

# NOAA's National Weather Service

## Serving the Nation's Environmental Forecasting Needs

**Lynn Maximuk  
Regional Director  
National Weather Service  
Central Region Headquarters  
Kansas City, Missouri**

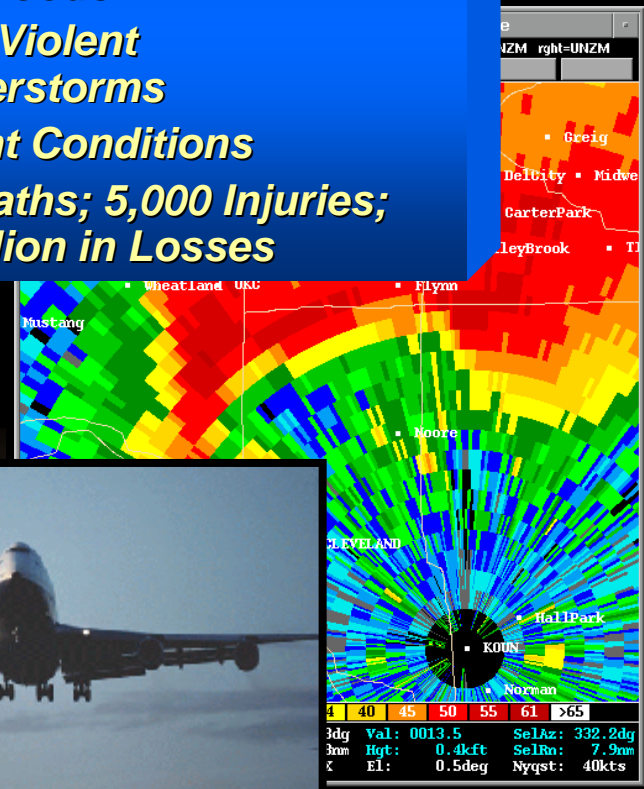
*"America's Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life"*

# NOAA's National Weather Service

- Provide climate, water, weather forecasts and warnings to protect **life** and **property** and enhance the economy
- 76 billion observations
- 1.5 million forecasts
- 50,000 warnings

## A Typical Year Brings:

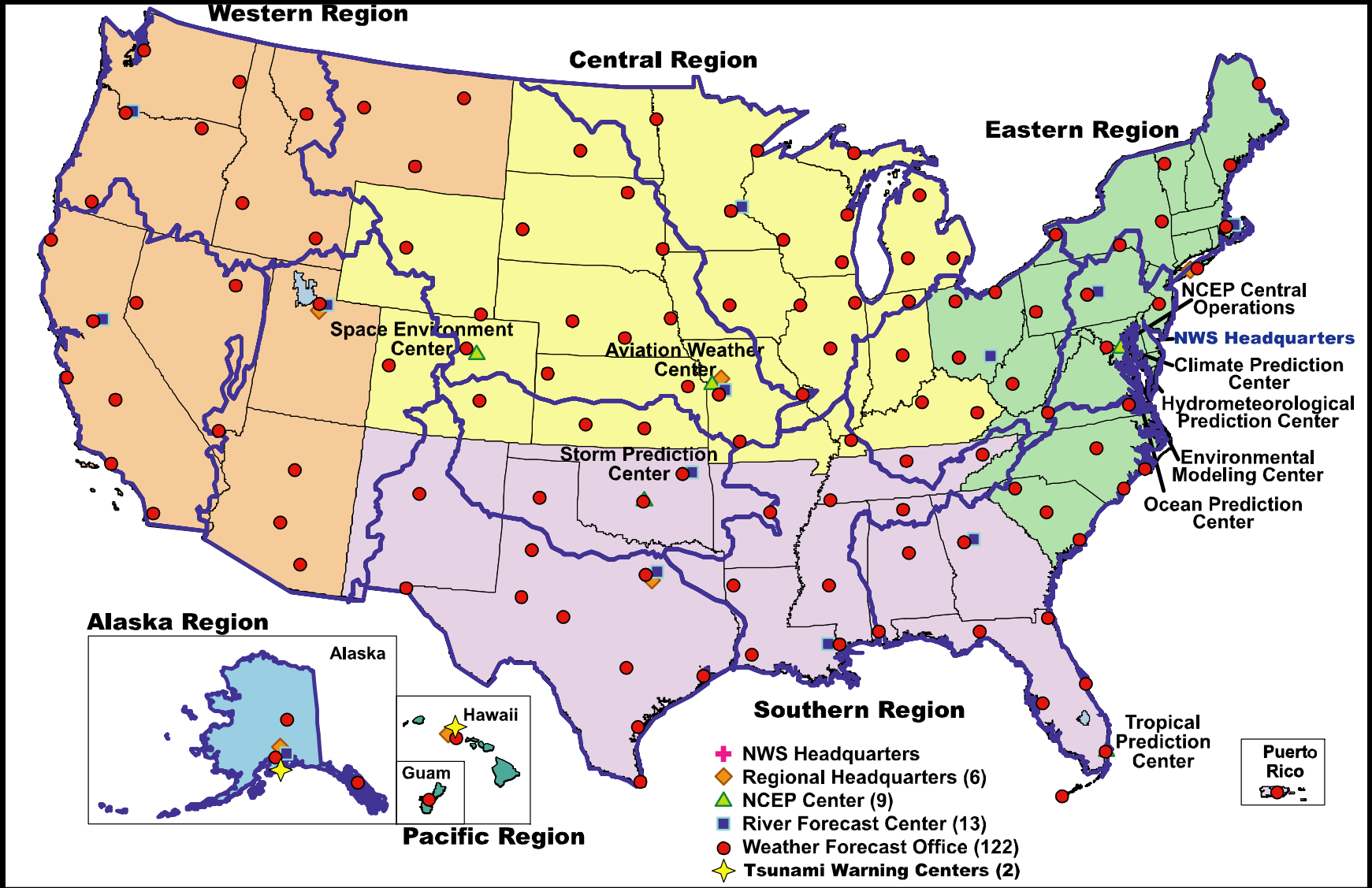
- 6 Hurricanes
- 1,000 Tornadoes
- 5,000 Floods
- 10,000 Violent Thunderstorms
- Drought Conditions
- 500 Deaths; 5,000 Injuries; \$14 Billion in Losses



"America's Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life"



