# Agenda

## **Observations Portfolio**

- Overview Quad
- Upper Air Aircraft Observations
- Volunteer Observing Ships
- NEXRAD
- ASOS
- COOP
- Mesonet
- USRCRN
- Profiler
- Upper Air Radiosondes
- Marine Observations
- NRC/NLSC

#### **OBSERVING SYSTEMS PORTFOLIO QUARTERLY PROGRAM REVIEW**

#### DRAFT

Project Status as of: Sep 30, 2014





#### **Project Information and Highlights**

#### Lead:

John D. Murphy, Acting Observation Portfolio Manager

#### Scope:

- Includes NWS systems (and 'data buys') that provide observations from radar, upper air, surface and marine environments used to support NWS' mission of providing weather, water, and climate data forecasts and warnings for the protection of life and property; and for the enhancement of the National economy Identify NWS' dissemination requirements and gaps
- Funding supports O&M of existing systems as well as development and implementation of new observational capabilities required to meet the NOAA strategic plan goals for a Weather-Ready Nation
- Observing the environment requires integration of all available sources; to include both in-situ and remotely-sensed data from satellites and radars, and data from NOAA systems, commercial sources, Federal and even international partners.
- No single observation source can stand on its own

#### **Estimated Benefits:**

Funding these systems provide up-to-date and accurate information to the Nation through support of the 122 WFOs, 13 RFCs, and 10 national Centers. It improves the resiliency of the American public and the US economy and reduces the potential of societal and economic impacts due to high impact weather events



#### Scheduling

NWS-Level AOP Milestones	Date	Status
Disposal contract for Wind Profiler sites	3Q	Complete
Reach & Maintain data availability at 75% (TAO)	4Q	Y – Terminated 3Q cruise
TAO refresh deployment: 11 refreshed buoys deployed	4Q	Complete
Bannister Business Case Analysis	3Q	Complete
27 of 27 ASOS sites completed (Sandy Supplemental)	4Q	Y – 6 sites delayed to FY15
Acquire "Autosonde" radiosonde/balloon system for evaluation (Sandy Supplemental)	3Q	Complete
Complete acquisition of supplies & services to redesign 20 Hurricane Buoys (Sandy Supplemental)	4Q	Complete

Additional AOP milestones included on Program Quads.



#### Issues/Risks

#### Issues:

- Ron Brown 3Q cruise terminated due to engine failure. After completing 4 cruises in FY14, data availability is 70%.
- Six sites delayed to 1QFY15. One site delayed to 3QFY15 due to lease issue.

#### Mitigation:

- 1) NDBC and OMAO have scheduled 2 cruises in early FY15. Data availability expected to be 80% at the end of calendar year 2014 if funding and ship time are available. Need \$1.8M increase to sustain 80% through FY15. Have identified shortfall to CFO.
- Procurement actions for these sites completed and work in progress. All sites are functional so there are no operational risks due to this delay.

## DRAFT



#### **Finances**

Budget I financial status included on Quad Charts individual OPR Program Quad Charts

#### **Aircraft Observations** Project Status as of: 14 Oct 2014



#### **Project Information and Highlights**

#### Lead:

Steve Pritchett, Project Manager

#### Scope:

- 1) Expand and sustain AMDAR (MDCRS) and WVSS observation coverage over data sparse areas, including internationally
- Improve data assimilation techniques for all aircraft observations
- Investigate possibilities of obtaining and assimilating domestic aircraft observations from regional carriers
- Quantify value of new and existing aircraft observations and data assimilation techniques through impact experiments

#### **Estimated Benefits:**

- 1) High quality aircraft soundings of temperature, wind, and moisture lead to more accurate numerical weather prediction for high impact weather and partially mitigate a potential gap in polar orbiting satellite coverage (JPSS gap)
- This project will quantify the value of aircraft observations, potentially leading to efficiencies/cost savings in our observational capability
- Increased skill performance of 1.0% as measured by standard verification scores

#### Scheduling

Milestone	Date	Status
Hire and train 2 support scientists for data assimilation, quality control, conduct impact experiments, and investigate density of US soundings from WVSS and MDCRS	7/15/2013	Completed
MDCRS/WVSS Workshop	4/28 -4/30 2014	Completed
Extend current WVSS and MDCRS contracts and make contract awards	7/15/2014	Completed
Issue RFP for contract to: Expand MDCRS, AMDAR, and/or CONUS Regional data. Expand WVSS data capabilities and	5/30/2014	
buy the available data for international routes.		Completed
Award Contract	9/22/2014	
Develop and test advanced techniques for assimilating aircraft observations and quantify the impact of aircraft observations for the operational global system	10/15/2015	On Track

#### Issues/Risks

#### **Risks & Issues:**

Development and testing may be delayed due to HPC operating system deficiencies (R)

#### Mitigation:

Request for FY14 HPC Allocation HPC resources

#### **Finances**

#### **Funding Sources:**

1) Sandy Supplemental \$8.3M 2) Aviation PPA \$1.95M

#### **Obligation Status:**

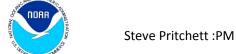
1) Sandy Supplemental \$8.3M 2) Aviation PPA \$1.93M

#### **Execution Status:**

Complete

Required

## **Volunteer Observing Ship (VOS) Program**



#### Oct 14, 2014





## **Project Information and Highlights**

- VOS provides over 6,000 observations per day with the United States providing the largest percentage in the world.
- Instrument standards, Quality Control efforts and standardization of program practices and procedures are key for international fluidity.
- Update training to encompass the ever increasing technical expertise needed for the duties of PMO's.

