

Storm Report Instructions (updated 9/9/2024)

For any questions or concerns with the storm reporting system please contact:

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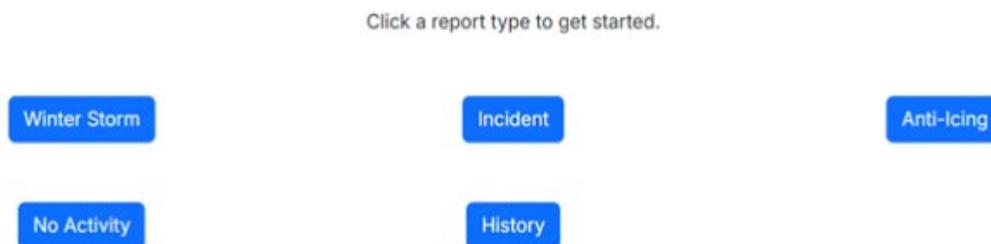
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Please take your time in filling out and compiling information for the storm reports to insure the Department gets as accurate data as possible. The week end for the storm reports is Thursday at Midnight, and reports are due for that week the following Wednesday to allow time to make sure all information is gathered and entered correctly.

A report should be entered every week, even if there was no activity. Please use the No Activity tab to establish there were no events/incidents that week.

Each Winter Storm/Incident/Anti-Icing event should be logged separately according to the guidelines below:

Here is the menu of options you will see once you enter the Winter Report System:



Winter Storm: *This will be filled out when there is a freezing precipitation event that causes forces to go out and clear the road way to make it safe for the traveling public. Please see step by step instructions below for filling out a Winter Storm Report starting on page 3.*

- *It is possible to have more than one storm/incident in a single day. For this to happen, precipitation must have ceased for at least four hours before starting again. When precipitation stops for less than four hours, it will be considered the same event. But when it stops for four or more hours, it will be considered two events, even when crews are still cleaning up after the first event. (SEE FIGURE 1.1 below for examples)*
- *When an incident happens simultaneously with a storm, include all the labor, equipment, and materials in the storm.*
- *No maintenance that is conducted, by agreement, outside the traveled way should be included on the storm reports. This includes parking lanes, curb and gutter, sidewalks, sidewalks on bridges, and drainage facilities.*

- Cleanup immediately after a storm, during the same working period, shall be included in the storm report
- Storms that happen simultaneously in different locations of a county shall be combined into one storm.

Incident: This report is to be filled out when forces are required, that isn't done in the same shift of a winter storm. If clean-up of a storm is done the following day after a storm ends, this would require an incident report to be filled out.

- Options to choose: Drifting, Blowing Snow, Frost, Bridge Decks, Clean-up of storm the following day, Ice, Lake Effect.

Anti-icing: This is when liquids (i.e. NaCl brine) are sprayed on the roadway out ahead of the storm to keep the snow/ice from bonding with the pavement so can plow it off quickly and with less effort.

- Each anti-icing operation shall be logged and recorded on a separate anti-icing form.
- Anti-icing can be conducted concurrently with both storms and incidents and should be kept separate

No Activity: This tab should be used if there were no storms/incidents/anti-icing activities. Just need to select the week you are in and confirm there was no activity that week.

Please see Figure 1.1 on next page for examples of when separate Winter Storm/Incidents/Anti-icing reports should be filled out.

*****Also see below for step by step instructions for using the Wistransportal system for Winter Storm Reporting on State Highways along with a WINTER SCENARIO EXAMPLE AT THE END.*****

*****Instructions on how to edit an existing report and how to run reports can also be found at the end of this document on pages 13 and 14*****