# NWS Facilities

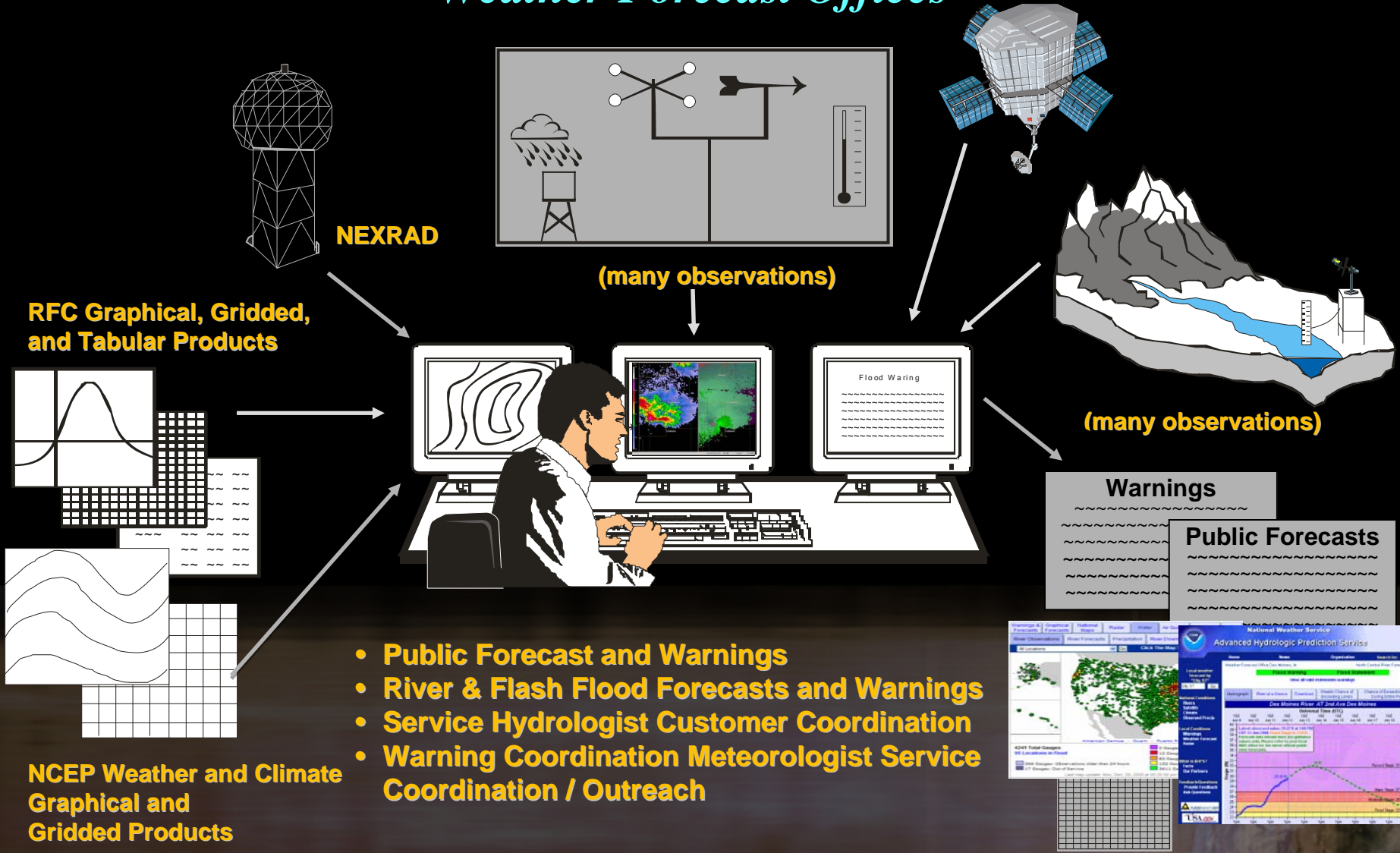


*"America's Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life"*

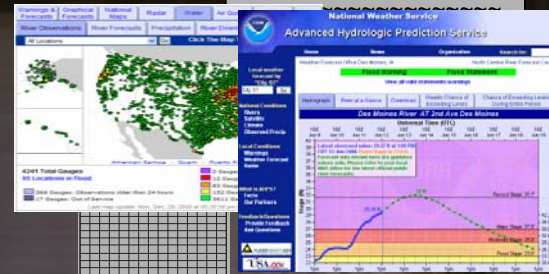


# NWS Products and Services

## Weather Forecast Offices



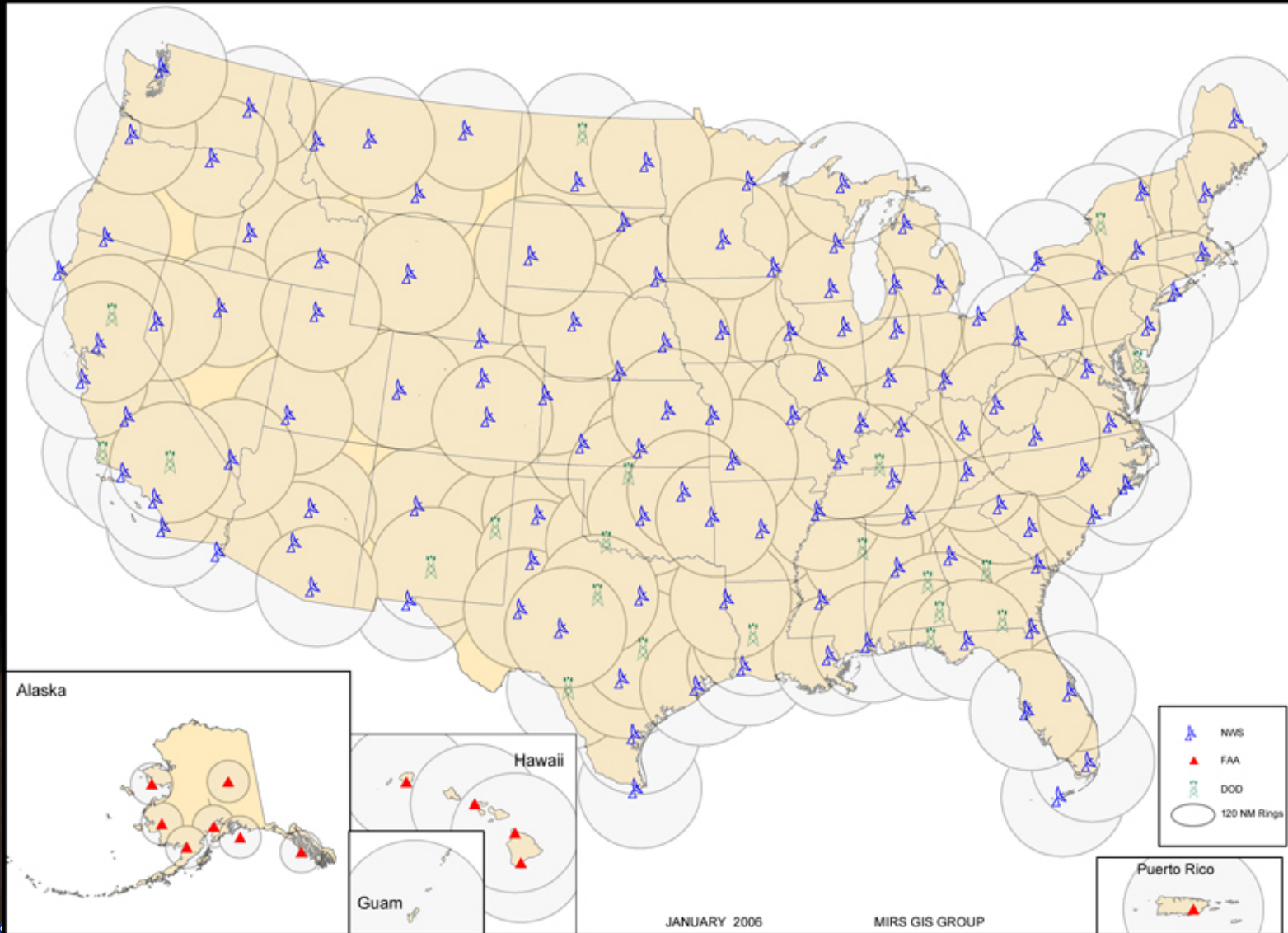
- Public Forecast and Warnings
- River & Flash Flood Forecasts and Warnings
- Service Hydrologist Customer Coordination
- Warning Coordination Meteorologist Service Coordination / Outreach