#### **Estimated Benefits:**

- 1) Insure that our ship observations, being the largest percentage in the VOS Scheme, are of the highest quality.
- Engage underdeveloped countries in participation into VOS; supporting the effort of receiving data over data sparse areas of the world by becoming proactive in the drifter donation program. DBCP/SOT initiative.
- US VOS will be unified in the team efforts and guidelines set forth by WMO.
- US VOS will be a vital asset to the International VOS scheme.
- Data quality will improve, thus add model integrity will also improve model skill.
- High quality archival data sets/metadata for climatological and environmental research and studies/ efforts impacting climate change studies.



Milestone Scheduling	Date	Status
National Port Meteorological Officer Work shop ( first in 5 years) Bay St Louis	08/27/2014	Completed
Develop project plan to begin to "normalize" VOS Program (FY15 AOP milestone)	12/30/2014	On Track
Support the VOS Program fleet by being able to purchase much needed equipment and supplies to insure good quality observations and be able to classify 5-10 % of US VOS ships as the higher standard "select VOSClim"	09/30/2015	On Track
Quality Control Blacklist of 40 top worse ships, begin goal to have less than 5-10 US ships at any one time.	09/30/2015	On Track

Schoduling



#### Issues/Risks

- 3 of 13 NWS Port Meteorological Officer (PMO) positions vacant 23 1) percent rate, 3 PMO focal points in Ak, 1 vacant
- Poor data quality on many of the ships due to a variety of reasons 2)
- 3) International community expects a certain level of cooperation in the standard practices and procedures, compliancy with the WMO and the Task Teams held under JCOMMS SOT.
- 4) Metadata practices need standardization.

#### Mitigation:

- 1) Fill PMO/Focal point vacancies . 1 PFAR submitted by SR
- 2-4) Implement a strategy to execute and expand funding for much needed standardized instruments to support VOS efforts, including improved databases.
- 2-3) Improve training for all the VOS program participants to increase understanding of requirements for standard methods, practices and international engagement



#### **Finances**

**Funding Sources:** 

1) LWF \$68K

**Obligation Status:** 

1) LWF \$59K

**Execution Status:** 

Complete

Potential Management

Attention Needed

#### **NEXRAD QUARTERLY PROGRAM REVIEW**

Project Status as of: Sep 30, 2014





#### **Project Information and Highlights**

#### <u>Lead</u>:

Terry Clark, Acting ROC Director

#### Scope:

- Includes O&M funding for 122 NWS radars including: Region field level maintenance, telecommunications, parts repair and reconditioning, spares replenishment, training, data archive, and HQ maintenance and logistics support.
- Also includes tri-agency funding for the ROC including: software maintenance, depot level maintenance, and sustaining engineering for IT tech refresh, security updates and component obsolescence.

#### **Estimated Benefits:**

NEXRAD is the NWS' primary observing system for detecting tornadoes, severe storms and precipitation, radar underpins weather forecasting/warning services...crucial for Weather-Ready Nation



#### **Scheduling**

AOP Milestones	Date	Status
Improved Quantitative Precipitation Estimation algorithm (Sandy Supplemental)	Sept 2015	In Progress
Hail Size Discrimination algorithm (Sandy Supplemental)	Sept 2015	In Progress
Surface Hydrometeor Classification algorithm (Sandy Supplemental)	Sept 2015	In Progress
Tornado Debris Signatures algorithm (Sandy Supplemental)	Sept 2015	In Progress
ID#4 - RPG/RDA Build 14 will be deployed to 100% of NEXRAD fleet	3Q	Complete
ID#12 - Network availability of 96%	4Q	G
ID#13 - Digital signal processor LRIP contract for NEXRAD SLEP	4Q	Complete



#### Issues/Risks

#### <u>lssues</u>:

- The SLEP acquisition policy requires specified administrative processes, and there is potential for delays in procurement to impact development, integration and deployment.
- 2) Possibility of a part-year CR in FY15, CR through 2<sup>nd</sup> Qtr should not be a significant issue.
- Possibility of a full-year CR in FY15 will significantly impact Signal Processor SLEP schedule by delaying procurement of production hardware. May also impact Transmitter SLEP scheduled to begin in FY16.

#### Mitigation:

- 1) Teaming with AGO/WAD to develop solid acquisition strategies has minimized acquisition risk.
- 2) Funds reg'd mid-May 2015, can be obligated with AGO/WAD coordination
- 3) Team with NWS CFO for alternative PAC funding options.



#### **Finances**

#### Funding Sources: \$63,055.5K

- 1) NWS Systems O&M \$46,408.5K + \$6543.2K Carryover
- 2) USAF Reimbursable \$4,171.6K
- 3) FAA Reimbursable \$4,194.1K + \$279.2K Carryover
- 4) Sandy Supplemental \$1,458.9K Carryover

#### Obligations Status: \$52,136.6K

- 1) NWS Systems O&M \$43,734.5K
- 2) USAF Reimbursable \$3,780.8K
- 3) FAA Reimbursable \$3,162.4K
- 4) Sandy Supplemental \$1,458.9K

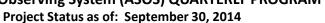
#### **Execution Status:**

\*NEXRAD carried over \$9.3M of two-year NWS funds and \$1.6M of USAF/FAA multi-year reimbursable funds into FY15. Carryover was expected but was higher than planned. There were procurement efficiencies, a few large procurements protested/deferred to 2015, and FAA forward funded some FY15 SLEP with FY14 funds.