Figure 1.1 – Winter Reporting Examples

TIME											Comments	
6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00		
		INCIDENT										COMBINE INTO (1) INCIDENT REPORT
					INCIDENT							
		STORM										COMBINE INTO (1) WINTER STORM REPORT
					INCIDENT							
		INCIDENT										SEPARATE REPORTS: (1) INCIDENT REPORT & (1) ANTI-ICING REPORT
					ANTI-ICING							
		ANTI-ICING										COMBINE OR SEPARATE IN ANTI-ICING REPORT(S)
					ANTI-ICING							
		INCIDENT										STOP INCIDENT WHEN STORM BEGINS, AND CREATE WINTER STORM REPORT: (1) INCIDENT REPORT & (1) WINTER STORM REPORT
					STORM							
		STORM										COMBINE INTO (1) WINTER STORM REPORT
					STORM							
		STORM										COMBINE INTO (1) WINTER STORM REPORT, < 4 HRs BETWEEN STORMS
					STORM							
		STORM										(2) SEPARATE WINTER STORM REPORTS, ≥ 4 HRs BETWEEN STORMS
							STORM					
		STORM		CLEAN-UP								INCLUDE CLEAN-UP IN FIRST STORM. START NEW REPORT WHEN SECOND STORM BEGINS: (2) WINTER STORM REPORTS
							STORM					
		STORM		CLEAN-UP								INCLUDE FIRST CLEAN-UP WITH FIRST STORM. SECOND CLEAN-UP IS REPORTED AS A SEPARATE INCIDENT REPORT
								CLEAN-UP				

Logging in to Wistransportal System for Storm Report:

- Go to the website: <http://transportal.cee.wisc.edu/>
- Click on Storm Report on right hand side under quick links
- If you haven't already registered on site, click on User Account Request Form and fill out relevant information: <https://transportal.cee.wisc.edu/forms/secure/storm-request.pl>
- Once this is completed, you will have the ability to enter storm reports for a designated county(s)

Entering a Winter Storm Report

- Click on Storm Report => Winter Storm Report System
- Select County from Drop down menu, click "Submit".

- Select the **Winter Storm** Tab
- Winter Storm Report Form will appear. This will need to be filled out, see instructions/explanations below

Weather:

Storm start: *Enter the date and approximate time that the precipitation started anywhere in the county to the nearest half hour. Use whatever information is available (State Patrol, sheriff, patrols) to get the best estimate of when the precipitation began. The **rule of thumb** to remember is that regardless of what operation is commencing the **Storm Start** time is the time the snow or freezing precipitation began falling.*

*Example: If it is **raining** and it changes to freezing precipitation, the Storm Start time is when the precipitation begins to freeze, **not** when the rain started. We typically do not send out forces for rain events.*

Storm end: *Similar to storm start. Enter the date and approximate time the snow or freezing precipitation ended in the county to the nearest half hour.*

Pavement temperature in degrees – Fahrenheit: *(at time crew went out and then came in). Enter the approximate pavement temperature as determined from the nearest RWIS site or a vehicle-mounted infrared device, at the time the de-icing/anti-icing crew went out/came in for a storm, incident, or anti-icing.*

Air temperature in degrees – Fahrenheit: *(at time crew went out and then came in). Enter the approximate air temperature as determined from the nearest RWIS site or a vehicle-mounted infrared device, at the time the de-icing crew went out/came in for a storm.*

Type of precipitation: *Check each box that applies. Drifting is isolated, blowing snow is widespread.*

Average Snow Amount: *Enter a ballpark estimate of the average snow amount that you had to react to, rounded to the nearest tenth of an inch. By definition of a Storm there should be something falling from the sky. With that said, the **Average Snow Amount** should never be ZERO. If you had a non-measurable event such as **Sleet**, **Drizzle**, or **Freezing Rain** enter **0.1** as the average.*

MDSS Forecast accuracy: *If MDSS was not used, please select “Not used” in the drop-down box. If it was used, select how accurate the forecast was, then another menu will populate to select how accurate the treatment recommendation was.*

Performance:

Pavement bare/wet: Enter the date and approximate time that “ALL of your 18-hour or 24-hour highways depending on which group you’re assigned to (See list below) were in bare/wet condition, to the nearest half hour. Check the “Never bare/wet” box if the roadways in your assigned category were not bare/wet prior to the start of the next storm. Check “Always Bare/wet” if the roadways were bare/wet the entire time your crews were out. If your highways are primarily Category 3-5 according to [HMM Guideline 6-15-05](#) consider them bare/wet when they meet the descriptions in this guideline.

