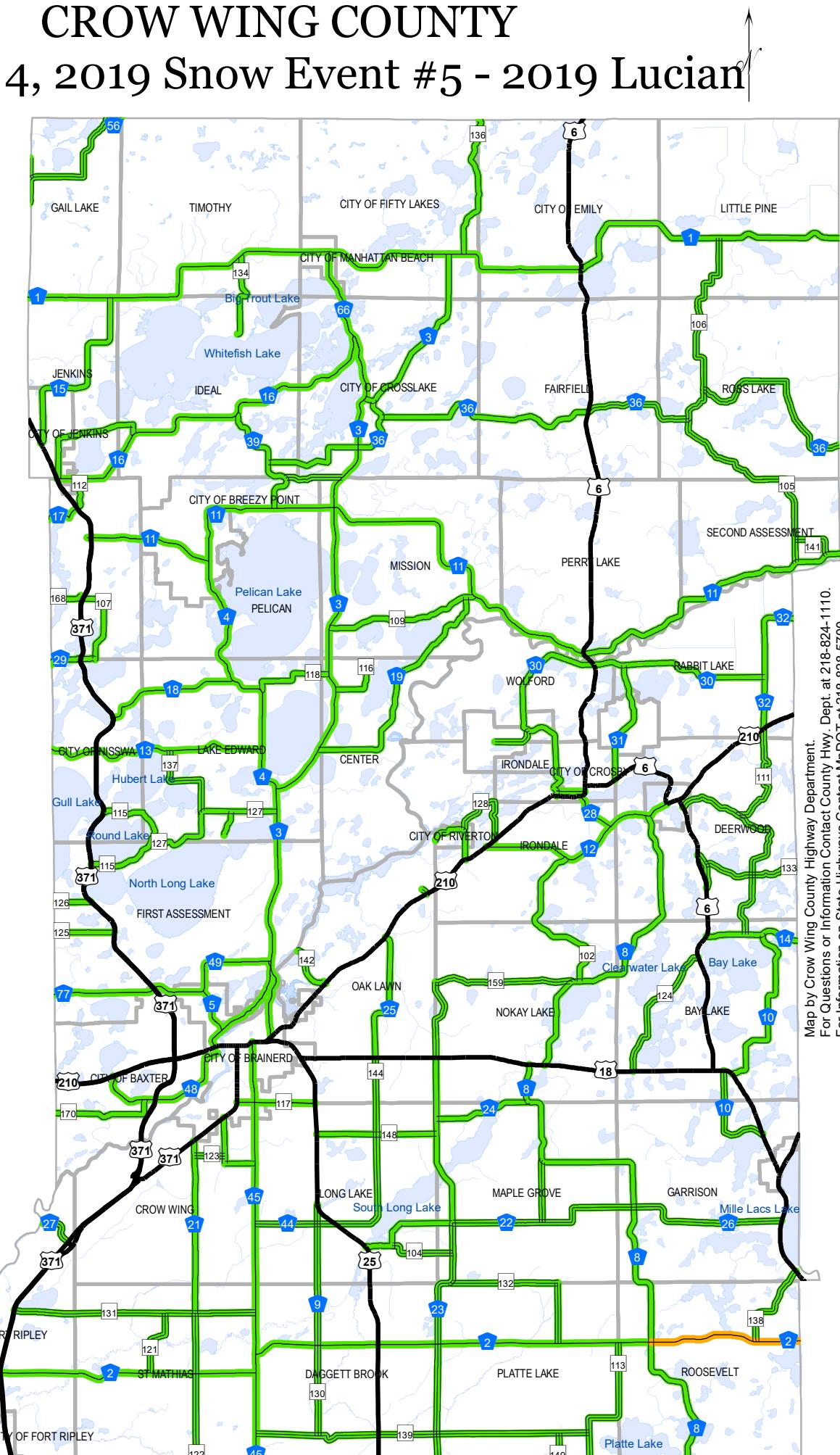
Route Priority

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

Route Target

- Target Achieved
- Target Partly Achieved
- Target Not Achieved

Report Date: 2/6/2019



2018/2019 Summary For Snow Event #5 - 2019 Lucian Date 2/4/19

Salt Tons	Salt \$	Sand Tons	Sand \$	Brine gal	Brine \$	Mat. Total	Equip \$	Reg. Personnel	OT \$
246.71	\$20,970	11.5	\$391	3445.5	\$2,274	\$23,635	\$17,710	\$7,546.00	\$882

Total \$49,773 16 Plow hrs. \$3,111 per/hr.
257 Man hrs. \$89 per/CL/mile

Forecast

Rain changing over to snow was forecasted to start at 6 PM 2/3/19 and end 9 AM 2/4/19. 4"-6" of snow expected.

Pre Plan

Begin plowing at 4 AM 2/4/19, apply 500 lbs. of treated salt on centerlines then turnaround and replot covered roads. Start at 7 AM on 2/5 for plow forecasted snowfall throughout the day Tuesday.

Actual Event

Event start: 2/4/2019 3:00 A.M.

Event ended 2-4-19 3:00 P.M.

Comments

Rain started at 3 AM 2/4/19 and transitioned to snow around 5 AM. Trucks applied 200 lbs. of treated salt to centerlines. The snow transitioned back to rain around 7 AM. Roads started to refreeze. Plows rescraped roads and reapplied treated salt material at 400 lbs. per mile on centerlines. Snow flurries continued into the afternoon.

Conditions

Roads were melting almost right away. Pavement conditions were warmer than expected at 4 AM 2/4/19. Rain and snow continued to fall into the morning hours. The temps fell all morning and into the afternoon. The salt was working where placed, just not melting away from where it was placed. The winds picked up and with the falling temps the blowing snow started to stick to the road and freeze.

Road	Road Temp	Date	Time	Air Temp
Hwy 6	19	2\4\19	4:00 AM	17
Hwy 371	15	2\4\19	8:00 AM	12
Hwy 371	11	2\5\19	4:00 PM	4
Hwy 6	9	2\5\19	4:00 PM	4

Date	High	Low
2/2/2019	29	7
2/3/2019	26	20
2/4/2019	20	-4
2/5/2019	6	-8
2/6/2019	18	8

Summary

Roads were melting until the afternoon on 2/4. Strong winds caused blowing snow to catch, stick and freeze to the road, causing black ice. The roads freeze dried in most areas overnight and began to melt again in the morning on 2/5. The rainfall and falling temps along with high winds later created areas of black ice and made it difficult to get the roads in better shape sooner. CSAH 2 east of Pine Center had blowing snow issues and did not achieve a bare wheel path goal until 11AM on 2/5, 2 hours after the goal.

Decisions Made

Start plowing at 4 a.m. on 2/4 and apply treated salt. Have the plows turn around and plow again on 2/4

Lessons Learned

Rain, snow and wind with falling temps created a challenge for us to keep the roads from refreezing.

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 Not Met	18 Hr.
Priority 2 Met	48 hr.