**Gridded Products**



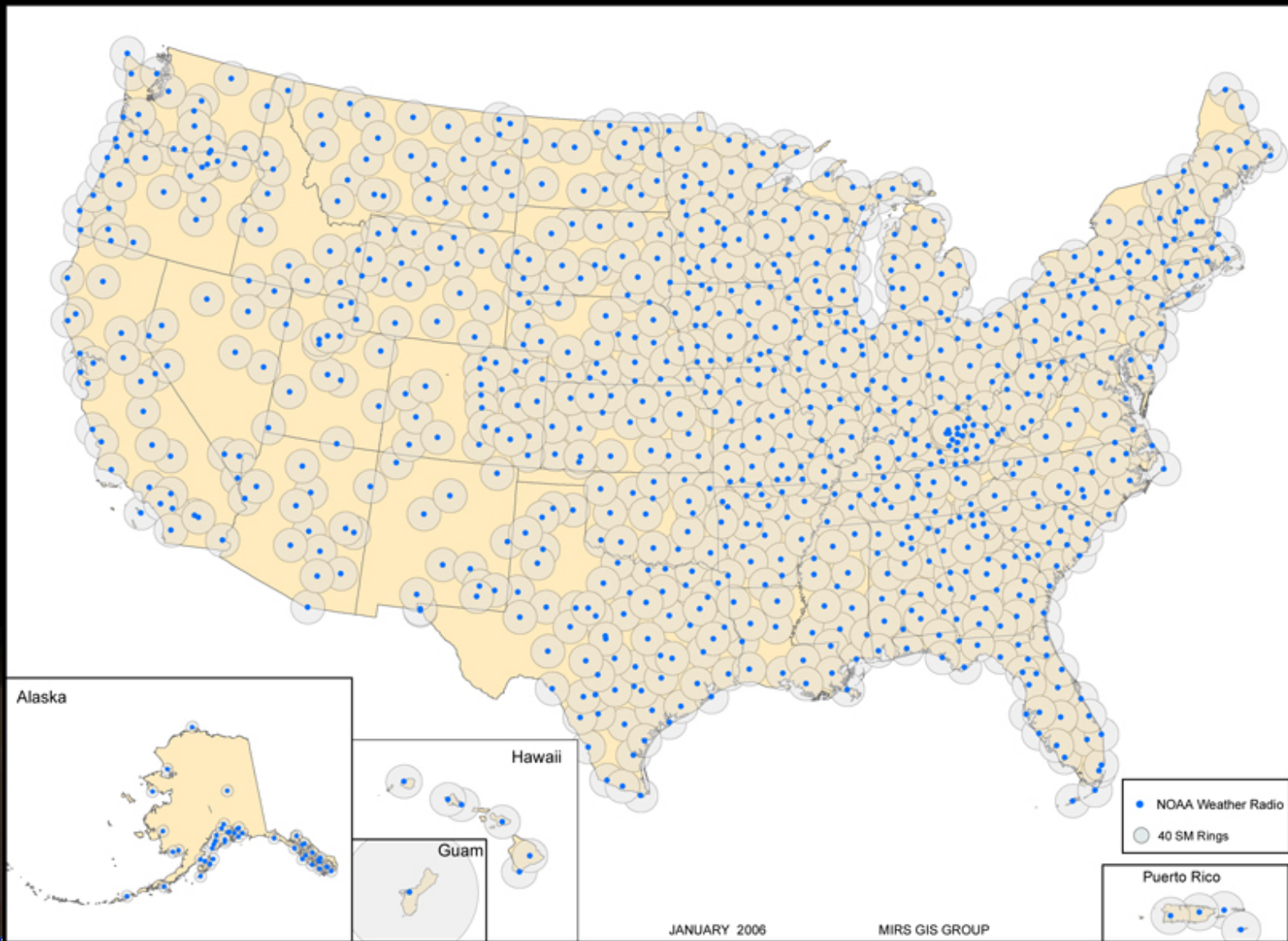
# NOAA's Doppler Radars



*"America's Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life"*



# NOAA Weather Radio All Hazards

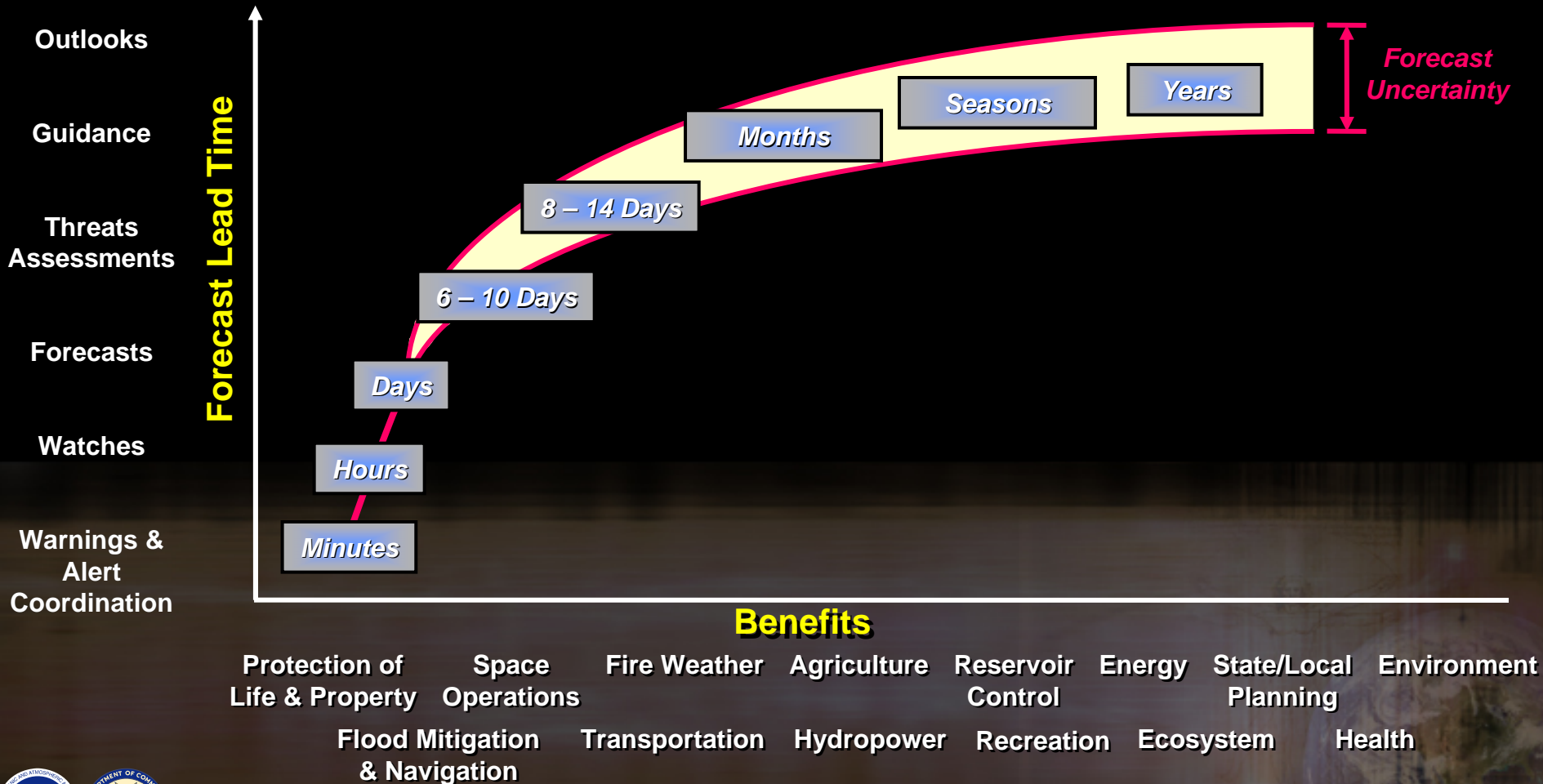


*“America’s Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life”*



# NOAA's NWS Overview

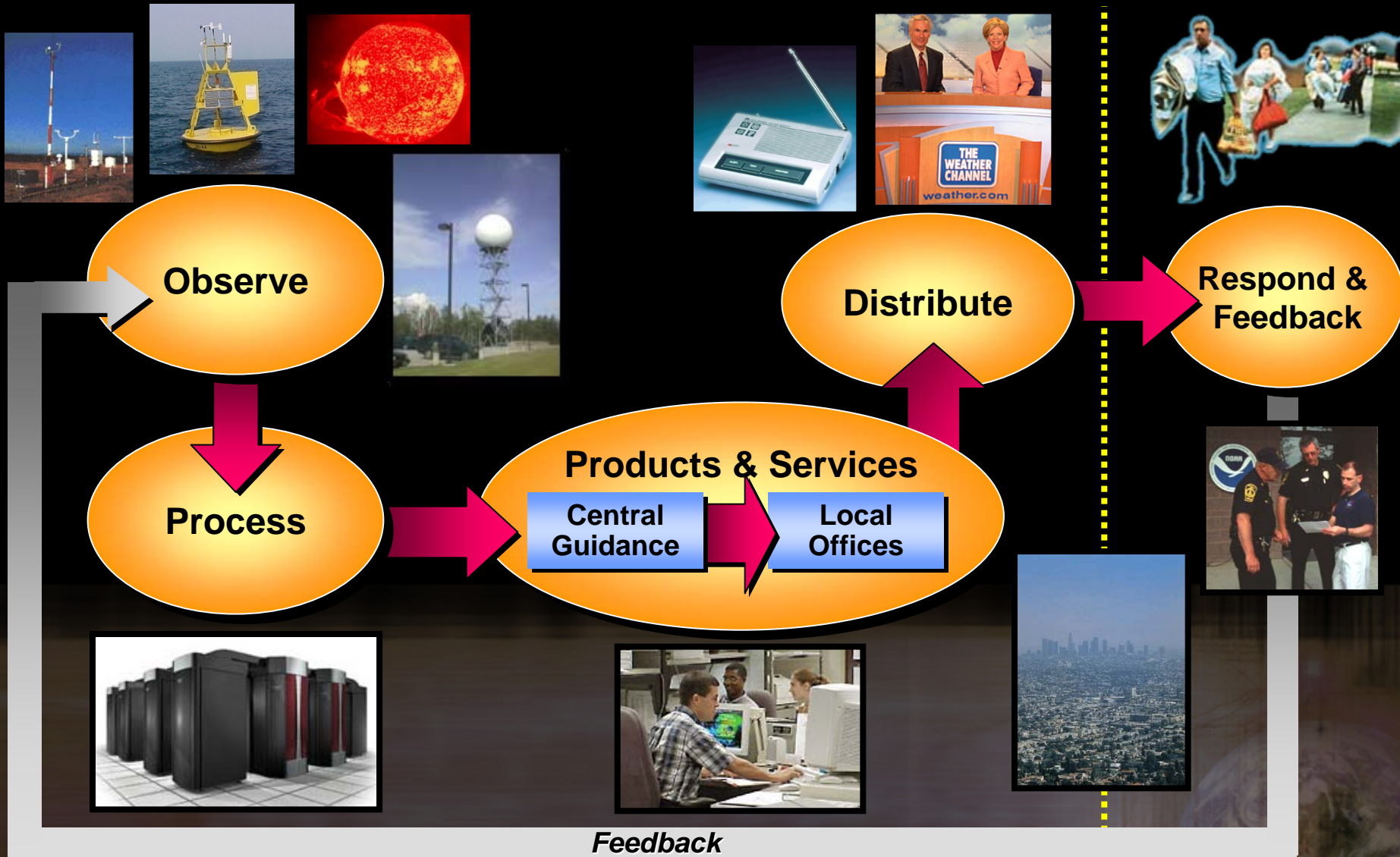
