Role of the Warning Coordination Meteorologist (WCM)

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U.S. National Weather Service

- 122 local Weather Forecast Offices (WFOs)
- 9 National Centers (NCEP)
- 13 River Forecast Centers (RFCs)
- 2 Tsunami Warning Centers
- 21 Center Weather Service Units (CWSUs)
U.S. National Weather Service 
Weather Forecast Offices (WFOs)

- Issue all Local Forecasts and Warnings
- Build and Maintain Relationships with key partners
- Coordinate and Provide **Expert Decision Support** to Emergency Operations Centers and other key partners
- Solicit Customer Feedback on Products and Services
- Conduct Community Awareness and Education Programs
- Train Volunteer Observers and Storm Spotters

**Warning Coordination Meteorologist serves as the primary interface between WFO and Customers**
WCM Job Description/Duties

Local Weather Forecast Office (WFO)

It is said that the WCM wears several hats

- Partner Liaison
- Customer Service/Outreach
- Office Manager
- Service Coordinator
WCM Job Description/Duties

Local Weather Forecast Office (WFO)

- **Primary interface** between WFO and core community partners (emergency managers/public safety officials and media)

- **Product Evaluation**: seeks and implements partner feedback on improvements and additions to products and services
WCM Job Description/Duties

Local Weather Forecast Office (WFO)

- Organizes and conducts yearly partner training/meetings such as **Integrated Warning Team workshops** and takes part in local and state exercises
- Attends and represents NWS at partner-organized meetings to **better understand partner and community needs**, and apply those to NWS products and services
WCM Job Description/Duties
Local Weather Forecast Office (WFO)

- Conducts and arranges media interviews on high-impact weather events
- Press conferences for seasonal outlooks
WCM Job Description/Duties
Local Weather Forecast Office (WFO)

• Responsible for planning, coordinating, and carrying out the public weather awareness and preparedness program
  – Educate the public to ensure the mitigation of death, injury and property damage or loss caused by meteorological events
Community Outreach

- Yearly hurricane/severe weather expos
- Being accessible to community-at-large
- Office tours/open house
- Speaking to business and civic groups, and schools
WRN Ambassador

AMBASSADOR

WEATHER-READY NATION™
It’s All About Partnerships

Government
Emergency Management
Academia
Private Sector
Broadcast Media
Social Science

Building a Weather-Ready Nation
Over 11,000 WRN Ambassadors in the U.S., approximately 130 in South Florida alone
WCM Job Description/Duties

Local Weather Forecast Office (WFO)

- Coordinates preparedness program with government officials and media
  - Works with media and emergency managers to ensure that preparedness message is consistent and plans are in place *well before a weather threat*
Communities must meet basic guidelines for receiving and disseminating alerts as well as 24-hour monitoring.

- Perform at least 4 safety talks per year.
- Maintain hazardous weather operations plan, record of storm spotters and participate yearly in weather-related exercises.
- Must Be Renewed Every 4 Years.
WCM Job Description/Duties

Local Weather Forecast Office (WFO)

- Works with government agencies and other key partners to develop plans for promoting more effective use of NWS products and services
WCM Job Description/Duties

Local Weather Forecast Office (WFO)

- Conduct storm spotter training classes year-round
- Several hundred new spotters trained every year in South Florida alone
WCM Job Description/Duties

Local Weather Forecast Office (WFO)

• Serves as Senior Forecaster
  • Performs full range of responsibilities of that position
  • Serves in this role about 25% of the time

• Act as acting branch/office chief
  - full range of administrative duties
WCM Job Description/Duties
Local Weather Forecast Office (WFO)

Coordinates with partners on the provision of impact decision support services (IDSS)

NWS Miami forecasters Sean Miller & Robert Garcia briefing incident command officials in Surfside, FL – July 2021
Impact Decision Support Services

- Provide direct and specific weather-based and/or event-based weather support to government officials either on-site at a command post or remotely from NWS office.
- Focus on providing an expectation of impacts that could affect a large public event or a community’s preparation in advance of severe weather.
- Examples: severe weather/tropical cyclone events, festivals, sporting events.
Impact Decision Support Services

• What IS Impact Decision Support Services?

• Provision of forecast advice and interpretative services to help core partners, such as emergency personnel and public safety officials, make decisions when weather, water and climate impacts lives and livelihood

• Providing specific temperature and wind information to a private event organizer??

National Weather Service
Miami – South Florida
weather.gov/miami

Issue Date: July 10, 2017
Time: 9:00 am

OVERVIEW
Today, there is enhanced coverage of morning showers and storms compared to the last couple days. Expect scattered showers and storms through early afternoon with lower rain chances beyond mid-afternoon. An isolated passing shower or storm can’t be completely ruled out for late afternoon and evening today. For tomorrow, rain chances will be lower as there will be a slightly drier airmass in place. Any showers that do occur would happen in the morning to early afternoon hours.