## Automated Surface Observing System (ASOS) QUARTERLY PROGRAM REVIEW







#### **Project Information and Highlights**

#### Lead:

Tom Szynborski, ASOS Program Manager

#### Scope:

- Includes O&M funding for 314 NWS and 570 FAA ASOS sites including: Region field level maintenance, telecommunications, parts repair and reconditioning, spares replenishment, maintenance technician training, data archive, and HQ maintenance and logistics support.
- Also includes tri-agency funding for the OOS including: software maintenance, depot level maintenance, and sustaining engineering and testing for tech refresh and component obsolescence.

#### **Estimated Benefits:**

1) ASOS is the nation's primary system for collecting and reporting surface weather observations, primarily at airports, in support of aviation operations as well as weather forecasting and the timely issuance of warnings



#### Scheduling

AOP Milestones	Date	Status
2 of 27 sites completed (Sandy Supplemental)	4Q FY2013	Complete
9 of 27 sites completed (Sandy Supplemental)	2Q	Complete
18 of 27 sites completed (Sandy Supplemental)	3Q	Complete
27 of 27 sites completed (Sandy Supplemental) *	4Q	Funds Obligated
ID#9 - ASOS ACU/DCP tech refresh design	4Q	Complete

- 5 sites delayed to 1QFY15 due to contracting delays
- 1 site delayed until FY15 Q3 due to leasing issue



## Issues/Risks

#### Issues:

1) A sustainability analysis conducted by the NWS's National Reconditioning Center (NRC) has determined that the ASOS Acquisition Control Unit (ACU)/Data Collection Package (DCP) will reach the end of its service life by 2018 and requires a tech refresh.

#### Mitigation:

1) An FY17 ASOS Service Life Extension Program (SLEP) budget initiative is required to develop and deploy upgraded ACU and DCP hardware and the development of associated software and information technology necessary to ensure aviation weather is properly collected and reported until FY 2033 from the existing sensor network.



#### **Finances**

#### **Funding Sources (K):**

- 1) \$11.606.8 ASOS O&M
- 2) \$2,717.2 ASOS PAC
- 3) \$12,742.0 FAA O&M
- \$770.0 Reimbursables
- \$625.1 Sandy Supplemental

#### **Obligation Status (K):**

- \$10,263.3 ASOS O&M
- 2) \$476.7 ASOS PAC
- 3) \$12,399.5 FAA O&M
- \$555.68 DOD Reimbursables
- \$611.51 Sandy Supplemental

#### **Execution Status**

Carried over \$1.3M NWS ASOS O&M and \$2,240.8K NWS PAC. Carryover funds to be used for ACU/DCP Upgrade in FY15/16.







## Cooperative Observing Program (COOP)

## Project Status as of: September 30, 2014

#### **Project Information and Highlights**





#### <u>Lead</u>:

Jim Zdrojewski, Acting Program Manager

#### Scope:

The COOP Program collects and provides observational data and metadata for forecasting and modeling of meteorological, climatological, and hydrological operations and applications and includes observational equipment and its O&M.

#### **Estimated Benefits:**

- 1) The COOP observations are the basis of the Nation's official climate record.
- 2) COOP observations are a major component of hydrologic modeling
- 3) FEMA relies on COOP snowfall data as the primary source for disaster declaration and relief efforts.
- 4) USDA risk management models get 80% of the data from COOP for ag disaster relief and for baselines with the related insurance and reinsurance industries.
- Large and small businesses rely on the 30 year climate normals, including HDD and CDD, produced from COOP data for decision making concerning billions of dollars of commerce.



Milestone	Date	Status
COOP Training – Residence Course at NWSTC	March	Complete
COOP Training – Residence Course at NWSTC	June	Complete
Annual Jefferson and Holm national observer awards	July	Complete
New metadata software implemented (SIS)	October/ November 2014	In Progress
Improvements to WxCoder III software	September 2014	In Progress



#### **Issues/Risks**

#### Issues:

- Current metadata software (CSSA) has increasing IT security risks due to software's age.
- Annual fluctuations as well as persistent continuing resolutions, cause difficulty for planning of long term projects to replace aging equipment using the Sustain COOP budget.
- 3) National COOP Program Manager position is vacant.

#### **Mitigation**:

- CSSA will be shut off to the outside on October 16<sup>th</sup>. Access will only be from within SSMC2 for final transfer of data to new system. SIS metadata software will be deployed operationally during the first week of November. This gap is needed for transfer of data and required IT procedures.
- Some equipment replacement projects must be deferred until we are guaranteed funding is available. Current project is wireless temperature sensor.
   Soil temperature sensor at proof of concept stage.
- Climate Services Division personnel detailed as Acting COOP Program Manager while still performing duties of CSD position.



