

CROW WING COUNTY

October 21, 2020 Snow Event #7 - 2020 - 1

Reported Event Conditions

Date: 10/21/2020
Event No: #7-2020-1
Begin Time: 10/21/20 5AM
End Time: 10/21/20 12AM
Weather: Snow
Precipitation: 3"
Temperature: 28\33
Wind: 5-15 MPH

Event Costs

| | |
|----------------|----------|
| Salt | \$9,433 |
| Sand | \$0 |
| Brine | \$1,729 |
| Equipment/Fuel | \$17,545 |
| Personnel Reg. | \$6,852 |
| Personnel OT | \$1,636 |
| Total | \$37,195 |
| Cost Mile | \$66 |
| Season Total: | \$36,505 |

Priority By Route

Priority 1

% Target 1A Met: 86%
% Target 1B Met: 100%

Priority 2

% Target 2A Met: 73%
% Target 2B Met: 100%

Priority 3

% Target 3A Met: 78%

— MnDOT Highway

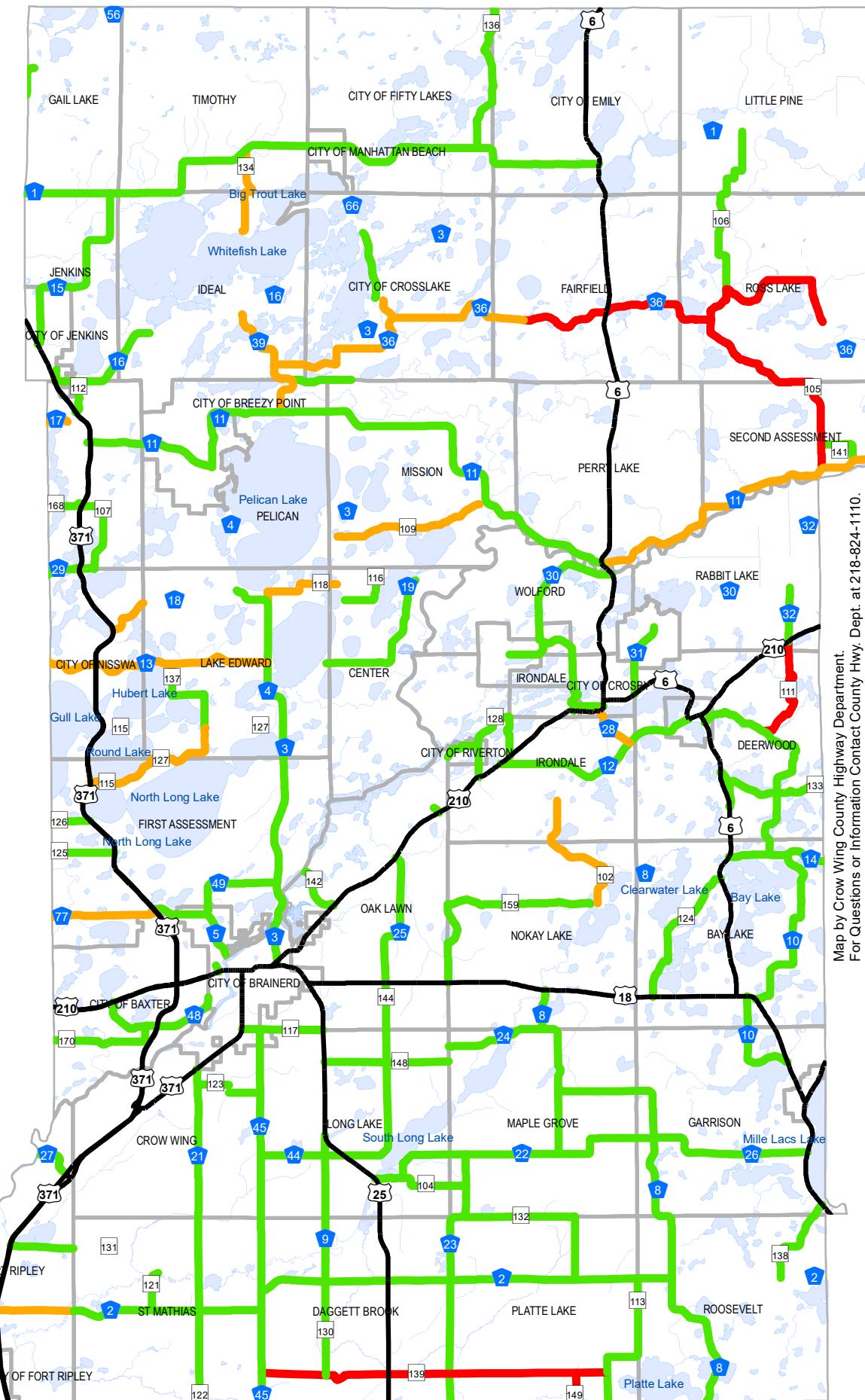
Route Priority

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

Route Target

- Target Achieved
- Target Partly Achieved
- Target Not Achieved

Report Date: 10/29/2020



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.

2020/2021 Summary For Snow Event #7 - 2020 - 1

Date 10-20-20

| Salt Tons | Salt \$ | Sand Tons | Sand \$ | Brine gal | Brine \$ | Mat. Total | Equip \$ | Reg. Personnel | OT \$ |
|-----------|---------|-----------|---------|-----------|----------|------------|----------|----------------|---------|
| 103.66 | \$9,433 | 0 | \$0 | 2620 | \$1,729 | \$11,162 | \$17,545 | \$6,852.00 | \$1,636 |

Total \$37,195

256 Plow hrs.

\$145 per/hr.

18.29 Man hrs.

\$66 per/CL/mile

\$1.40 per/household for entire County

Forecast

3"- 5" of snow forecasted to fall 10-20-20, ending at 12:00 AM 10-21-20.

Pre Plan

Start plowing at 2 p.m. 10-20-20 and apply 200 lbs. of salt to keep the snow/rain soft as to continues to fall.

Start plowing at 3 a.m. 10-21-20 and apply 200 lbs. of salt to get the roads melting .

Actual Event

Event start: 10/20/2019 12PM

Event ended 10-21-19 12AM

