2014 Winter Events

Florida Division of Emergency Management

Florida Department of Transportation

Florida Highway Patrol

Florida Department of Education

Florida Department of Management Services
January 2014 Winter Storm

CIEM 2014
Tiffany Hersey
Deputy State Meteorologist
Florida Winter Storms

- 3 Ingredients Needed:
  - Surge of Cold Air
  - Track of low pressure system
  - Placement of moist air

- Temperature profile between the surface and 5,000 ft. determines precipitation type

- **Rain**
  - Frozen precipitation melts and reaches the ground as rain.

- **Freezing Rain**
  - Frozen precipitation melts in warm air. Rain falls and freezes on cold surfaces.

- **Sleet**
  - Frozen precipitation melts in shallow warm air. Then refreezes into sleet before reaching the surface.

- **Snow**
  - Snow falls through cold air and reaches the surface.
Sunday January 26, 2014
Winter Storm Watches Issued

Arctic Airmass Returns Tuesday-Wednesday Along with Potential For Wintry Precipitation Impacts

- Chance of wintry mix inland Tuesday, with a chance of snow Tuesday night. Light accumulations cannot be ruled out.
- Chances of wintry mix are better over southern areas and near the coast Tuesday, transitioning to snow Tuesday night and early Wednesday. Best chance of light accumulations.
- An arctic cold front will surge southward into our area late Monday, with cold air staying in place through Wednesday.
- Highs only in the 30s over most areas Tuesday, with lows in the upper teens to mid 20s Tue. night.
- Wintry mix of rain, freezing rain, sleet, and snow possible Tuesday, transitioning to snow Tuesday night.
- Best chance of winter weather impacts will be near the coast.

Winter Storm Warning
Winter Storm Watch

Wintery mix/snow possible Tue-Wed of next week

- Type: A chance of rain, snow, freezing rain or sleet.
- Timing: Late Tuesday into Wednesday morning.
- Although still 4-5 days out, the models are suggesting we could see a pattern favorable for snow, freezing rain, or sleet for much of the Tri-State area with another cold surge next week. The best potential right now would be along and north of a line from Panama City to Tallahassee to Valdosta.
Monday Surface Analysis
January 27, 2014
Thursday
January 30, 2014
January 2014 Winter Storm:

Snow, Sleet, and Freezing Rain Reports
Florida Winter Events

- **November 21, 2006**: Snow fell in parts of Central FL (1st November snow event in the state since 1912)

- **January 2010**: Light snow fell in Jacksonville and Central Florida with flurries as far south as West Palm Beach

- **December 26, 2010**: Sleet/snow mix in Jacksonville with flurries in Central and Northwest Florida.
January 2014 Winter Storm

Mark Thomas, P.E. DME
Chad Williams, P.E. ADME
District 3 Maintenance Office
Approximate DEM Regions Impacted by Wintry Mix

FDOT
District 3 Office
1074 Hwy 90
Chipley, FL 32428
District Three – The District of “2”

Alabama

Central Time Zone

Eastern Time Zone

Georgia

FHP Troop A

NWS Mobile

FHP Troop H

NWS Tallahassee

DEM Region 1

DEM Region 2
Wintery mix/snow possible Tue-Wed of next week

Event:

Type – A chance of cold rain, snow, freezing rain or sleet

Timing – late Tuesday into Wednesday morning

Although still 4-5 days out, the models are suggesting we could see a pattern favorable for snow, freezing rain, or sleet for much of the Tri-State area with another cold surge next week. The best potential right now would be along and north of a line from Panama City to Tallahassee to Valdosta.
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Winter Storm Event – January 28-31 2014

• A major winter storm event resulted in a mixture of freezing rain (with ice accumulation), sleet, and snow across most of the Panhandle between the afternoon of the 28th and morning of the 29th.

• The following took place on January 28, 2014
  ➢ At 1 PM CST, Pensacola was 31°F with freezing rain
  ➢ Pensacola International Airport closed at 9:17 PM and was not scheduled to reopen until late on the 29th.
  ➢ Pensacola received 1.8 in of snow.
  ➢ The Florida Highway Patrol began closing portions of Interstate 10 in the western panhandle.

• On January 29, the Florida Highway Patrol closed 200 miles of Interstate 10 from the Florida-Alabama state line to Jefferson County.
Winter Storm Event – January 28-30 2014

[Map showing sleet/snow on the ground and clouds]

Florida Department of Transportation
Sleet, Freezing Rain, Ice, & Then.....Freezing Fog

• Freezing Fog - 1/31/2014

• Worst fog on 2/12 & 2/13 (Department of Transportation District 3 EOC manned all night)

• Use of Portable VMBs and overhead Dynamic Message Signs throughout District during fog event
Welcome to Florida
The Sunshine State
Lessons Learned

• The FDOT has to do a better job at coordinating all the pieces of the puzzle in order to better manage winter events. (16 counties, 2 FHP Divisions, 2 NWS, 2 adjoining states, 2 time zones, 2 FDOT Districts)

• It would be beneficial to the traveling public for the NWS to continue to issue “Freeze Warnings” to the EM community throughout the winter months
Lessons Learned (Cont.)

