COMMITTEE FOR CLIMATE SERVICES COORDINATION

Record of Actions for 2017-1 Meeting

13 March 2017

PARTICIPANTS

NOAA/OFCM:	Donell Woods, OFCM
	Mike Bonadonna, OFCM
NOAA/NWS:	Fiona Horsfall, Climate Services Branch
	Jena Meyers, Climate Services Branch
DOD/USN:	Dave McCarren, Chief Scientist - Office of the Oceanographer of the Navy
NOAA/OAR:	Jessie Carman, ESPC Deputy Program Manager

Dial in Participants:

NOAA	Mike Brewer, NCEI Doug Kluck, CR-RCS
USDA	Rachel Steel, Climate Hubs
DOD/USAF	Ryan Harris, USAF
DOD/USN	Megan Hutchins, FNMOC
	Tom Murphree, Naval Postgraduate School
DOD/USA	Louis Escamilla, HQ Army
DOI/USGS	Alexander Bryan, CSC
NOAA/OFCM	Floyd Hauth, OFCM/STC
USGCRP:	Fred Lipschulz, GCRP
CDC:	Jesse Bell, CDC
NASA:	Tsengdar Lee, High end computing Program Manager
DOE:	Elisabeth Hunke, Los Alamos Labs

1. ADMINISTRATIVE REMARKS

Donell Woods, OFCM Senior Physical Scientist, provided administrative remarks.

2. OPENING REMARKS

Fiona Horsfall, Chief, NWS Climate Services Branch, provided opening remarks, introduced participants in attendance and by telephone, and reviewed the agenda. She reiterated that the

meeting goal was to identify ongoing activities within agencies at the field office level and recommend a path forward for improved coordination and collaboration between agencies for provision of climate services at the national, regional and local level.

She noted that there is considerable uncertainty regarding the future of climate services but that NOAA intends to proceed with business as usual for the immediate future. Climate services support is still needed by decision makers for preparedness, and risk reduction in national security, personal safety, economic well-being, food security, and protection of the environment.

Members briefly discussed the future of climate services in the federal government and the reluctance of several agencies to attend climate meetings at this time.

3. PRESENTATIONS

DOD/USN/FNMOC

Megan Hutchins, Senior Climatologist at FNMOC gave a presentation on how Navy uses International Comprehensive Ocean Atmosphere Data Set (ICOADS) for operational support.

She said ICOADS offers surface marine data spanning the past three centuries, and simple gridded monthly summary products for 2° latitude x 2° longitude boxes back to 1800 (and 1°x1° boxes since1960)—these data and products are freely distributed worldwide. She noted

FNMOC is tasked to provide Historical Sea States for Forensic Investigations. Megan cited two relatively recent examples/cases where these data were needed.

She noted that to meet mission requirements there is a need to improve data latency so the data are available on a daily basis and not have to wait for the monthly summary. She asked if NCEI could change the update cycle from monthly to daily.

She said other initiatives to improve climate services are to partner with USAF 14WS for access to their data for forensic purposes and to integrate FNMOC model data used for NWP. Megan closed by saying how much the Navy relies on NOAA information.

Fiona stated that she will add forensic investigations to her list of climate service requirements. She will also provide information about the Ocean Prediction Center to Megan.

Tsengdar Lee informed the members about the Ocean Reanalysis Workshop scheduled for this summer (organized by JPL) in France and forwarded information about the workshop to the group.

DOD/USN

Dave McCarren - Chief Scientist - Office of the Oceanographer of the Navy gave a presentation on coordinating delivery of products from the Earth System Prediction Capability (ESPC) efforts. He explained that The National Earth System Prediction Capability (National ESPC) is collaboration between the National Oceanic and Atmospheric Administration (NOAA), U.S. Navy, U.S. Air Force, Dept. of Energy (DOE), National Aeronautics and Space Administration (NASA), and the National Science Foundation (NSF).

ESPC provides an integrated National Capability meeting the U.S. Federal need for Earth System Prediction for the provision of operational products and services:

- For the protection of life and property in the US.
- For the economic development, aviation, maritime, shipping, agriculture of the US.
- National defense and homeland security (World Wide).

Strategic decision making includes:

- Near term, medium range and extended range weather (< 90 days.)
- Seasonal and inter-annual climate (90 Days+).
- Sub-decadal to decadal.
- Leveraging existing and planned Agency operational capabilities, and research and development programs and projects.

