

# OFCM

Office of the Federal Coordinator for Meteorological Services and Supporting Research

---

***Bill Schulz***

***Federal Coordinator for Meteorological  
Services***

**May 3, 2016**

# Overall OFCM Construct

## FEDERAL METEOROLOGICAL COORDINATING INFRASTRUCTURE

### FCMSSR

Meets semi-annually  
Administrator/DUSD level

### ICMSSR

Meets quarterly  
Dep. Administrator/Dep. OoN level

FEDERAL COMMITTEE FOR METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH (FCMSSR)

FEDERAL COORDINATOR FOR METEOROLOGY

INTERDEPARTMENTAL COMMITTEE FOR METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH (ICMSSR)

#### COMMITTEES

OPERATIONAL PROCESSING CENTERS

- Cooperative Support and Backup
- Observational Data
- ▶ Centralized Communications Management
- ▶ Operational Community Modeling

OPERATIONAL ENVIRONMENTAL SATELLITES

- Satellite Telemetry

AVIATION SERVICES AND RESEARCH

- Volcanic Ash

CLIMATE MONITORING AND SERVICES

COOPERATIVE RESEARCH

- Tropical Cyclone Research
- Weather Information for Surface Transportation

~~SPACE WEATHER~~

- Space Weather Enterprise Forum
- ▶ ~~Space Weather Implementation Planning~~

OBSERVING SYSTEMS AND SERVICES

- Multifunction Phased Array Radar
- ▶ Metadata
- Meteorological Codes
- ▶ METAR Transition

#### WORKING GROUPS AND JOINT ACTION GROUPS

- Disaster Impact Assessments and Plans: Weather and Water
- ▶ COASTAL Act Post-Storm Analysis
- Federal Plan
- Hurricane and Winter Storms Operations
- National Wildland Fire Weather
- Social Science
- Tropical Cyclone Research Forum/ Interdepartmental Hurricane Conference
- ▶ High Performance Computing
- Atmospheric Transport and Diffusion

**Publications:**  
**Federal Plan**  
**NHOP**  
**FMH's**

# Federal Coordinator's Approach

---

- Combination snapshot, strategic vision, and near-term goals
- OFCM priorities will be those that are FCMSSR/ICMSSR approved or directed
- Outline:
  - Mission
  - Structure
  - Procedures
  - Priorities, Goals and Expected Outcomes

# Mission

---

OFCM is a service organization.

Our customers are the agencies comprising the Federal Weather Enterprise (FWE).

Our main product is sustained coordination efforts on cross-agency issues.

# Mission (expanded)

---

- **Coordinate (Ongoing)**
  - Facilitate the exchange of information, plans and concerns among the Federal Weather Enterprise to help the nation get the most out of the approximately \$5.3B spent annually on meteorological services and supporting research.
- **Advise (Building.....)**
  - Provide strategic and operational views of interagency federal weather efforts in order to support related decisions at high levels.
- **Plan (Ongoing)**
  - Produce and maintain foundational meteorological documents including:
    - Federal Plan for Meteorological Services and Supporting Research
    - Federal Meteorological Handbooks
    - National Hurricane Operations Plan
    - Others as directed

# Procedural Guidelines

---

- Coordination is a target-rich environment
- Engage where we can add value, not bureaucracy
- Value looks like:
  - Financial incentives
  - Complex problem solving
  - Political support
  - Professional development
  - Uncertainty reduction
  - Complying with legal/policy mandates

# Procedural Guidelines - COORDINATING

---

- Engage on committees (ICMSSR and OSTP organizations)
- Maintain contacts with extra-government agencies (AMS, AGU, NAS, Academia)
- Look to engage on strategic issues-
  - Improving forecasts
  - Increasing utility of meteorological information
  - Ensuring continuity of observation quality and sources
  - Facilitating data exchange and availability
  - Supporting sustainability of the FWE