## Seamless Suite of Products



*“America’s Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life”*



# NOAA's NWS Overview



*"America's Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life"*



# NWS Watch/Warning Concept



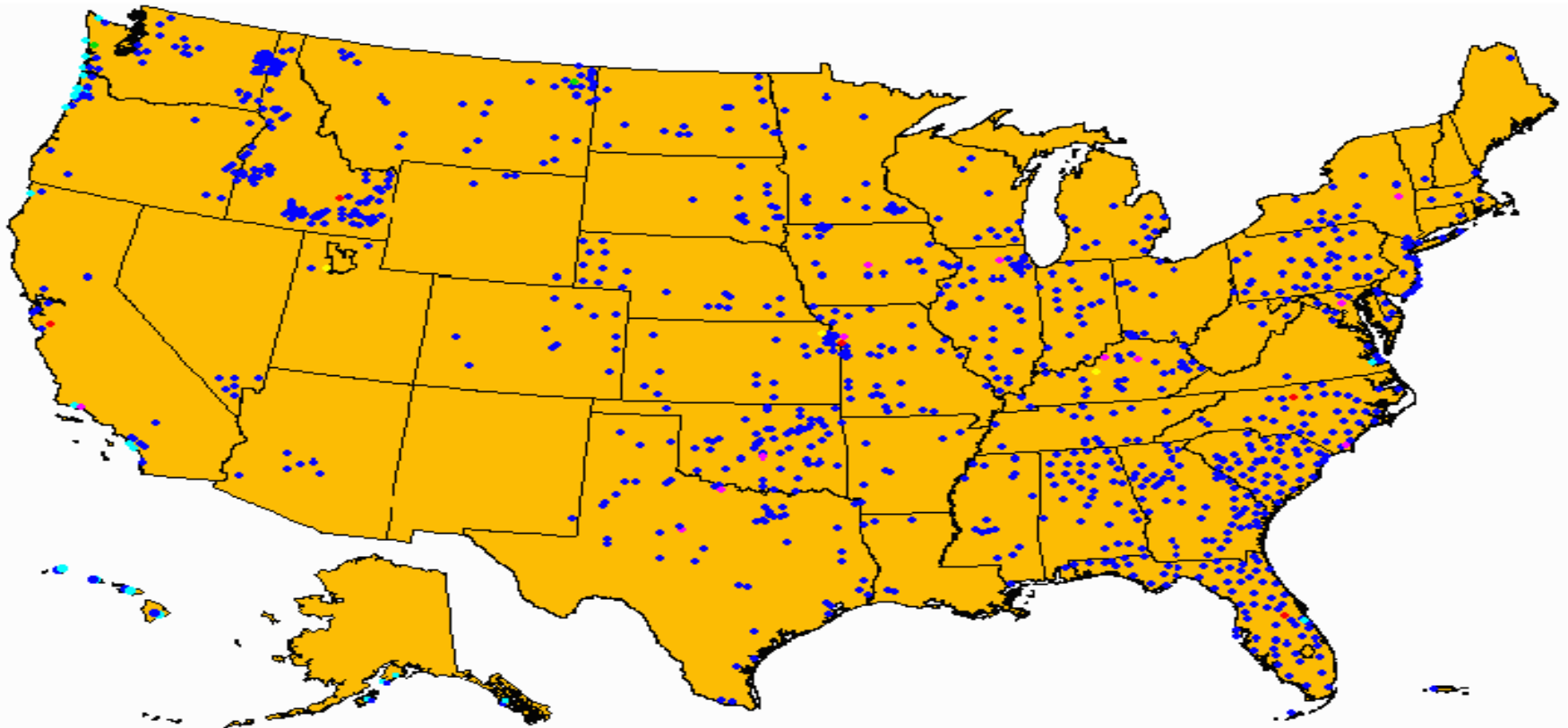
# Warning Coordination Meteorologist/Service Coordination Hydrologist