#### **Finances**

#### **Funding Sources:**

- 1) Sustain COOP, FY14 \$902,550
- 2) Sustain COOP, FY13 Carryover \$987,816

#### **Obligation Status:**

- 1) Sustain COOP, FY14 \$548,393
- 2) Sustain COOP, FY13 Carryover \$800,891

#### **Execution Status:**

- 1) Sustain COOP, FY14 Remainder \$354,157
  - Will be carried over to FY15. Plan in place to obligate in Q2.
- 1) Sustain COOP, FY13 Carryover Remainder \$186,925



# **National Mesonet QPR**

## Project Status as of: October 14, 2014

#### **Project Information and Highlights**



#### Lead:

Curtis Marshall, Project Manager

#### Scope:

1) NWS to contract with the private sector to obtain access to mesonets operated by a collection of state, local, and private sector entities

#### **Estimated Benefits:**

1) NWS will gain/continue access to meteorological observations at more than 8000 sites across the CONUS for use in warning and forecast operations

#### **Scheduling**



Milestone	Date	Status
Funds transferred to OST	April 2014	Complete
Issue C-Request to AGO	June 1, 2014	Complete
Issue RFQ	July 1, 2014	Complete
Receive proposals	Aug. 1, 2014	Complete
Award contract	Sept. 1, 2014	Complete

#### **Issues/Risks**

#### Issues:

None

#### **Mitigation**:

None



#### **Finances**

#### **Funding Sources**

1) Mesonet \$12,110.8K (includes \$122.8K of FY13 carryover)

OnTarget

#### **Obligation Status**

1) Mesonet \$11,900.0K

#### **Execution Status**

Complete



## U.S Regional Climate Reference Network (USRCRN)

Project Status as of: Sept 30, 2014



#### **Project Information and Highlights**

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#### **Scheduling**

<u>Lead</u>:

Bobby Martinez, Project Manager

#### Scope:

There are a total of 88 USRCRN sites deployed in the Southwest U.S. (72) and Alabama (16).

- Agreement was reached between the NWS and the Southwest States to transfer ownership of 63 of the 72 sites in the Southwest. Working on transfer process.
- b) NESDIS is working on transferring the 16 SLA's for Alabama.
- c) The equipment from the 9 de-installed sites will be split amongst the 4 States for sparing purposes.

#### **Estimated Benefits:**

1) Significant cost savings will be achieved by reducing the number of sites to be de-installed from 88 to 9.

Milestone	Date	Status
Develop De-installation Plan & Schedule	10/31/14	Ongoing
Identify transfer entities to accept ownership of network	5/31/14	COMPLETE

State	Sites to Deinstall	Sites to Retain (need SLA)	SLAs Completed	SLAs Remaining
Alabama	0	16	0	16
Arizona	4	14	8	6
Colorado	0	17	7	10
New Mexico	5	16	3	13
Utah	0	16	1	15

G

#### Issues/Risks

#### Issue:

New Site License Agreement (SLA) between States and Site Hosts may not be reached which would prevent States from accepting ownership transfer.

#### **Mitigation**:

PM is monitoring progress of negotiations between the States and Site
Hosts. Positive progress is being made between the parties. To date, the
vast majority of sites have verbal confirmation. Process is slow moving,
but to date, no opposition has been encountered from the Site Hosts.



#### **Finances**

#### **Funding Sources**

1) USRCRN PAC \$2,114.6K

#### **Obligation Status**

1) USRCRN PAC \$665.4K

#### **Execution Status**

\*\$1,449,188 in FY13 carryover was unspent. Need \$200K carried over in FY15 for shipping and contingency costs. This will leave \$1,249,188 available for reprogramming.

#### WIND PROFILER QUARTERLY PROGRAM REVIEW

Project Status as of: September 30, 2014

#### **Project Information and Highlights**





#### <u>Lead</u>:

Al Wissman

#### Scope:

- Includes O&M funding for 31 existing and 5 Next Generation Wind Profiler sites including: Region field level maintenance, telecommunications, parts repair and reconditioning, spares replenishment, operator and maintenance technician training, data archive, leases, HUB maintenance and logistics support.
- 2) Also includes PAC funding for the installation of 4 Next Generation Wind Profilers, the removal of the 31 CONUS Wind Profilers and the security software updates.

#### **Estimated Benefits:**

1) Funding for the installation of the Next Generation Wind Profiler systems provides improved and accurate volcanic plume information to the Alaska region.

#### **Scheduling**



AOP Milestones	Date	Status
ID#3 - Disposal contract for Wind Profiler sites	Q3	Completed
ID#7 - NOAA Profiler Network continue operations and maintenance support of three profilers located in Alaska	Q4	Completed



#### **Issues/Risks**

#### <u>lssues</u>:

1) Alaska installation solicitation was canceled September 9, 2014 with a potential loss of \$650K of FY13 carry over.

#### Mitigation:

1) Applied FY13 carry over to OAR support services contract to acquire engineering services for Alaska wind profiler installation preparations.



#### **Finances**

#### **Funding Sources:**

1) FY13 Carryover ORF	\$3,202.5k
2) FY14 ORF	\$1,798.2k
3) FY13 Carryover PAC	\$771.2

#### **Obligation Status:**

1) FY13 Carryover ORF	\$3,202.5K
2) FY14 ORF	\$397.0K
3) FY13 Carryover PAC	\$0.0K

#### **Execution Status:**

- \$1,401.2 FY14 ORF carried over. Will be used to fund Alaska Wind Profiler deployment activities in FY15.
- \$771.2K FY14 PAC carried over. Will be used to fund Alaska Wind Profiler Installation contracts in FY15.





## Upper Air - Radiosondes QUARTERLY PROGRAM REVIEW

Project Status as of: September 30, 2014

#### **Project Information and Highlights**





#### <u>Lead</u>:

Hiram Escabi, Jr., Upper Air Program Manager Harold Daley, COR Radiosondes Nicholas Schmid, COR Balloons

#### Scope:

- Since the late 1930's the National Weather Service (NWS) has measured vertical profiles of pressure, temperature, relative humidity, and wind velocity through the use of balloon-borne radiosondes.
- The NWS participates in the WMO's World Weather Watch Program by maintaining and operating a network of radiosonde stations in the contiguous U.S. (69 sites), Alaska Region (13), Caribbean (1), and (9) Pacific Region. In addition the Cooperative Hurricane Upper Air Stations (CHUAS) network in the Caribbean (10).