July 10, 2017
Temperatures
High: 80°F; Low: U 70’s
Heat Index: 96-100 (Daytime)
Precipitation
Thru 2PM: 50%
Beyond 2PM: 30%
Thunderstorms
Thru 2PM: 40%
Beyond 2PM: 30%
Wind
East southeast: 9-14 mph
Gusts: 14-18 mph

July 11, 2017
Temperatures
High: Near 90; Low: lower 80’s
Heat Index: 97-101 (Daytime)
Precipitation
AM: 20%
PM: 20%
Thunderstorms
AM: 20%
PM: 20%
Wind
East: 8-12 mph
Gusts: 12-15 mph

July 12, 2017
Temperatures
High: Near 90; Low: lower 80’s
Heat Index: 97-101 (Daytime)
Precipitation
AM: 30%
PM: 30%
Thunderstorms
AM: 20%
PM: 30%
Wind
East northeast: 8-14 mph
Gusts: 14-18 mph

POTENTIAL HAZARDS
Moderate
Lightning

Slight
Wind Gusts

Slight
Heat Index

Slight
Lightning

None
Wind gusts

Slight
Heat Index

Green
No Current threat

Yellow
Slight Threat

Orange
Moderate Threat

Red
High Threat

For More Detailed Forecast: Hourly Weather Forecast for Bayfront Park
Coordinates with partners on the provision of **impact** decision support.
WCM Job Description/Duties

Local Weather Forecast Office (WFO)

• Coordinates and performs NWS post-storm surveys to assess damage and rate the intensity and effects of a storm
• Normally done for tornado events but can also be done for flooding and hurricanes
NHC WCM

- Conducts a tropical cyclone preparedness program
  - Identifies preparedness objectives and projects to meet them
  - Reviews NHC warning efforts and determines adequacy of NHC preparedness activities
  - Coordinates with NWS WCMs to ensure uniformity of effort, collaboration, and compatibility
  - Interacts with NCEP, and regional and NWS headquarters on TC preparedness activities

- Conducts a marine preparedness program
  - Coordinates NHC interactions with marine customers
  - Serves as a liaison between NHC TAFB and the marine user community
Key Tasks of NHC WCM

- Works with FEMA Emergency Management Institute (EMI) to conduct 3-one week EM training courses on hurricane preparedness and evacuation decision making

- Develops NHC outreach and training agenda for National Hurricane Conference

- Coordinates NHC participation at state EM or hurricane conferences
Key Tasks of NHC WCM

• Develop training plan and course for media

• Coordinates and develops table top hurricane exercise material for state and federal agencies

• Works with NWS WCMs and regions to improve NHC/WFO Watch/Warning coordination

• Works with international met services to improve forecast coordination
Other Tasks of NHC WCM

• Serves on team to improve NWS watch and warning collaboration

• Serves on NWS Assessment Teams

• Works with COMET on on-line hurricane preparedness module

• Participates in U.S. Hurricane Awareness Tour

• WORKS OPERATIONAL FORECAST SHIFTS FROM MAY 15 - NOVEMBER 30!
Difference Between WFO and NHC WCMs

• NHC Director and Deputy Director are the primary spokespersons for the center
  – At a WFO, the WCM and Meteorologist-In-Charge serve that role

• NHC WCM role is more of an Outreach Coordinator and Planner

• Coordinates with Federal and State partners more than local officials
“Battle is won (or lost) during the off-season…”

Highlights of annual NHC involvement:

- FEMA/NWS week-long Introduction to Hurricane Preparedness course for emergency managers (three courses), January-February
- U.S. Interdepartmental Hurricane Conference, March
- National Hurricane Conference, April
- World Meteorological Organization workshop for international meteorologists (2-week course at NHC), March
- Hurricane Awareness Tour (one week, alternating each year between U.S. Gulf and East Coasts), April or May
- Caribbean Hurricane Awareness Tour, April
- National Hurricane Preparedness Week, May
- State conferences
- Scientific conferences
  - Transition of new science from research into operations
Question #1 WCM Role

- When is the BEST time to get to know your core partners?
“Battle is won (or lost) during the off-season…”

- Main message: don’t wait until a disaster to get to know the people your serve and work with
- This involves a continuous, year-long effort and engagement with key partners
- Battle is won (or lost) during the “off-season” (Max Mayfield)
- Regarding weather outreach and education, what are your biggest challenges in reaching out to your community partners, residents, and visitors?
Questions?

Thank you for your time, and safe trip home!