- Promote safety/preparedness
- Work with partners during events
- Provide storm surveys after significant events
- Provide spotter training



# StormReady/TsunamiReady Community Preparedness Program

~1500 StormReady Communities in 50 States  
67 TsunamiReady Communities in 10 States



## Legend

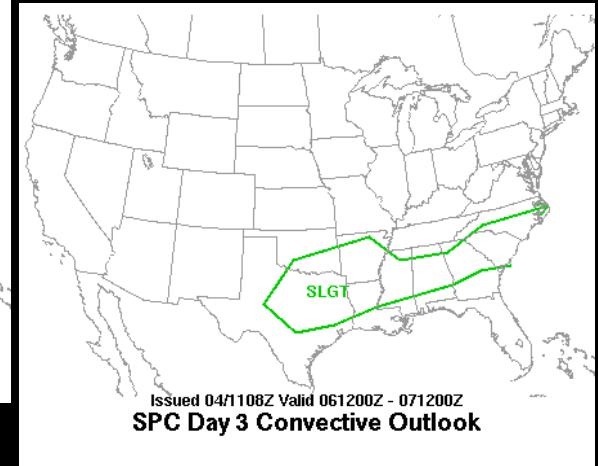
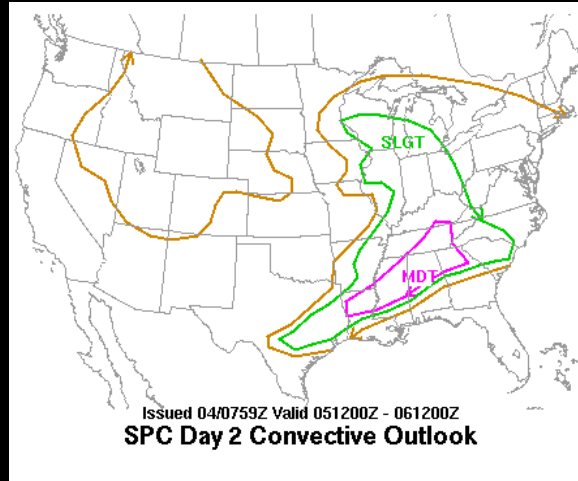
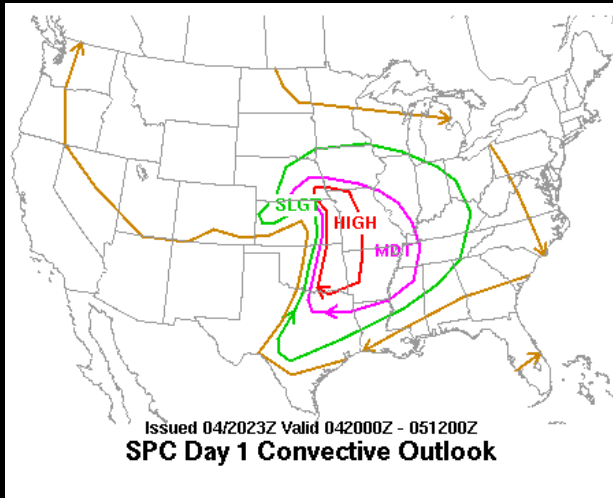
**Gold** states have StormReady® communities or counties  
**Light Blue** dots are TsunamiReady communities  
**Blue** dots are StormReady® Communities  
**Red** dots are StormReady® Commercial Sites

**Green** dots are StormReady® Indian Nations  
**Purple** dots are StormReady® Universities  
**Yellow** dots are StormReady® Military sites

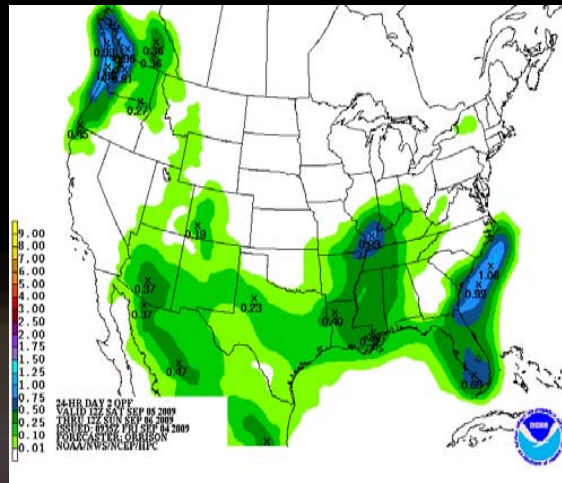
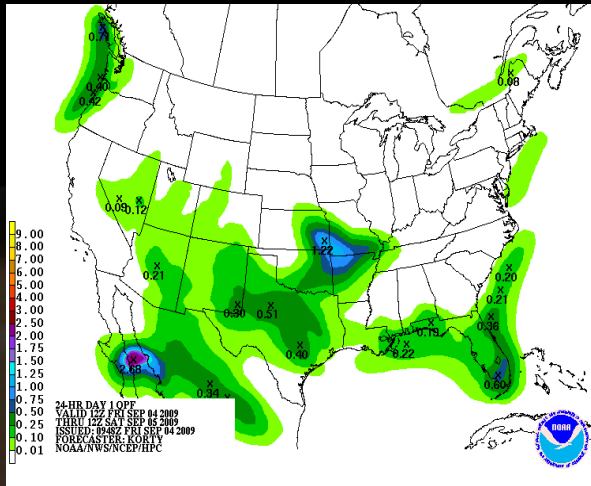