- **Counties to report bare/wet conditions for only their 24-hour highways:**
Brown, Chippewa, Columbia, Dane, Dodge, Door, Dunn, Eau Claire, Fond du Lac, Grant, Iowa, Jackson, Jefferson, Juneau, Kenosha, La Crosse, Manitowoc, Marathon, Marquette, Milwaukee, Monroe, Oconto, Outagamie, Ozaukee, Portage, Racine, Rock, Sauk, Shawano, Sheboygan, St. Croix, Vernon, Walworth, Washington, Waukesha, Waupaca, Waushara, and Winnebago
- **Counties to report bare/wet conditions for only their 18-hour highways:**
Adams, Ashland, Barron, Bayfield, Buffalo, Burnett, Calumet, Clark, Crawford, Douglas, Florence, Forest, Green, Green Lake, Iron, Kewaunee, Lafayette, Langlade, Lincoln, Marinette, Menominee, Oneida, Pepin, Pierce, Polk, Price, Richland, Rusk, Sawyer, Taylor, Trempealeau, Vilas, Washburn, and Wood.

Equipment:

Total number of de-icing units used: Enter the total number of different deicing units/pieces of equipment used to fight an event/storm.

If an operator goes out in one truck in the morning and it breaks down so that he goes out in another truck in the afternoon, then this counts as 1 unit. If an operator goes out in a plow in the morning and a grader in the afternoon, then this counts as 2 units.

Total de-icing unit hours: Enter the hours, rounded to the nearest whole number, of the units that were used after the snow or freezing precipitation had begun falling.

Labor:

Crew out: Enter the date and time the first patrolperson went out to react to a freezing precipitation event, address an incident, or anti-icing operation, to the nearest half hour.

Crew in: Enter the date and time that the last patrolperson returned, to the nearest half hour.

Total regular de-icing hours: Enter the regular hours, rounded to the nearest whole number, for all operators used for de-icing during a storm.

Total overtime de-icing hours: Enter the overtime hours, rounded to the nearest whole number, for all operators used for de-icing during a storm.

Materials:

Total salt used (in tons): Enter the total salt used by all patrol sections in the county, rounded to the nearest ton.

Total ClearLane used (in ton): Enter total used (tons) in entire county, if any at all

Total ThawRox used (in ton): Enter total used (tons) in entire county, if any at all

Total sand used (in cubic yards): Enter the total sand used by all patrol sections in the county, rounded to the nearest cubic yard.

Total dry calcium chloride (in tons): Enter the total calcium chloride used by all patrol sections in the county, rounded to the nearest ton.

Salt prewetting agents (gal): Select the de-icing agent used to prewet salt from the pull-down box. Enter the appropriate amount used in gallons.

Example: If you were using an 90/10 mix of salt brine/calcium chloride mixture to pre-wet rock salt coming off the truck and used 2,000 gallons total along with dry rock salt (entered in the total salt used) The selection would look like this for the liquids used:

Salt Prewetting Agents: [\(enter values for all agents used\)](#)

Agent 1:	<input type="text" value="Salt Brine (liquid NaCl)"/>	▼	<input type="text" value="1800"/>	gal.
Agent 2:	<input type="text" value="Calcium Chloride (CaCl2)"/>	▼	<input type="text" value="200"/>	gal.
Agent 3:	<input type="text"/>	▼	<input type="text"/>	gal.
Agent 4:	<input type="text"/>	▼	<input type="text"/>	gal.

Again, this tab is used for the application of using liquid along with rock salt on a given route.

Sand prewetting agents (gal): Select the de-icing agent used to prewet sand from the pull-down box. Enter the appropriate amount used in gallons.

DLA (Direct Liquid Application) Agents: Select the de-icing agent used from the pull-down box. Enter the appropriate amount used in gallons.

