

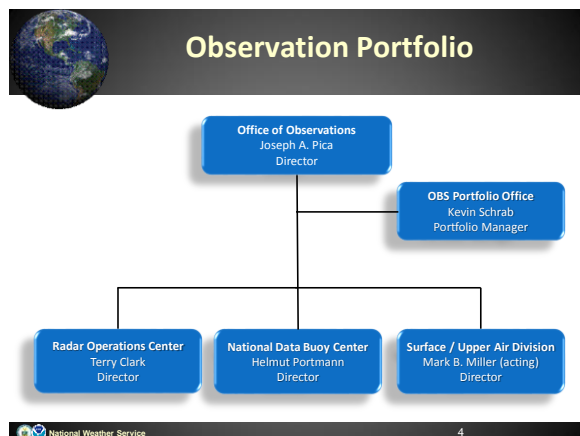
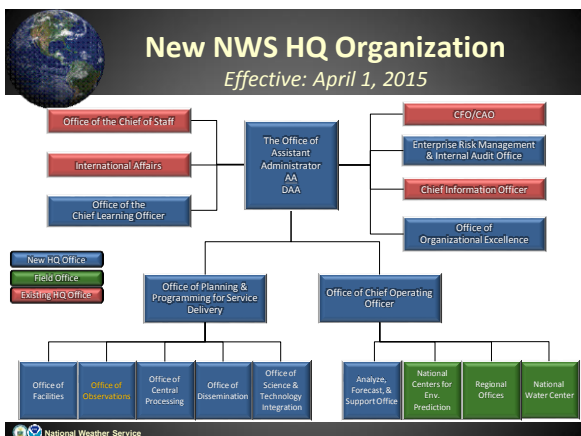
## Evolving NWS Observations

AMS Forum on Observing the Environment from the Ground Up  
Tuesday, March 7, 2016

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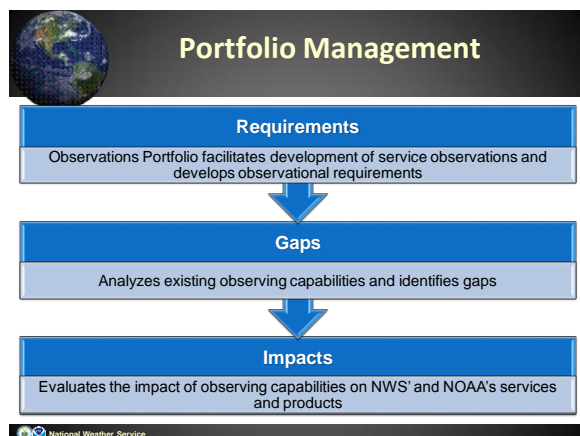
## NWS Portfolio Management

- The NWS Headquarters reorganization led the NWS to adopt a portfolio management framework that:
  - More directly aligns corporate strategic plans with mission delivery
  - Allows the NWS to prioritize its investments and allocate its workforce more effectively
- Portfolios established to align with major functions of the NWS mission



## FY2017 Observation Priorities

- NEXRAD Service Life Extension Program**
- ASOS Service Life Extension Program (New)**
- Radiosonde Frequency Migration (Spectrum Funded)**
- Satellite User Readiness**
  - GOES-R (Launch date October 2016)  
Support GOES-R DOE-4  
(Begins 17 July 2016, for 37 days)
  - JPSS (Launch date Q2 FY17)
  - COSMIC-2A (Launch date Q2 FY17)



## Portfolio Management Tools

- **COURL:** Consolidated Observation User Requirements List - documented observation user requirements by each NOAA Mission Service Area (MSA)
- **SoR:** Systems of Record - a database of over 180 observing system summaries (NWS owns 13)
- **CASrT:** CasaNOSA Analysis System Requirements Tool – data analysis tool to measure how well any observing capability satisfies any given observational requirement
- **NOSIA-II:** NOAA Observing Systems Integrated Analysis – the capability NOAA uses to document and analyze relationship(s) between/among observing systems and their impacts on the Agency’s diverse services and scientific objectives

## NWS Systems of Record

<b>ASOS</b> Automated Surface Observing System	<b>C-MAN</b> Coastal-Marine Automated Network	<b>COOP</b> Cooperative Observer Program	<b>CWB</b> Coastal Weather Buoys
<b>DART</b> Deep-Ocean Assessment and Reporting of Tsunamis	<b>GAMMA</b> Airborne Gamma Radiation Snow Water Equivalent and Soil Moisture Survey Program	<b>NEXRAD</b> NEXT Generation Weather RADar	<b>NPN</b> NOAA Profiler Network
<b>PTWC Network</b> Pacific Tsunami Warning Center Sea Level Network	<b>RAWINSONDE</b> Upper-Air Rawinsonde Network	<b>Spotter</b> Spotter/Skywarn Volunteer Program	<b>TAO</b> Tropical Atmosphere Ocean Array
<b>VOS</b> Voluntary Observing Ship			

## NWS Leveraged Systems

<b>ACE</b> Advanced Composition Explorer Solar	<b>ADM-Aeolus</b> Atmospheric Dynamics Mission – Aeolus Doppler Lidar	<b>AWOS</b> Automated Weather Observing System	<b>CMB</b> Canadian Moored Buoy	<b>CCORAHIS</b> Community Collaborative Rain, Hail, & Snow Network	<b>GSN</b> Global Seismographic Network
<b>ICFSN</b> International Cable Pressure Sensor Networks	<b>ISN</b> International Seismic Networks	<b>MDCRS/WVSS</b> Meteorological Data Collection and Reporting System/Weather Vane® Sensing System	<b>NED</b> USGS National Elevation Database	<b>NLDN</b> National Lightning Data Network	<b>NSNSN</b> NOAA-Supported National Seismic Networks
<b>OSN</b> Other Seismic Networks	<b>RAWS</b> Interagency Remote Automated Weather Stations	<b>SGN</b> Stream Gauge Network	<b>SNOTEL</b> Snowpack Telemetry	<b>State Mesonets</b>	<b>STEREO Solar</b> Terrestrial Relations Observatory
<b>TAMDAR</b> Tropospheric Airborne Meteorological Data Reporting	<b>TDWR</b> Terminal Doppler Weather Radar	<b>VGLD</b> Vanadu Global Lightning Dataset	<b>WMO-AMDR</b> Aircraft Met Data Relay	<b>CDMIC</b> Coastal Observing System for Meteorology, Hazards, and Climate	<b>CWOP</b> Citizen Weather Observer Program
<b>OSCVR</b> Solar Wind Data & Coronal Mass Ejection Isotropy One-Space Climate Observatory	<b>GOES</b> Geostationary Operational Environmental Satellites	<b>GPFSMR</b> Global Positioning System Integrated Precipitable Water Sensor	<b>JPSS</b> Joint Polar Satellite System	<b>NLDN</b> National Lightning Data Network	<b>NOAA Aircraft</b>
<b>NOAA Ships</b>					

## Challenges

- Understanding NWS’ and NOAA’s wide ranging and evolving needs for observations pertaining to the full range of mission areas
- Refining methods for developing and documenting observation requirements to support mission areas
- Establishing methods for gap analysis to facilitate funding priorities
- Maintaining current while exploring new observing capabilities amidst funding challenges

## Questions?