*“America’s Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life”*

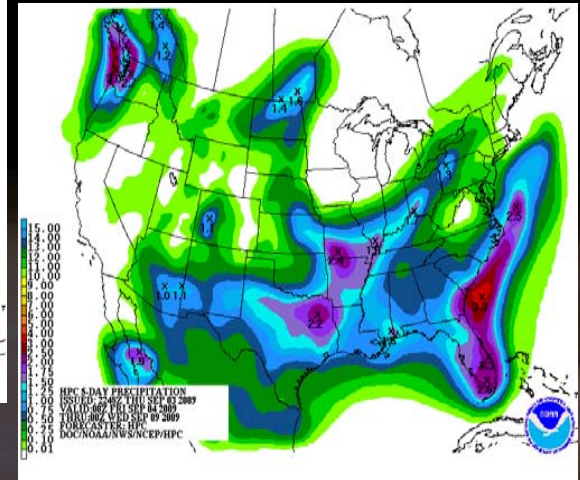
# Outlook Products (READY)



## Severe Weather

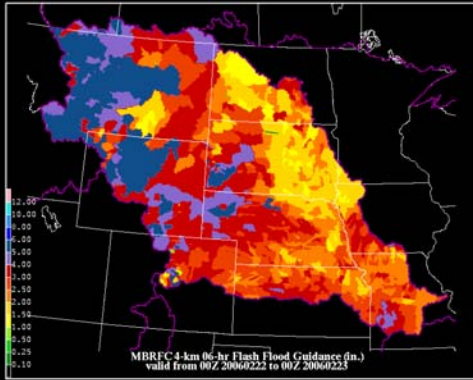


## Precipitation

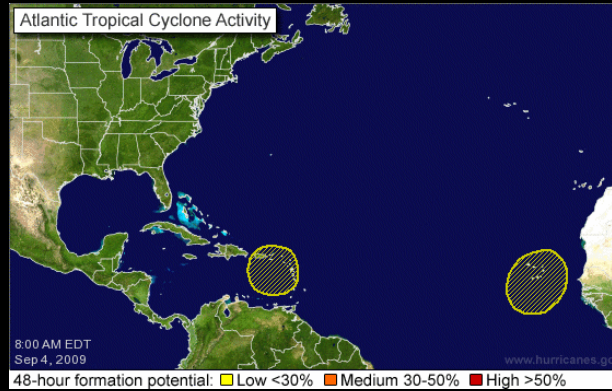


*"America's Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life"*

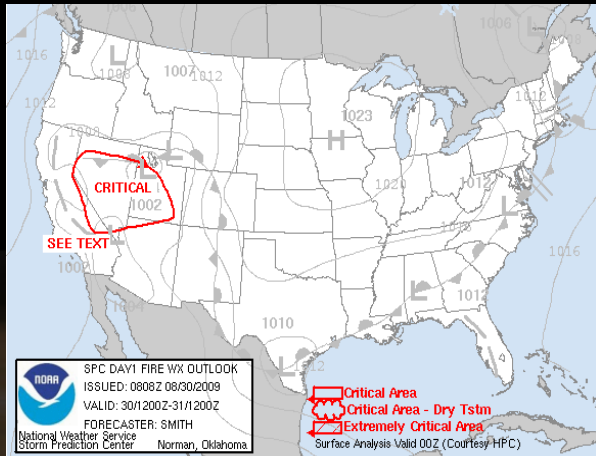
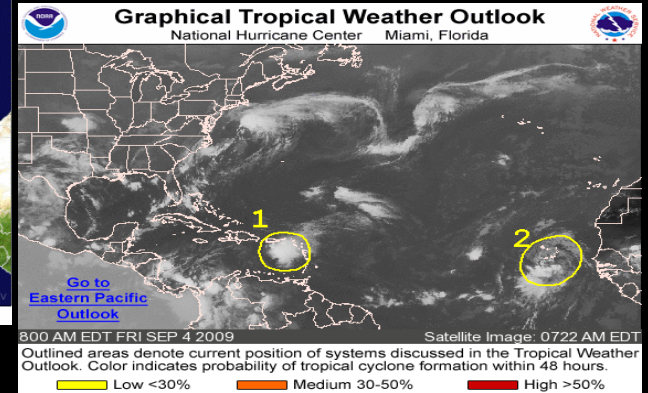
# Outlook Products ...cont...



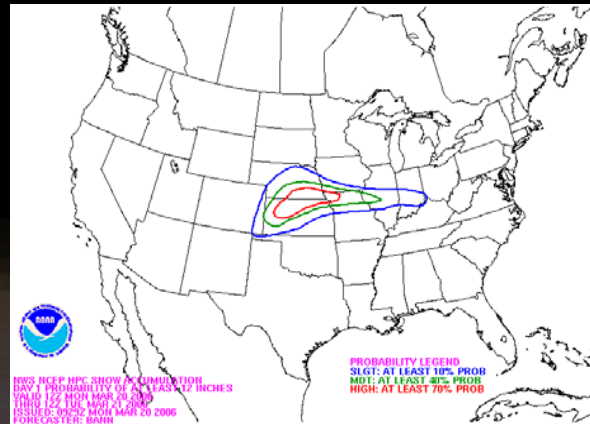
Flash Flood



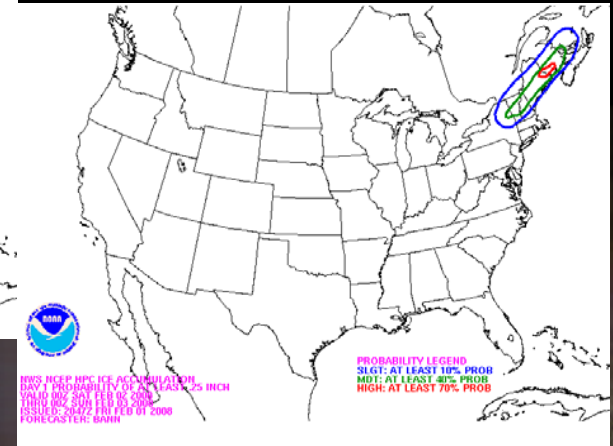
Tropical Weather



Fire Weather



Winter Weather  
(Snow)



(Ice)

"America's Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life"