****This is to be used for counties using mostly liquid routes. Which means only brine/liquids are being used to de-ice the pavement (No rock salt or very minimal rock salt is being used)**

Example: On a Mostly Liquid Route only there was 3,000 gallons of liquid used. The mixture used was an 90/10 mixture of salt brine and BEET HEET (Ag Product). The selection would look like below:

Direct Liquid Application (DLA) Agents: [\(enter values for all agents used\)](#)

Agent 1:	<input type="text" value="Sodium chloride brine"/>	<input type="text" value="2700"/>	gal.
Agent 2:	<input type="text" value="Agricultural byproduct"/>	<input type="text" value="300"/>	gal.
Agent 3:	<input type="text"/>	<input type="text"/>	gal.
Agent 4:	<input type="text"/>	<input type="text"/>	gal.

****AGAIN, this section is only to be used for Mostly Liquid Routes**

Entering a Winter Incident Report

- This report is to be filled out when a winter incident occurs (example: A winter storm ended over a day ago, but high winds caused drifting snow on the state highway and forces were sent out to clear the road way. All relevant information must be entered in this form.) All options to choose from: drifting snow, blowing snow, frost, bridge decks, clean-up, ice, lake effect.
- The only selection that is different the Winter Storm Report form is the Type of incident(s) that caused forces need.
- Use the incident report tab in the main menu after you select your county

Entering an Anti-Icing Report

- This report is to be filled out when forces are sent out ahead of an incoming storm to put down liquids to help keep the snow from bonding with the pavement.
- Use the anti-icing tab in the main menu after you select your county.

Entering a No Activity Report:

- This report is to be used if there were no storms/incidents/anti-icing activities during a given week
- Just need to select the week that no activity took place and hit "Submit)

Example of a Winter Storm causing all (3) forms to be filled out:

Scenario: It is December 4th, and a forecasted snowstorm was to come through the county the following day, early morning of December 5th, so forces were sent out to anti-ice. The storm did in fact come, starting at 3:00 AM December 5th, causing forces to be called in and went out at 4:00 AM, (9) trucks with pre-wet capabilities and (1) truck on a Mostly Liquid Application route were dispatched out. The storm then stopped at 12:00 PM with a total of 6.2" of snow, the pavement in the county was declared bare/wet at 3:00 PM and all trucks were returned to the shop by 3:30 PM. The day following the storm at 8:00 AM December 6th a report of drifting snow came in due to high winds. To fight this action in the area(s) of reports (4) plows were dispatched at 8:30 AM to clear the road way, they then returned at 1:30 PM.

Anti-Icing Information:

- (3) Anti-icing trucks were sent out at 8:00 am and returned at 1:00 PM with a pavement temperature of 25°F. All hours were regular time, totaling 15 hours.
- In total 4,500 gallons of salt brine was used
- MDSS was used to forecast and once the storm was complete it was a good forecast, however the treatment recommendation was not used

Winter Storm Information:

- The storm started at 3:00 AM and ended at 12:00 PM totaling 6.2" of dry snow
- The crews left at 4:00 AM, Pave Temp: 19°F, Air Temp 22°F
- In all (10) trucks were used to clear the snow, totaling 115 equipment hours
 - In which 80 hours were regular time and 35 hours of overtime
- In total the (9) prewetting trucks used 400 tons of rock salt and 4,000 gallons of salt brine. The (1) Direct liquid route truck used 6,500 gallons of 90/10 sodium and calcium blend.
- Bare/wet declared at 3:00 PM
- The crews returned at 3:30 PM, Pave Temp: 20°F, Air Temp 26°F
- MDSS forecast was used and was good, so used the treatment recommendation which was good as well

Winter Incident Information

- Drifting snow caused (4) plows to be sent out at 8:30 AM and returned at 1:30 PM, the pavement temp was 28°F
- The (4) plows totaled up to 20 hours, all on regular time.
- 50 tons of salt and 500 gallons of salt brine for prewetting was used

****Below are examples of the filled-out reports from the above information taken in for the Anti-icing, winter storm, and winter incidents that occurred.****

Filled out Anti-Icing Report:

Weather:

Pavement Temperature: (at crew out time)

Type of Precipitation: (check all that apply or check routine)

Wet Snow Dry Snow Freezing Rain Sleet Frost Routine

MDSS:

Rate Accuracy of MDSS Weather Forecast:

Rate Accuracy of MDSS Treatment Recommendation:

Equipment:

Total Anti-Icing Units Used:

Total Anti-Icing Unit Hours:

Labor:

Crew Out:

Crew In:

Total Regular Anti-Icing Hours:

Total Overtime Anti-Icing Hours:

Materials:

Anti-Icing Agents: (enter values for all agents used)

Agent 1: Salt Brine (liquid NaCl)

gal.

