



LET IT SNOW

NDOT Dresses for Winter Weather Duty

Winter weather can dress Nevada roads in a sheet of water or snow. And, as every year, Nevada Department of Transportation crews are suiting up and blazing trails to safer winter roads with effective, money-saving expertise and technology.

DISTRICT 1. *Water and Snow.*

In District 1, the fight begins in Mt. Charleston, where sanders and snow blowers stand ready for the nearly two feet of snow needing to be cleared up to 10 times each year. Alamo, Panaca and Mountain Springs also have to be cleared.

And, there are other natural concerns in the district. "Flooding is what gets us. It's desert country, so it all runs down," Maintenance Engineer Joe Martinez said. While he credits a strong drainage infrastructure, Martinez explained that flood waters still have to run off. "The main thing is to close roads and clean up afterwards," he stated, crediting crews for safe, efficient water removal and traffic control.



Maintenance Supervisor Tom Lumpkin tests salt content of brine.

DISTRICT 2. *Ice and Snow.*

Across District 2, lines and leaks have been repaired, road brine and salt produced and snow equipment moved in place for winter.

Rotary snowplows, some with 12-foot-high cutting edges, will be used on the nearly 9,000-foot Mt. Rose Summit, as well



Snow plows and sander trucks line up for winter duty.

as Spooner Summit, Kingsbury Grade and Virginia City. Other plows are multi-use workhorses allowing crews to plow in winter and haul in summer.

Another tool is brine manufactured in-house at a cost of just four cents per pound of salt used. When mixed with a 10% salt and 90% sand blend, the brine makes heavier road dirt that doesn't easily bounce off roadways. "If you can control spread patterns, you reduce your salt and sand usage," said Highway Maintenance Supervisor Tom Lumpkin.

DISTRICT 3. *Wind and Snow.*

Meanwhile, amid some of the state's worst winter weather, District 3 tucks magnesium chloride into its winter arsenal. The solution is sprayed from six 1,800-gallon truck bed tanks to slow roadway ice formation.

Something new is a brown sugar-like mineralized de-icer. After testing in 2004, the de-icer was mixed with sand and effectively used last winter to melt ice at temperatures to 5 degrees Fahrenheit. "Once we finish anti-icing before a storm," Highway Maintenance Manager Mickey Dugger explained, "we put sanders and plows on the trucks and they become snow plows."

Atop Emigrant, Pequop, Adobe, Lamoille and other summits, the district's nearly 120 snowplows will then work to efficiently clear roads, while four rotary snowplows battle blowing snow that often covers winter roads.