# Watch Products (SET)



Tornado



Severe Thunderstorm



Tsunami



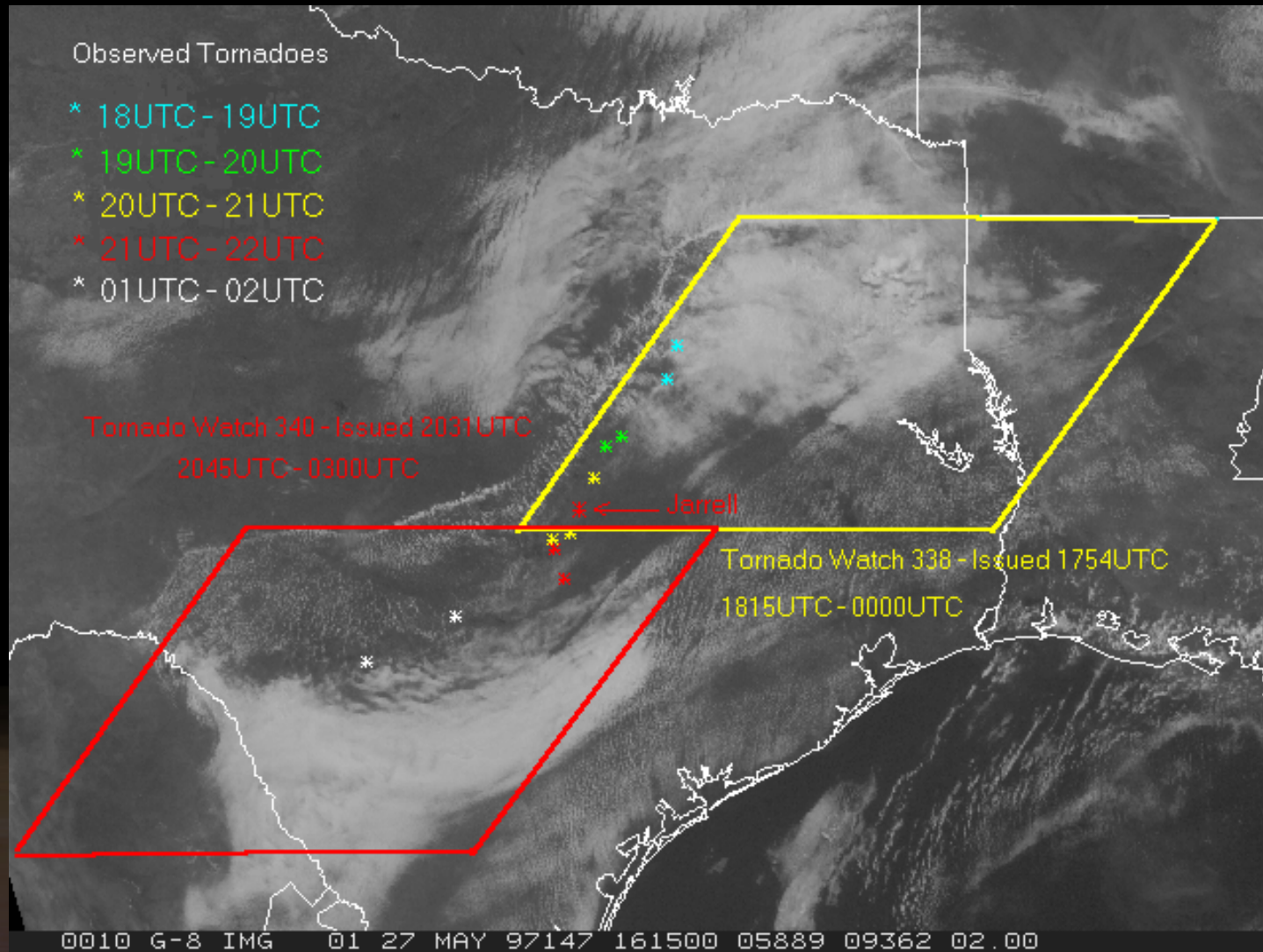
Fire Weather

Winter Storm

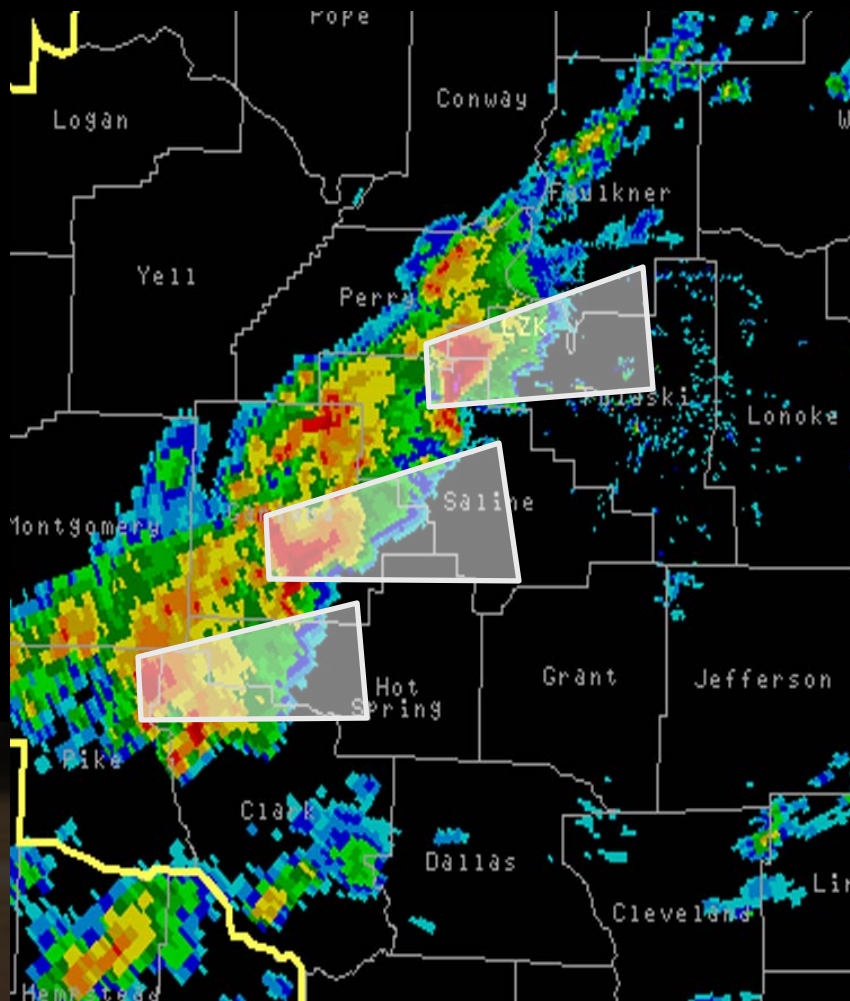


Flood/Flash Flood

# Tornado Watch Display



# Severe Storm Warnings (GO)



WUUS53 KBIS 010007  
SVRBIS  
NDC033-087-010100-  
/O.NEW.KBIS.SV.W.0095.090701T0007Z-090701T0100Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED  
SEVERE THUNDERSTORM WARNING  
NATIONAL WEATHER SERVICE BISMARCK ND  
607 PM MDT TUE JUN 30 2009

THE NATIONAL WEATHER SERVICE IN BISMARCK HAS ISSUED A

- \* SEVERE THUNDERSTORM WARNING FOR...  
SOUTHERN GOLDEN VALLEY COUNTY IN SOUTHWEST NORTH DAKOTA...  
NORTHWESTERN SLOPE COUNTY IN SOUTHWEST NORTH DAKOTA...
- \* UNTIL 700 PM MDT
- \* AT 606 PM MDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A SEVERE THUNDERSTORM CAPABLE OF PRODUCING QUARTER TO GOLF BALL SIZE HAIL...AND DESTRUCTIVE WINDS IN EXCESS OF 70 MPH. THIS STORM WAS LOCATED NEAR BEACH...OR 10 MILES SOUTHEAST OF WIBAUX...AND MOVING SOUTHEAST AT 10 MPH.
- \* THE SEVERE THUNDERSTORM WILL BE NEAR...  
BEACH NOW.  
GOLVA AROUND 645 PM MDT.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

THIS STORM HAS EXHIBITED SOME WEAK ROTATION. TORNADOES CAN DEVELOP QUICKLY FROM SEVERE THUNDERSTORMS. ALTHOUGH ONE IS NOT IMMEDIATELY LIKELY...IF A TORNADO IS SPOTTED...ACT QUICKLY AND MOVE TO A PLACE OF SAFETY INSIDE A STURDY STRUCTURE...SUCH AS A BASEMENT OR SMALL INTERIOR ROOM.

