

Day 2 Weather Scenario Messaging Activity - Utah

Wasatch Front Downslope Wind Event

December 1, 2011

Background:

Historically, strong easterly downslope wind events have impacted the northern Wasatch Front on average every few years. While most events remain modest with winds gusting into the 60-70 mph range for several hours, infrequently very strong events occur in which wind speeds are much higher and for longer duration. The strongest events occurred in 1983 and 1999, which produced winds as high as 113 mph along the northern Wasatch Front for durations in excess of 12 hours. Such events toppled semis along I-15 north of Salt Lake City, overturned Union Pacific train cars, disrupted air travel, and caused widespread damage to personal property. Total losses have exceeded \$68 million with these stronger events.

Forecast/Timeline:

Synoptic scale forecasts began to depict the potential for an ideal set up for downslope winds beginning on Saturday, November 26. Model continuity locked into high wind potential on Sunday, November 27 and the Salt Lake City WFO began to message the threat of a downslope wind event along the Wasatch Front (Hazardous Weather Outlooks). Daily coordination calls began with UDOTs private sector meteorologists moving forward. A High Wind Watch was issued on Tuesday, November 29 for wind gusts in excess of 75 mph. A High Wind Warning was issued on Wednesday, November 30 for winds in excess of 80 mph beginning late Wednesday night and continuing through Thursday night.

Impact Statements: (24 hours out, continued 12 hours out)

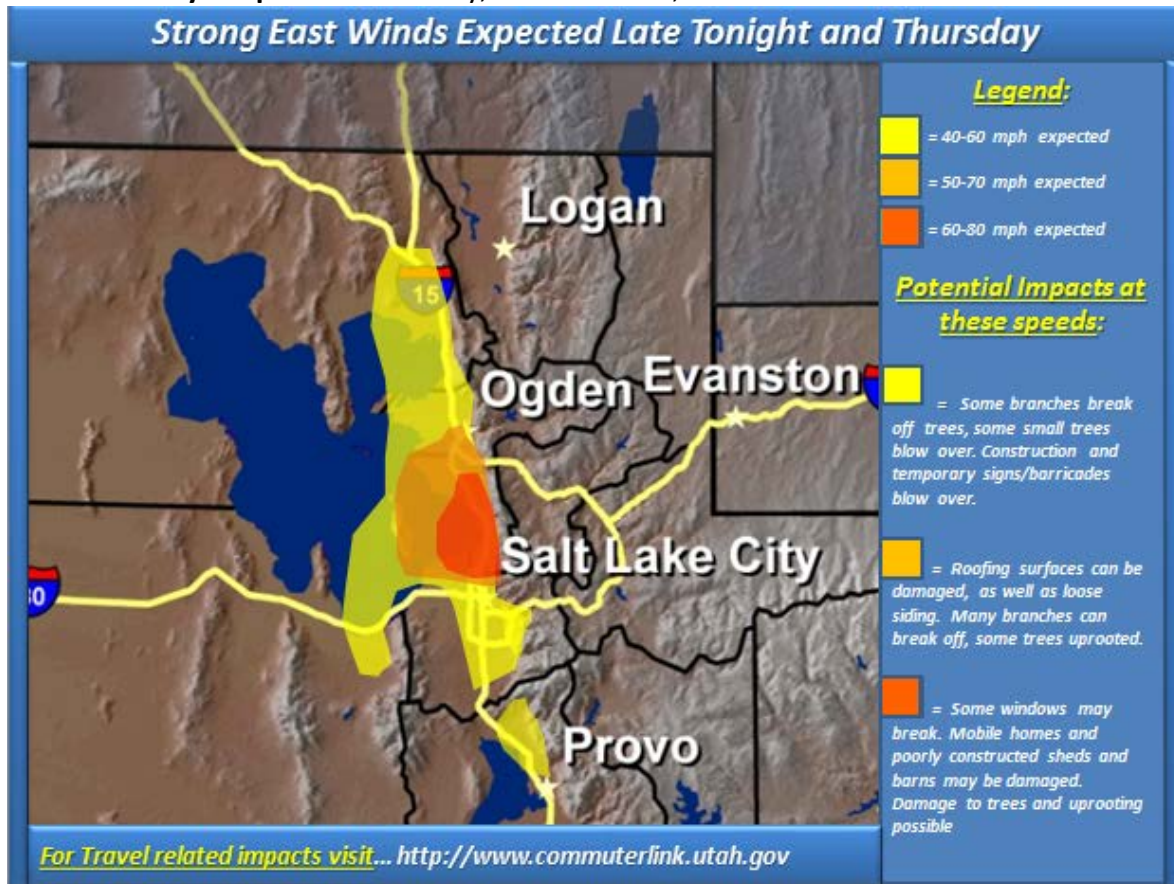
- “This is a potentially dangerous situation”
- “High Confidence forecast” wording used.
- “Expected to be similar to events that occurred in 1983, and 1999”

WFO SLC Decision Support: Full suite beginning Tuesday November, 29.

Dissemination Platforms:	Partnering Agencies:
<ul style="list-style-type: none">• NWS Chat (NWS/UDOT)• Facebook (NWS)• Twitter (NWS/UDOT)• VMS (UDOT)• Web Graphics and Articulate Briefings (NWS/UDOT)• Phone/In Person Briefings (NWS/UDOT)• Legacy Products (NWS/UDOT)	<ul style="list-style-type: none">• UDOT/Wxnet• Local/State Emergency Managers/Utah Highway Patrol• Union Pacific Railroad• UTA Frontrunner Commuter Rail• CWSU ZLC (for Salt Lake International Airoport)• Media• Public

Population Demographics:
<ul style="list-style-type: none">• Box Elder County - 52,097• Weber County – 243,645• Davis County – 336,043• Salt Lake County – 1.107 million• Utah County – 575,205

Weather Story Graphic: Wednesday, November 30, 2011



Transportation Corridors



UTA Commuter Rail



Union Pacific Railways/County Boundaries