• Rain preceding freezing temperatures creates a problem for correct timing of treatment options

• Freezing temperatures typically arrive at all locations at the same time requiring abundant resources

• Benefits would be recognized by Standing Up ESF 1 and 3 with daily teleconferences for weather updates for these “localized” events
Lessons Learned (Cont.)

• A Governor Declared Emergency Order for Winter Events could provide more alternatives to better respond to the needs of an event
• Pre-staging resources will allow for quicker response times
• Air temperatures reported by weather services does not always accurately correspond to bridge deck temperatures
• Traffic counts are not sufficient to keep ice from adhering to roadway surfaces
• Everyone benefits from keeping our roadways open and safe for travel (Visitors, Commerce, Local Agencies)
Where Do We Go From Here

- The FDOT is developing written plans to address the impacts of Winter related weather events.
- The planned activities will center on keeping traffic moving safely along the interstate and barrier island bridges.
- The Department is exploring options which include:
  - In-house resources
  - Amending existing contracts with contractors currently performing maintenance activities
  - Exploring a “pre-event” contacting methodology
Where Do We Go From Here

• Research options related to funding the installation of Roadway Weather Information Stations (RWIS) for timely information
• Research options related to funding additional Permanent Mounted Dynamic Message Boards at bridge structures
• Developing reporting requirements for all parties involved in management of the event
• Developing SOPs for the dissemination of information through the use of Transportation Management Centers (TMC)
QUESTIONS

The District 3 Maintenance Florida DOT Curling team takes a rare opportunity to practice for the Winter Olympics!
LTC Kelly Hildreth
Florida Highway Patrol
Florida Department of Education

School Closings
Sandy Meyer
SERT Operations Chief

Communications: The Way Ahead
Winter Event
Regional / Multi-Regional Strategy Conference Call

Attendees:
National Weather Service (multiple)
FDOT Districts 2 & 3
FHP Troop(s)
ESF 16
Dept of Education - School Closings
Dept of Management Services – Govt Building Closings
Potentially Impacted Counties EM/LE
ESF 14 (Messaging)
ESF 6 (Potential Sheltering)
ESF 18 (Carriers, Hotels, etc)
AL & GA reps
Comms Plan (SLERS, etc)
Questions?
DRAFT Regional Road Closure Decision and Notification Process
(due to widespread severe fog, wildfires or ice conditions)

NWS forecasts regional or multi-regional hazardous conditions for I-10 corridor

FDOT District(s) & FHP Troop(s) confer with NWS (Mobile, Tall & Jax) on timing and extent of potential hazardous impacts on I-10 corridor

FDOT District(s) & FHP Troop(s) confer on need for preventative actions (de-icing, etc) and/or potential for road closure.

FDOT District(s) & FHP Troop(s) coordinate with Local Co EM’s and LE concerning limited PA

NOTE: Both of these will require notification to EOG & Status Report from FDOT w/SWO distro.

FDOT District(s) & FHP Troop(s) confer with FDOT ECO (ESF 1/3 & FHP ECO on need for Regional / Multi-Regional Conference Call

Regional/ Multi-regional PA’s?

No

Yes

FDOT District(s) & FHP Troop(s) confer as to extent of PA and/or need for localized or regional/multi-regional interface

Preventative Actions?

Yes

FDOT District(s) & FHP Troop(s) confer with NWS (Mobile, Tall & Jax) on timing and extent of current hazardous impacts on I-10 corridor and potential re-retry/re-opening strategy

Re-Entry / Re-opening Conference Call
(FDOT ECO ESF 1/3 facilitates)
- NWS (multiple)
- FDOT Districts 2 & 3
- FHP Troop(s)
- ESF 16
- Dept of Education – Closings
- Impacted Counties EM/LE
- ESF 14 (Messaging)
- ESF 6 (Potential Sheltering)
- ESF 18 (Carriers, Hotels, etc)
- AL & GA reps
- Comms plan (SLERS, etc)

Widespread Road Closure occurs?

Yes

Locally managed & coordinate thru local EM/LE, District FDOT and FHP; SWO notified of actions (both Interstate and Local) and distro by SWO to all.

Re-Entry / Re-opening Conference Call
(FDOT ECO ESF 1/3 facilitates)
- NWS (multiple)
- FDOT Districts 2 & 3
- FHP Troop(s)
- ESF 16 (LE matters)
- Dept of Education – School Closings
- Impacted Counties EM/LE
- ESF 14/EOG Comms (Messaging)
- ESF 6 (Sheltering status)
- ESF 18 (Carriers, hotels, etc)
- AL & GA reps
- Comms plan (SLERS, etc)

FDOT Districts/FHP Troops notify SWO of Re-entry / Re-opening status (both regional and Local) – SWO provides notification to all.

No or Local Only

Monitor Conditions & Standard Wx Notifications/Alerts