#### **Estimated Benefits:**

- Radiosonde observations are essential for producing accurate weather forecasts and warnings.
- 2) Provides data to meteorological forecasting computer models.



NWS-Level AOP Milestones	Date	Status
Automated Radiosonde Observation System (Sandy Supplemental)	4Q	G
Contract awarded 403 MHz GPS Radiosonde Systems for CHUAS network in the Caribbean	4Q	G



#### Issues/Risks

#### Issues:

The current Radiosondes Observing System will be replaced due to impacts from Middle Class Tax Relief Act of 2012, which directed the auction of NOAA satellite spectrum. The effort to relocate radiosonde operations to the 400 MHz band cannot be completed ahead of the launch of the GOES-R satellite. Radiosondes must make operational adjustments to effectively mitigate potential interference to GOES-R ground stations after the CY2016 launch.

#### Mitigation:

Beginning after the launch of the GOES-R satellite, the NWS will change its operations at sites where there is potential to cause harmful interference to GOES-R by limiting radiosonde transmissions to the lower two (of the available four) frequency channels, thus not transmitting on the same frequency as GOES-R. NWS and NESDIS will work together to conduct a radio-frequency analysis to validate the mitigation strategy. If the analysis shows the plan will not adequately protect GOES-R ground stations, alternative mitigation strategies will be considered.



#### **Finances**

#### **Funding Sources:**

1) Sandy Supplemental	\$1,088.0K
2) LWF	\$14,050.5k
3) Systems Acquisition	\$4,365.1K

#### **Obligation Status:**

1) Sandy Supplemental	\$1,087.8K
2) LWF	\$14,042.1K
3) Systems Acquisition	\$3,474.3K

OnTarget

#### **Execution Status:**

Complete

# **Observations Portfolio – Marine Observations - Buoys**

Program Status as of September 30, 2014



**Project Information and Highlights** 

## cead:

Helmut H. Portmann, Director, NDBC

#### Scope:

NDBC maintains global network of NWS - funded weather and ocean data buoys, C-MAN stations, Hurricane buoys, AK data buoys, deep-ocean tsunami detection stations and the Tropical Atmosphere Ocean buoys, as well as 5 directly reimbursable weather buoys that collect and distribute marine atmospheric and ocean observations in real time via NWS Telecommunications Gateway and NDBC website. NDBC also supports marine data collection by NOAA IOOS and other partners by collecting, qc and distributing data in real time.

NDBC is recapitalizing its hurricane buoy network with Sandy Supp. funds with new modular weather and waves system on smaller more efficiently maintained buoys.

NDBC operates and maintains mission control center, laboratory, calibration, industrial production, warehouse facilities and office space at Stennis Space Center in South MS

#### **Benefits:**

Real time availability of weather and ocean observations are critical for the NWS forecasts and Warning products.



#### Issues/Risks

FY15 CR level LWF funding for TAO is not sufficient to maintain near 80% data availability though FY15 and into FY16. The NWS CR budget for TAO is \$1.8M short of the \$6.7M requirement. This will impact procurement of equipment, sensors and contractor support for servicing 3 of the 8 TAO lines at the end of FY15 and early FY16. The "gap " in TAO service is expected to result in a drop in TAO performance to 50-60% beginning in early FY16.

#### Mitigation:.

- Adjusted FY15 CR spend plan for TAO to "frontload' the spending in the first half of FY15, so shortfall will be in Q3 and Q4.
- Request \$1.8M additional funding in Q3 to procure instruments and contract labor for preparing for last FY15 and early FY16 TAO service cruises.

#### Scheduling

G FY14 AOP Milestones	Date	Status
ID#15 – Wx Buoys and CMAN: Maintain data availability level at 60%	Q4	G
ID#17 – Reach and maintain data availability for TAO at 75%	Q4	Y
Cruise 1 – Ron Brown 13 buoys on 95W, 110W, 125W; <b>Ship</b> casualty, cruise cancelled on April 4, 5 of 13 buoys serviced		Υ
Cruise 2–Charter 8 buoys 95W, 110W – improvement to <b>40% due to</b> failures of old sensors in other parts of the array	Q3	G
Cruise 3 –Charter 7 buoys on 180 – improve to <b>55%</b>	Q4	G
Cruise 4 – RB 12 buoys on 125W and 140W  COMPLETE- data availability at 70%	Q4	G
2 cruises on RB in FY15Q1 - improve TAO to 80% by end of CY.	FY15Q1	G
ID#18 - 11 new refreshed TAO buoys are deployed in the array in FY14 - COMPLETE	Q4	G
ID#19 - Complete acquisition for supplies and services to redesign 20 Hurricane Buoys	Q4	G



#### **Finances**

#### Funding Sources and Obligation Status through September 30, 2014

#### **Funding Source**

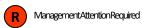
1)Wx Buoy/C-MAN (LWF)	\$15,257
2)TAO (LWF)	\$ 6,332
3) Alaska Data Buoy	\$ 1,650
4) Tsunami/DART	\$ 8,001
5) Reimbursable funding	\$ 1,333
6) Hurricane Sandy Supplemental	\$ 3,655