Agent 2:

gal.

Agent 3:

gal.

Agent 4:

gal.

Comments:

Anti-iced bridges and approaches as well as problem areas around the county. This was anti-icing application #8 of the season

Reset Form

Submit Form

Filled out Winter Storm Report (1/2):

Weather:

Storm Start:	<input type="text" value="12/05/2023 03:00 AM"/>	<input type="checkbox"/>
Storm End:	<input type="text" value="12/05/2023 12:00 PM"/>	<input type="checkbox"/>
Pavement Temperature: (at crew out time)	<input type="text" value="19"/>	
Air Temperature: (at crew out time)	<input type="text" value="22"/>	
Pavement Temperature: (at crew in time)	<input type="text" value="20"/>	
Air Temperature: (at crew in time)	<input type="text" value="26"/>	
Type of Precipitation: (check all that apply)	<input type="checkbox"/> Wet Snow <input checked="" type="checkbox"/> Dry Snow <input type="checkbox"/> Freezing Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Lake Effect	
Average Snow Amount: (in inches)	<input type="text" value="6.2"/>	

MDSS:

Rate Accuracy of MDSS Weather Forecast:	<input type="text" value="Good"/>	<input type="checkbox"/>
Rate Accuracy of MDSS Treatment Recommendation:	<input type="text" value="Good"/>	<input type="checkbox"/>

Performance:

Pavement Bare/Wet At:	<input type="text" value="12/05/2023 03:00 PM"/>	<input type="checkbox"/>
	<input type="checkbox"/> Never Bare/Wet <input type="checkbox"/> Always Bare/Wet	

Equipment:

Total De-Icing Units Used:	<input type="text" value="10"/>
Total De-Icing Unit Hours:	<input type="text" value="115"/>

Labor:

Crew Out:	<input type="text" value="12/05/2023 04:00 AM"/>	<input type="checkbox"/>
Crew In:	<input type="text" value="12/05/2023 03:30 PM"/>	<input type="checkbox"/>
Total Regular De-Icing Hours:	<input type="text" value="80"/>	
Total Overtime De-Icing Hours:	<input type="text" value="35"/>	

Filled out Winter Storm Report (2/2):

Materials:

Total Salt Used: (in tons)	<input type="text" value="400"/>
Total ClearLane Used: (in tons)	<input type="text" value="0"/>
Total ThawRox Used: (in tons)	<input type="text" value="0"/>
Total Sand Used: (cubic yds)	<input type="text" value="0"/>
Total Dry Calcium Chloride Used: (in tons)	<input type="text" value="0.0"/>

Salt Prewetting Agents: (enter values for all agents used)

Agent 1:	<input type="text" value="Salt Brine (liquid NaCl)"/>	<input type="text" value="4000"/>	gal.
Agent 2:	<input type="text"/>	<input type="text"/>	gal.
Agent 3:	<input type="text"/>	<input type="text"/>	gal.
Agent 4:	<input type="text"/>	<input type="text"/>	gal.

Sand Prewetting Agents: (enter values for all agents used)

Agent 1:	<input type="text"/>	<input type="text"/>	gal.
Agent 2:	<input type="text"/>	<input type="text"/>	gal.
Agent 3:	<input type="text"/>	<input type="text"/>	gal.
Agent 4:	<input type="text"/>	<input type="text"/>	gal.