Comments

The timing of the event was difficult. Crews were in working but the snow didn't start impacting traffic until 2 PM on 10-20-20. The plows plowed until 9 PM 10-20-20 and then rested until 3 AM 10-21-20. The event ended at 12 AM 10-21-20, resultting in not meeting many of our plowing targets because of the event ending when our operators needed required rest.

Conditions

Wet snow fell impacting county roads in the afternoon of 10-20-20, through the morning of 10-21-20.

| Road | Road Temp | Date | Time | Air Temp |
|-------|-----------|----------|----------|----------|
| Cr 45 | 38 | 10/20/20 | 11:00 AM | 30 |
| Cr 3 | 32 | 10/21/20 | 4:00 AM | 28 |
| | | | | |
| | | | | |
| | | | | |

| Date | High | Low |
|------------|------|-----|
| 10/19/2020 | 33 | 27 |
| 10/20/2020 | 33 | 29 |
| 10/21/2020 | 34 | 27 |
| | | |
| | | |

Source: weather.com. Monthly Weather. 56401

Summary

Roads cleaned up with minimal salt use. Road temps stayed warm, leading to bare lanes by just scraping the roads the morning of 10-21-20.

Decisions Made

Plows began plowing around 2 PM 10-20-20. They applied 200 lbs of salt to keep the snow melting and sticking to the roads. We ended plowing at 9 PM 10-20-20 for required rest. We began plowing at 3 AM 10-21-20. The roads cleaned up well and by daybreak we sopped applying material because the road surfaces were not slippery after simply plowing.

Lessons Learned

Roads cleaned up well by just plowing. Salt application on 10-20-20 may have been a benfit that prevented the snow from bonding to the road's surface and allowed for quick clean up on 10-21-20.

Goals Met/Not Met

| | Plowing | Goals |
|------------|---------|--------|
| Priority 1 | 86% Met | 6 hr. |
| Priority 2 | 73% Met | 8 hr. |
| Priority 3 | 78% Met | 10 hr. |

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