#### **Obligation Status**

1)Wx Buoy/C-MAN (LWF)	\$15,040
2)TAO (LWF)	\$ 6,332
3) Alaska Data Buoy	\$ 1,645
4) Tsunami/DART	\$ 8,000
5) Reimbursable funding	\$ 1,333
5) Hurricane Sandy Supplemental	\$ 3,653

#### **Execution Status**

Fully executed except for labor lapse







#### NRC/NLSC QUARTERLY PROGRAM REVIEW

Project Status as of: Sep 30, 2014





#### **Project Information and Highlights**

#### <u>Leads</u>:

Chuck Maples, NRC Anthony Harrison, NLSC

#### Scope:

- The NRC provides depot-level maintenance, reconditioning, and quality assurance of NWS operational equipment in support of NWS and other Tri-Agency programs including NEXRAD, ASOS, AWIPS, Upper Air, and COOP.
- 2) The NLSC provides cost effective warehousing and shipping support for over 11,000 stock items totaling over 2.2 million pieces. The NLSC is responsible for filling customer orders within 24 or 48 hours depending on emergency or routine orders.

#### **Estimated Benefits:**

Keeping NRC and NLSC together in Kansas City will continue support of programs with timely repairs, low error rates for fielded equipment, and short time frames for delivery of parts to the field.



#### **Scheduling**

AOP Milestones	Date	Status
ID#6 – Bannister Business Case Analysis	3Q	Completed



#### Issues/Risks

#### <u>lssues</u>:

- 1) Relocation from Bannister required by Dec 2015.
- Move related funding required in FY15, O&M funding increases going forward.
- 3) Need critical NRC/NLSC vacancies filled to have resources to prepare and move facilities.

#### **Mitigation:**

- 1) NRC/NLSC staying in Kansas City, new site selected.
- 2) Reviews of facility ongoing. Daily interaction with contractor/GSA/NOAA
- 3) Floor plans, equipment locations, shelving details review continues.
- 4) Site activity underway. Dirt being moved, base for slab being built.
- 5) Allocation of increased rent/utilities being worked.
- Vacancy work ongoing. 3 vacancies selections made thru OPM. Recruiting actions underway for 4 other positions. 2 others working for RADS entry.



#### **Finances**

#### **Funding Sources:**

- 1) LWF \$1,584.5K
- 2) NEXRAD O&M \$2,641.0K
- 3) AWIPS O&M \$108.0K
- 4) NWS ASOS \$981.1K
- 5) FAA ASOS \$1,203.6K

#### **Obligations Status:**

- 1) LWF \$1,118.4K
- 2) NEXRAD O&M \$2,292.3K
- 3) AWIPS O&M \$79.8K
- 4) NWS ASOS \$889.4K
- 5) FAA ASOS \$760.1K

#### **Execution Status:**

FY14 complete. Unobligated balances included in carryover requests.



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# Agenda

# **Central Processing Portfolio**

- Overview Quad
- WCOSS
- WCISS
- AHPS
- AWIPS
- Tsunami IT Modernization

#### CENTRAL PROCESSING PORTFOLIO QUARTERLY PROGRAM REVIEW

Project Status as of: 27 October 2014

#### **Project Information and Highlights**





#### <u>Lead</u>:

Ben Kyger

#### Scope:

 Includes AWIPS, supercomputing NCEP front office, NCO, Hydrology, and NCEP center and NWS Regional data center IT infrastructure used to support NWS' mission of providing weather, water, and climate data, and issue forecasts and warnings for the protection of life and property and for the enhancement of the national economy.

#### **Estimated Benefits:**

 Funding for these systems provides up-to-date and accurate weather information to the Nation through the support of the 122 WFOs, 13 RFCs, and 9 national prediction centers. Improves the resiliency of the American public and the US economy and reduces the potential of societal and economic impacts due to severe weather events.



NWS-Level AOP Milestones	Date	Status
AWIPS - Submit acquisition plan for re-compete	<del>Q3</del> Q4	R
Two NCEP Centers exit AWIPS2 FOTE	Q4	R
SWPC enters IOC for AWIPS2	Q4	R
Supercomputing - Take delivery of WCOSS phase 2	Q4	С
NCO - Implement GFS/GDAS v12.0.0	<del>Q4</del> Q1FY15	G
Hydrology - CHPS moved to AWIPS2	Q4	С
MRMS live on IDP	Q4	С



#### Issues/Risks

#### Issues/Risks:

- 1) Issue AWIPS2 deployment will not reach it's goal of 16 WFOs per quarter
- 2) Issue IBM sale of WCOSS technology to Lenovo has delayed the delivery of task order 4 in support of the Sandy supplemental
- 3) Issue The GFS/GDAS v12.0.0 implementation will be delayed
- 4) Issue- NAWIPS migration plan is not valid
- 5) Issue-SWPC AWIPS2 IOC delayed

#### Mitigation:

- 1) Accept delay. Current target Q4FY15
- 2) Accept delay and continue with re-compete in parallel
- 3) Accept delay. Current target Q1FY15
- 4) Being re-planned/restructured
- 5) AWIPS2 v14.2.2 delayed until Q1FY15



#### **Funding Sources and Obligation Status YTD**

Functional Area	Omnibus	Allotted	Obligated
AWIPS	\$60.0M	?M	\$51M
Supercomputing	\$74.6M	\$36.2M	\$22.6M
NCEP Front Office	?	?	?
NCO	\$14.1M	\$12.7M	\$6.4M
Hydrology	\$10.0M (- \$2M)	\$3.7M	\$2.4M
NCEP center IT (no regions)	?	?	?
Total	?	?	?

