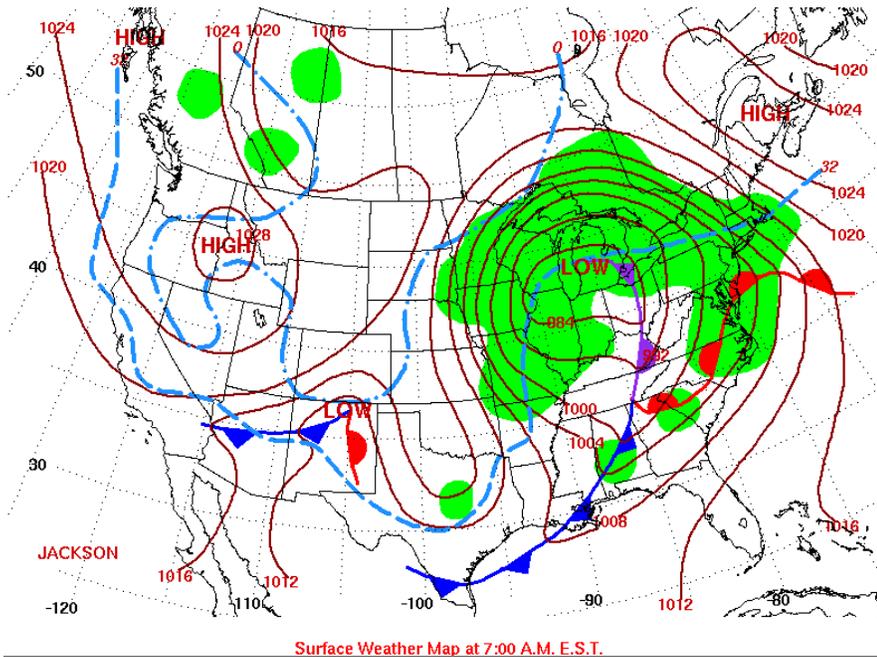




INFORMATION



Forecasts

Using a weather forecast is certainly vital to best management practices for salt use. In a survey done by SICOP regarding the top 10 issues that make up a world-class snow and ice program accurate forecasting is one of the top issues.

In nearly every research request better forecasting is always a major issue. Agencies use weather forecasting as a tool to help in their decision making process. Weather forecasting should always be seen as a prediction and predictions are always subject to change.

Weather forecasting has certainly become increasingly better. Weather forecasters have better tools and better models than ever before. There are many sources for weather forecasts both free and value added services that an agency can choose to employ. There are also many different types of forecasts that agencies can use to help make decisions.

Perhaps one of the most critical components of a forecast that an agency needs to know is the beginning time of any event. This is critical to the planning of a response and the staffing for an event.

Other extremely important components will be the type of precipitation and the pavement temperatures. Wind speeds are also critical because they can lead to blowing snow and the duration of the event is also very important. Another critical component in forecasting is the frequency of events.

The forecast tells us what type of storm we are dealing with. When we combine the forecast with our desired levels of service, we know what we need to do to achieve our goals. The forecast is critical.

An ideal winter operations forecast might look something like this.

Detailed start and end times for precipitation (ideally to an accuracy of 15 minutes).

Detailed information on precipitation types within a storm, with information on both where given precipitation types will be at given times, and when precipitation types will change at given locations.

Detailed pavement temperature forecasts.

Detailed information on post-storm weather that could have operational impacts (like wind speed increasing, or pavement temperatures dropping).

There may well be other factors that you would like to see in your forecast, but at this point, it is probably worth remembering the wise words of Jagger and Richards (1968) “You can’t always get what you want.”

But still, if you have a detailed list of what you need to get from your forecast, well you just might find, you get what you need...

The numbers: A good forecast is absolutely critical for winter operations, especially if we want to be pro-active. Without it we are, in essence, assuming every winter storm is the same, and we know that is not the case.

The Alternatives: To get a good forecast, you are likely to need to contract for a Value-Added Meteorological Service (VAMS). The National Weather Service was not mandated to provide road related forecasts – their mandate was focused on aviation weather, and if your truck is flying, you have problems that will not be helped by a forecast.

The needs: A good contract is a must for a satisfactory forecast. The Aurora pooled fund consortium (<http://www.aurora-program.org/>) have completed a number of projects that detail how good forecasting contracts can be obtained (see <http://www.aurora-program.org/projects.cfm> especially). It is also important to develop an ongoing relationship with your forecaster. Most contracts allow for daily discussions between the agency and the forecast provider, yet anecdotally most agencies do not make use of this feature. When agencies do use this feature, the end result tends to be an improved forecast experience that more fully meets the needs of the agency.