He said ESPC work within the mission of each agency, to further a national goal towards which each agency contributes. This effort is broadly consistent with WMO's S2S Prediction Plan and various national goals and provides a strong need for interagency coordination and leveraging of capabilities. Part of this effort is to see how good products are in various time scales.

He noted the focus of the ensemble effort is to bring together different models. There currently is an Operational Global Weather Ensemble which is a 63-member multi-model, > 80 variables, out to 16 days, with skill at 11+ days, at 1 degree resolution - going to ½ degree, adding variables, with extended runs to 32 days.

He also covered the Operational Multi-model Ensemble for Sub-seasonal and Seasonal Prediction; the Earth System Modeling Framework - Common Model Architecture; the In-place Coordinating Structure – Project Office: and the Executive Steering Group role. Multiple committees provide the opportunity for agencies to regularly interact to solve problems in a common way. To bridge the skill gap, research agencies work within mission expertise to improve skill and operational agencies exploit the research for skill improvements.

Dave stated the National ESPC collected Agency mission needs across timeframes to know where to look for skill. Examples of weather and climate needs from the series of meetings:

- Severe weather and high-impact events/potential
- Temperature, precipitation, pressure, etc. (extremes)
- Pollen forecast outlook
- Sub-surface freeze/thaw patterns
- Ocean current speed/direction
- Stream flow, soil moisture, and deficit and runoff
- Snow density and presence of ice layers

Feedback from Agencies on these needs were from Air Force, NOAA, NPS, FHWA, USDA, and Navy.

Dave recommended members visit the ESPC webpage: http://www.espc.oar.noaa.gov/ and also volunteer to provide input to a 14-page report on ESPC activities.

4. DISCUSSION

Members considered the following topics:

- Developing a list of ongoing climate service activities involving interagency coordination.
- Developing a list of areas of potential future coordination between agencies to improve climate services.
- Should we develop a statement describing the economic context
- Collecting agency requirements for climate products and services.
- Recommendations for moving forward with climate services.

Some of the points made included the need to collect anecdotal examples of why extended range information are needed and how it is applied. Some of the areas cited include decision support for forest service, military operations, national security, agricultural activities, drought and famine early warning, forensic needs, pandemic events, dam construction and operations, sea level change impact planning, etc. The economic value of services should also be addressed.

Services provided should include time scales and locations where needed. Examples should also include end user feedback on where products led to better outcomes.

5. ELECT CO-CHAIR

The Committee elected Rachel Steel, USDA as co-chair.

6. REVIEW DRAFT TERMS OF REFERENCE (ToR)

The Committee reviewed the draft Terms of Reference (ToR) and recommended the following:

Paragraph I: Definition of climate services. After considerable discussion, a case was made for the need for clarifying language. Fred Lipschulz (GCRP) and Tom Murphree (Naval Postgraduate School) were tasked to provide changes for further review by the committee.

The committee also recommended keeping the current name of the committee and adding language defining coordination and collaboration and change the second bullet under purpose paragraph to "……prediction for risk management and preparation".

The committee decided to continue coordination on meeting topics and action items on-line.

7. NEXT MEETING

A listing of proposed action items identified during the meeting was sent to committee members for their review and concurrence. The next meeting will be scheduled for November 2017.

8. ADJOURN

The meeting adjourned at 2:38 PM.

Draft Action Items from Committee for Climate Services Coordination meeting:

Climate Meeting Action Item 2017-1.0: Mike Brewer will check on ICOADS latency and how it is used at NCEI and report back to members.

Advocate: Mike Brewer

Date Assigned: 13 March 2017

Office of Primary Responsibility (OPR): NCEI

Suspense: TBD

Climate Meeting Action Item 2017-2.0: Committee members will provide a list of services they provide and why they are important or valuable (across time scales and locations). Consider national security, food security, risk management and protection, and remediation.

Advocate: Members

Date Assigned: 13 March 2017

Office of Primary Responsibility (OPR): All

Suspense: 5 June 2017

Climate Meeting Action Item 2017-3.0: Fred Lipschultz and Tom Murphree will provide comments on changes to ToR paragraph I (definition of climate services). Perhaps clarify with bullet comments.

Advocate: Fred and Tom

Date Assigned: 13 March 2017

Office of Primary Responsibility (OPR): NPS & USGCRP

Suspense: 31 March 2017

Climate Meeting Action Item 2017-4.0: OFCM will schedule next meeting for November 2017 timeframe.

Advocate: All

Date Assigned: 13 March 2017

Office of Primary Responsibility (OPR): OFCM

Suspense: October 2017