Annual budget expected in June 2013 AOP meeting: \$154.5M



## Weather and Climate Operational Supercomputing System (WCOSS) Q4 FY14 Quarterly Report – September 30, 2014





## **Project Information and Highlights**

#### Lead:

Mike Kane, Project Manager

#### Contracting Officer:

Michael Blumenfeld

#### Scope:

Provide High Performance Computing operational resources for NWS and NOS to support their respective missions.



#### Scheduling

Milestones	Date	Status
Delivered Task Order 0004 SOO to Vendor	11/21/2013	Complete
Vendor delivered 40 additional service nodes and acceptance test passed	12/18/2013	Complete
Exercise Next Contract Period (Feb 2014 - Feb 2015)	2/14/2014	Complete
Issue WCOSS II RFI	8/18/2014	Complete
Vendor Submisson of TO4 proposal	11/7/2014	On-Track
Award Task Order 0004 (Sandy Supplement)	12/1/2014	Progressing
Complete WCOSS Phase II Upgrade	12/31/2014	On-Track



#### Issues/Risks

#### Issues/Risks:

- Current WCOSS ITIA ceiling will be exhausted in FY15.
- 2) Obligation of Sandy Supplemental and NCO carryover (FY13 and FY14) funding.

#### Mitigation:

- Working with NOAA OCIO to increase ITIA ceiling for the remainder of the WCOSS contract base period. On hold pending decision on item 2.
- 2) Pursuing dual acquisition courses of action to ensure timely obligation of funding. RFI issued for WCOSS II acquisition and pursuing award of Task Order 004 on existing WCOSS contract.



#### **Finances**

	Amounts
Funding Sources	(\$Ms)
FY 14 PAC	\$37.71
FY14 HFIP	\$3.84
FY 13 DRA SS NWS	\$24.90
FY 13 DRA SS NOS	\$0.95
FY13 PAC Carryover	\$7.33
Total	\$74.73

Total Obligations to	
Date	\$31.38
Planned Obligations	
To Date	\$0.63

Note: \$43M carried over into FY15 for WCOSS Augmentation







EVM not required; steady-state investment



# Weather and Climate Computing Infrastructure Services (WCCIS) Q4 FY14 Quarterly Report – September 30, 2014





## **Project Information and Highlights**

#### Lead:

Mike Kane, Project Manager

#### **Contracting Officer:**

Ronald Banzon

#### Scope:

WCCIS provides labor, compute, storage, networking, datacenter, and other IT Infrastructure in support of operational and developmental modeling and forecasting for all NCEP centers.



#### **Scheduling**

Task	Milestones	Date	Status
IDP	Complete Buildout of David Skaggs		
IDP	Research Center	Q4	on-track
	First implementation of NLDAS	8/5/2014	Completed
	NAM upgrade	8/12/2014	Completed
	Upgrade to NOS Gulf of Mexico system	8/16/2014	Completed
Model	HRRR implementation	9/30/2014	Completed
Implementations	HYSPLIT upgrade including support for		
	СТВТО -	9/30/2014	Completed
	GFS Upgrade	Q1	On-track
	SREF Upgrade	Q2	On-track
	GEFS Upgrade	Q3	On-track
	Code Check-ins		
	NSHARP upgrades for WFOs	9/10/2014	Completed
	Baseline Viz configurations for SDM, CPC	9/10/2014	Completed
	Baseline Dataflow scripting and		
AWIPS	configurations	9/10/2014	Completed
	Thin Client Remote Execution	9/10/2014	Completed
	SWPC Magnetometer Viz Resource	9/10/2014	Completed
	NTRANS Viz Resource	9/10/2014	Completed
	UGD Datauri Removal	9/10/2014	Completed

## $\mathbb{R}$

#### Issues/Risks

#### Issues:

I. Backup capabilities lacking for AWIPS, NHC, AWC, and SPC.

<u>Mitigation:</u> Working with OCIO to submit a FY17 PCS to request funding to provide this capability along with out year sustainment and recapitalization funding.

#### Risks:

I. IF AWIPS II does not have the performance / scalability to support NCEP Centers' peak operations & usages of large non-SBN datasets, or if software installation takes too long with no rollback capabilities, then NCEP centers will not migrate fully to AWIPS II and the migration will continue to be delayed.

<u>Mitigation</u>: Coordinate with APO & Centers to (a) accelerate performance and scalability testing at the AWIPS Raytheon Silver Spring test bed and leverage the existing APO Work Assignment with RTS to work NCEP performance issues as needed.



#### **Finances**

	\$ (Ks)
Total Obligations to Date	\$27.40
Planned Obligations To	
Date	\$3.77

Funding Source	s	Amounts (\$Ks)
NCO		\$12,689
CITS		\$2,484
NHC (DRA SS)		\$1,370
OS&T MADIS		\$883
OS&T AWIPS		\$1,078
OS&T IDP		\$6,967
EMC (DRA SS)		\$750
CSDL		\$100
OS&T NAQFC		\$100
SWPC		\$572
HFIP (DRA SS)		\$97
OST Nex Gen   OOS		\$175
NOS I CO-OPS		\$148
NOS I OOS		\$51
OST/WPC		\$104
CPC		\$145
СРНС		\$119
NWS/Tsunami		\$237
	Total	\$28,069
rv and on-track		17







## **Advanced Hydrologic Prediction Service (AHPS)**

## Project Status as of 30 September 2014





#### **Project Information and Highlights**

#### Lead:

Donna Page, Project Manager

#### Scope:

Modernization of the NWS Hydrology Program – includes the Community Hydrologic Prediction System (CHPS), Hydrologic Ensemble Forecast Service (HEFS), Water Forecasting Improvement Preparatory Project, AHPS Web, AHPS Implementation support and development activities, working with stakeholders to improve services.