Direct Liquid Application (DLA) Agents: (enter values for all agents used)

Agent 1:	<input type="text" value="Sodium chloride brine"/>	<input type="text" value="5850"/>	gal.
Agent 2:	<input type="text" value="Calcium chloride brine or blend"/>	<input type="text" value="650"/>	gal.
Agent 3:	<input type="text"/>	<input type="text"/>	gal.
Agent 4:	<input type="text"/>	<input type="text"/>	gal.

Comments:

Snow storm hit the county pretty evenly throughout

Filled out Winter Incident Report:

Weather:

Pavement Temperature: (at crew out time)

28

Type of Precipitation: (check all that apply)

Drifting Blowing Snow Frost Bridge Decks Clean-Up Ice Lake Effect

Equipment:

Total De-icing Units Used:

4

Total De-icing Unit Hours:

20

Labor:

Crew Out:

12/06/2023 08:30 AM

Crew In:

12/06/2023 01:30 PM

Total Regular De-icing Hours:

20

Total Overtime De-icing Hours:

0

Materials:

Total Salt Used: (in tons)

50

Total ClearLane Used: (in tons)

0

Total ThawRox Used: (in tons)

0

Total Sand Used: (cubic yds)

0

Total Dry Calcium Chloride Used: (in tons)

0.0

Salt Prewetting Agents: (enter values for all agents used)

Agent 1:

Salt Brine (liquid NaCl)

500

gal.

Agent 2:

gal.

Agent 3:

gal.

Agent 4:

gal.

Sand Prewetting Agents: (enter values for all agents used)

Agent 1:

gal.

Agent 2:

gal.

Agent 3:

gal.

Agent 4:

gal.

Direct Liquid Application (DLA) Agents: (enter values for all agents used)

Agent 1:

gal.

Agent 2:

gal.

Agent 3:

gal.

Agent 4:

gal.

Comments:

Blowing and Drifting snow on STH 2 and STH 63

Editing an Already Submitted Report

- Click on “History” tab along the top of the screen.
- Find the report are looking to edit and click “view” along the right side of the report.

County	Report Type	Week End Num	Submitted On	Submitted By
Iron (26)	Winter Storm	Week 6 (12/07/2023)	09/10/2024 08:47 AM	dotcxc View

- Once in report, gives the option to click “Edit” at the top

Winter Storm Submission
Submitted by dotcxc on 09/10/2024 08:47 AM
[Edit](#) | [Delete](#)

- Once “Edit” is selected, can then edit any values of that report that need to be changed. Then can click “Submit Form”. The edits have then been made.
- Then to view edit history, can scroll to the bottom of that report to view who made edits and when. It also gives the ability to look back at the original report so can see what changes were made.

Winter Storm Submission History

Submitted By	Report Type	Submitted On	Status	
dotcxc	Winter Storm	09/10/2024 08:58 AM	Current	View
dotcxc	Winter Storm	09/10/2024 08:47 AM	Historic	View

Running Reports

- Click on “Weekly Reports” tab along the top of the screen.
- This goes to a menu to be able to select which type of report would like to run.
 - **Weekly Summary**: Gives a recap statewide of data reported per the storm reports for a given week.
 - **Weekly Salt/LM Map**: Shows a map of the state of the salt used during a given week in each county per the storm reports.
 - **Summary to Date**: Gives a recap statewide of all the storm reports turned in to that given point in time.
 - **Summary Map**: Gives a recap of cost, salt use, and winter severity index.
 - **Missing Reports**: Shows which counties are missing reports for any given week.
 - **Events Summary**: Gives a summary of all the events that have occurred in each county.
 - **Weekly Submittals**: Shows all the winter storm report data that has been entered in

- Then are given the option to select the “Season Year” in which can select the season are looking to get data for.
- Then are able to select the “Week End Number” that gives you an option to look at just that week specifically are a total of the season up until that point.
- Then once all selections are made, click on “Download Report” and the report will show up in you download folder and can open the document.
- An example is if are looking for the summary to date report for the 23-24 winter season through week 14 it would look like below:

Weekly Reports

Report Type:	Season Year:	Week End Number:
Summary to Date	2023-2024	Week 14 (02/01/2024)

[Download CSV](#) [Download Report](#)