VERY HEAVY RAIN...WHICH MAY FLOOD LOW LYING AREAS SUCH AS DITCHES AND UNDERPASSES...IS ALSO LIKELY. DO NOT DRIVE YOUR VEHICLE ON A FLOODED ROADWAY.

##

LAT...LON 4688 10406 4700 10405 4697 10383 4687 10361  
4665 10362 4654 10373 4654 10405  
TIME...MOT...LOC 0007Z 309DEG 10KT 4687 10404

##



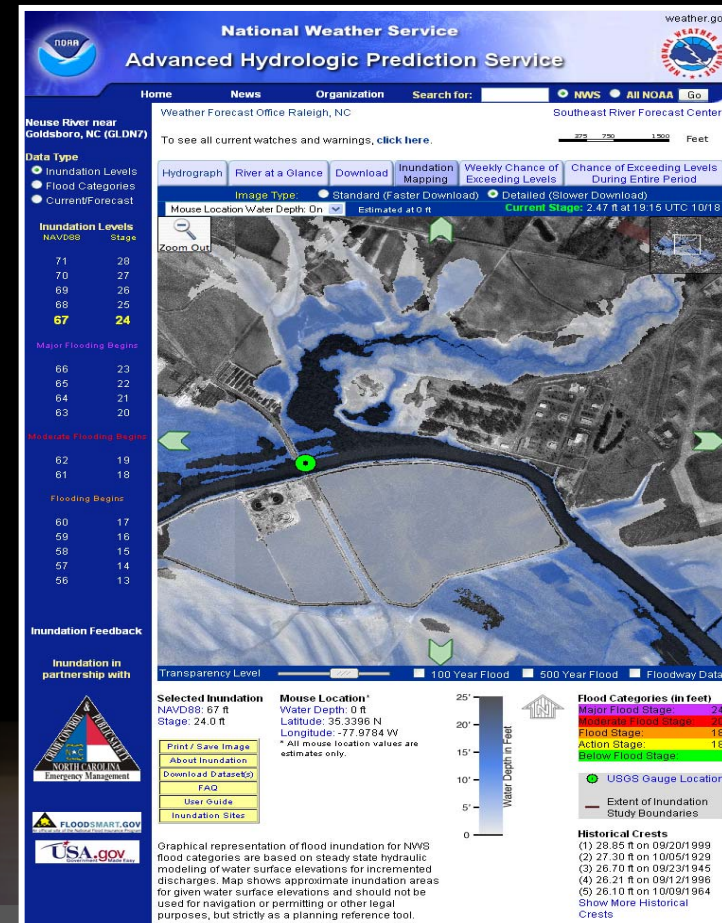


# Flood/Flash/Flood

## Where We're Headed

### Flood Inundation Mapping

- **Provide information on the spatial extent and depth of flood waters in the vicinity of NWS river forecast locations**
- **Can display flood inundation maps for various levels ranging from minor flooding through the largest flood on record**
- **Enhance the communication of flood risk and provide information needed to better mitigate the impacts of flooding and build more resilient communities**



- **Partnered effort with FEMA, USGS, States and other entities**
- **47 libraries have been implemented**



# Customers

- Local, State and Federal Governments
- Emergency Managers
- First Responders
- Private Sector Information Providers
- Broadcasters and other Media
- Academia
- General Public

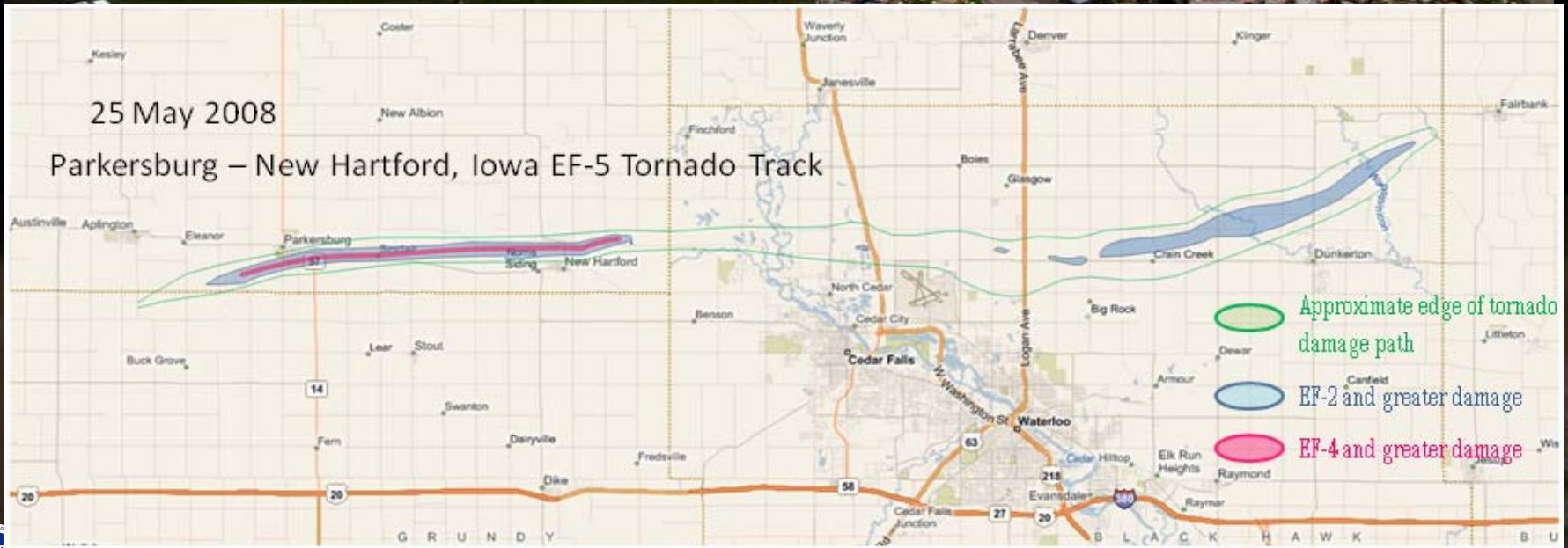


# Dissemination Methods

- National Weather Service Controlled Methods
  - ✓ NOAA Weather Radio All Hazards
  - ✓ NOAA PORT
  - ✓ Weather Wire
  - ✓ Emergency Managers Weather Information Network
- Mobile Communication Devices
  - ✓ Cell Phones
  - ✓ Personal Digital Assistants (PDA)
- Internet



# Storm Surveys/Assessments



*“America’s Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life”*



# Storm Surveys



# Our Goal

## *Saving Lives Through Partnerships*

**NOAA TEAM**

**PARTNERS**

**END USERS**



*"America's Weather Enterprise: Protecting Lives, Livelihoods, and Your Way of Life"*