Developing a Coordinated National Soil Moisture Network
NOAA's National Weather Service National Training Center
Kansas City, MO
November 13-14th, 2013
Agenda Outline

Wednesday, November 13th, 2013

1. ***8:30 – 8:45***
   Welcome and Introductions- Doug Kluck & Roger Pulwarty

2. ***8:45 – 9:00***
   Overview of the President's Climate Action Plan - Roger Pulwarty
   Action – Development of a Coordinated National Soil Moisture Network
   Goals and Deliverables of the Workshop – James Verdin

3. ***9:00 – 9:45***
   Why Soil Moisture? (Moderator – Tilden Meyers, NOAA)
   - *Soil moisture and river forecasting – Kevin Low (NOAA NWS)*
   - *Soil moisture monitoring for flood and drought early warning in the Midwest – Dennis Todey (South Dakota State Climatologist)*

   9:45-10:00
   Coffee break

4. ***10:00 – 12:00***
   Panel – in situ Monitoring Networks (Moderator – Bruce Baker, NOAA)
   15 minutes per panelist
   (Brief descriptions of purpose, extent (including map), methods, applications)
   - *USDA SCAN and SNOTEL – Mike Strobel (USDA NRCS)*
   - *NOAA CRN – Mike Palecki*
   - *U of AZ COSMOS – Marek Zreda*
   - *Nebraska - Ken Hubbard*
   - *Oklahoma – Jeff Basara*

   Open discussion (30 minutes) – Challenges in operation and maintenance of in situ monitoring networks

   12:00-1:00
   Lunch

5. ***1:00 – 3:00***
   *****Panel - Soil Moisture Variations in Space and Time: Satellite Observations and Modeling (Moderator-James Verdin, USGS)***
   15 minutes per panelist
   - *Microwave systems: SMAP – Vanessa Escobar (NASA GSFC)*
   - *Thermal infrared systems: ALEXI –TBD*
   - *Model assimilation of satellite soil moisture observations – Sujay Kumar (NASA GSFC)*
   - *LIS-based modeling for North America – Greg Fall (NOAA NOHRSC)*
   - *Soil Moisture Modeling and Observations: An OHD Research Perspective – Brian Cosgrove (NOAA OHD)*

   Open discussion (45 minutes) –
   - *Challenges linking in situ with satellite observations for a full landscape view of soil moisture*
   - *Challenges in modeling soil moisture for reanalysis, monitoring, and forecasting*

   *****NOTE: The Drought Task Force will call-in for the panel and participate in the discussion***

   3:00-3:15
   Break

6. ***3:15 – 5:00***
   Panel – Database Integration and User Access (Moderator – Mike Brewer, NOAA NCDC)
   15 minutes per panelist
   - *Experiences of the North American Soil Moisture Database – Steven Quiring (Texas A&M)*
   - *Experiences of the High Plains RCC – - Ken Hubbard (UN-L)*
   - *Experiences of the SCAN Network - Deb Harms (USDA NRCS)*
   - *Experiences of the Center for Integrated Data Analytics – Jessica Lucido (USGS)*
   - *Experience with Soil Survey Databases-Dave Hoover (NRCS)*

   Open discussion (30 minutes) – Challenges in assembling, harmonizing, and managing soil moisture data from disparate sources, and staging the data for user access

Thursday, November 14th, 2013

7. ***8:30 – 9:00***
   Plenary - Recap of previous day's information and discussions: barriers and critical gaps for creating an integrated system: (panel moderators)

   9:00 – 10:30
   Creating a National Soil Moisture Network – A plan of action
   Break out groups
   Group 1: Coordinating in situ networks
   Group 2: Remote sensing and modeling applications
   Group 3: Integrated databases and user access technology

   10:30-10:45
   Coffee break

   10:45 – 11:30
   Plenary – Reporting back and open discussion:
   Group 1: Coordinating in situ networks
   Group 2: Remote sensing and modeling applications
   Group 3: Integrated databases and user access technology

8. ***11:30 – 12:20***
   Next steps and the way forward – Roger Pulwarty

9. ***12:20 – 12:30***
   Closing remarks and thanks to participants – Doug Kluck