COPC areas

# Procedural Guidelines - ADVISING

---

- On selected (directed) topics with long (years+) lead times, present a horizontal view of the often disparate elements of a complex issue involving multiple agencies. Address elements such as:
  - Technical obstacles
  - Procurement sequencing requirements
  - Timeline discrepancies
    - Research and development
    - Testing and Evaluation
    - Deployment
  - Maintenance and sustainability expectations
  - Notional concept of operations
  - Funding sources and availability/expiration/contingencies
  - Expected benefits or capabilities
  - Expected costs
- Present a high level preliminary overview; 9 to 18 months to complete depending on the issue
- Intended to provide executive/senior agency (including OMB) leadership with solid background; help to manage expectations and enable more informed strategic planning and budgeting
- Example issues: Follow-on sensor development, modeling coordination



# Procedural Guidelines - PLANNING

---

The Office, in collaboration with experts from various agencies, authors the following:

- Federal Plan for Meteorological Services and Supporting Research
  - Fulfills PL 87-843 direction for preparation of an annual report showing the totality of government expenditures on meteorological services.
  - Under OMB delegation, OFCM collects budget data from agencies.
- Federal Meteorological Handbooks
  - Currently 5 in use (FMH 1,2,3,11 and 12)
  - Goal: updated as technology and procedural changes required.
- National Hurricane Operations Plan (Reviewed annually at TCORF)
- Additional plans and reports as required

# Priorities from around the FWE

---

- From meetings over the last two months, several common interests emerge among the FWE agencies:
  - Multi-purpose radar CONOPS
  - FMH updates
  - Determining the economic value of forecast improvements
  - Access to (and interpretation of) world wide meteorological data
  - Space based sensor data sharing
  - Coordinated approaches to modeling

Enabled by COPC

# Earth Systems Prediction Capability

---

- ESPC Executive Steering Group (*NOAA, USN.USAF, DoE, NASA, NSF*) to align under FCMSSR and/or OSTP (discussions ongoing)
- Provides greater interagency visibility, coordinated resource support, continuity
- OFCM to provide Executive Secretary services
- ESPC vision (from <http://espc.oar.noaa.gov>):
  - Advance computational and environmental numerical prediction science and technology
  - Enhance understanding of complex interactions of the earth environment
  - Extend predictive capability to decades
  - Identify and quantify uncertainty and risk
  - Coordinated mission requirements will enable meeting mutual needs and leverage capabilities

# CY2016 Goals

---

- OFCM internal:
  - Improve OFCM web page
  - Hire into two of the three vacancies
    - Project management specialist (publications)
    - Physical Scientist; Numerical Modeling and Climate
  - Increase non-NOAA representation in office
- **FWE issues:**
  - **Clear ICMSSR/FCMSSR action items**
  - **Update foundational documents/revise Fed Plan process**
  - **Convene radar CONOPS working group**
  - **Assume SWORM support duties**
  - **Publish FMH update plan**
  - **Engage groups involved in unified modeling efforts (e.g. ESPC)**

# CY2017 Goals

---

- OFCM internal:
  - Hire into third vacancy (Deputy Director/Research Coordinator)
  - Identify additional non-NOAA funding sources
  
- **FWE issues:**
  - **Publish radar CONOPS advisory document**
  - **Publish first analytic report (issue TBD)**
  - **Reactivate the Committee for Cooperative Research**
  - **Initiate study on economic value of forecast improvements**
  - **TCORF Action Item: Coordinate an effort to establish an interagency process sanctioned by FCMSSR to define observational requirements to support tropical cyclone forecasting.**

# Searching for Metrics

---

- Annual spending within the FWE vs. number of cooperative efforts and improvements
- Publication updates
- Reports issued
- Action items taken/completed at committee and working group meetings
- Web traffic
- Conference attendees (e.g. TCORF)

# Final Thoughts

---

## OFCM – Three things to end on:

- **Service Organization**
- **Cross-agency view**
- **Takes prioritization guidance from FCMSSR/ICMSSR**