#### **Estimated Benefits:**

National implementation of AHPS will save an estimated \$240 million per year in flood losses, and will contribute an additional \$520 million per year in economic benefits to water resource users.

#### Scheduling

AOP Milestone	Due	Status
Concept of operations document for the use of HEFS at RFCs	Q3	Complete
Deliver Dual-Pol Hydrologic software upgrades to AWIPS	Q3	Complete
Implement AHPS services at an additional 150 locations (3493 total)	Q4	Complete
Implement 3 AHPS Phase IX enhancements, integrate 11 flood inundations map libraries, and support AHPS web pages	Q4	Complete
Operational integration of HEFS V1 into the CHPS software baseline and release to all RFCs	Q4	Complete
Complete transition of CHPS into AWIPS (hardware and software)	Q4	HW complete, SW slightly delayed



## Issues/Risks

#### Issues/Risks:

Delivery of CHPS software to AWIPS was slightly delayed.

#### Mitigation:

Completed Oct. 3



#### Finances

#### **Funding Sources:**

- 1) \$271K AHPS FY13 Carryover
- 2) \$7.773K AHPS includes work with river basin commissions for coordinated forecasts
- 3) \$8,044K –AHPS program total (Non-NWC)
  - a) Note: Appropriations language added \$2M to AHPS to staff and operate the National Water Center (NWC) - will be discussed in NWC quad (AFS)

#### **Obligation Status**

- Q2 Obligated \$1,764K of AHPS on grants (UCAR) and support contracts
- Q3 AHPS FY13 CO funds to be obligated on task for Hydro Science contract late July
- Q3 Commitments/Obligations \$7,345K on grants (UCAR) and support contracts
- Q4 Plans to obligate the remaining \$166K and carryover \$533K

#### **Execution Status**

- Q2 \$2,406K executed through Q2
- Q3 \$7,345 executed through Q3
- Q4 = Total Obs \$7,060 Carryover of \$603K. Reserved funds for web dissemination \$533K and \$70K in other deferred activities to be executed in FY15







## Advanced Weather Interactive Processing System (AWIPS) Program

Project Status as of: September 30, 2014

## **Project Information and Highlights**





#### Lead:

Ronla Henry, Program Manager

#### Scope:

- The AWIPS program is comprised of O&M and Product Improvement
- Product Improvement projects include AWIPS II, Thin Client, Data Delivery, NAWIPS, BMH, Collaboration and Information Generation
- 3) Prime Contract Re-compete

#### **Estimated Benefits:**

- 1) AWIPS is NWS' primary weather analysis and forecast system.
- 2) Contract re-compete provides O&M and PI contract structure to support AWIPS, including focus on operational reliability/performance, security, cost effectiveness, customer support, and system evolution to support Weather Ready Nation. Innovations possibly include distributed Configuration Management (CM) environment, architecture change support using and manipulating large 4dimensional datasets, and changes to AWIPS hardware/software architecture to create long-term O&M savings

#### Scheduling



Milestone	Date	Status
Complete AWIPS2 migration at all NWS Centers	Q1FY14	Complete
Complete NOAA Weather Radio/BMH Preliminary Design Review (PDR)	<del>Q1FY14</del> Q2FY14	Complete
	Q1FY14- 8 WFOs	
Implement AWIDS 2 at FO WEOs for a total of FO	Q2FY14- 24 WFOs	24 WFOs
Implement AWIPS-2 at 50 WFOs for a total of 50	Q3FY14- 40 WFOs	Complete
	Q4FY14- 50 WFOs	
Complete digital analog converter acceptance testing for BMH	<del>Q2FY14</del> Q3FY14	Complete



#### Issues/Risks

Issue #1: NAWIPS migration Field OTE has been delayed.

#### Status:

 Currently working with individual centers to resolve issues that delayed entrance into OTE.

Risk #1: Acceptable NCEP COOP Solution needed prior to exiting OTE for NAWIPS Migration

#### Status:

- Short term COOP requirement will be met by AWIPS VPN and Thin Client solutions
- In process of procuring NC configuration to support long term COOP requirements

Risk #2: Inability of AWIPS I to support essential mission requirements Status:

- Evaluating the impact of AWIPS II deployment delays on the ability of AWIPS I to continue to support NWS mission
- Group 4 30-day test completed with no issues



#### **Finances**

#### **Funding Sources:**

- \$38,539,422 ORF
- \$21,495,987 PAC
- \$1,174,818 carry over funds ORF
- \$1,224,635 carry over funds PAC

#### Obligation Status (through 9/30/2014):

- \$35,927,310 ORF
- \$20,019,961 PAC
- \$594,267 ORF Carryover
- \$1,010,740 PAC Carryover

#### **Execution Status:**



# **Tsunami IT Modernization**

## Project Status as of: October 24, 2014



## **Project Information and Highlights**

#### Lead:

Bobby Martinez, Project Manager

#### Scope:

1) Develop and deploy common tsunami warning system at the National and Pacific Tsunami Warning Centers based on AWIPS II technology.

#### **Estimated Benefits:**

- 1) Common system between both centers
  - 1) Reduction of maintenance costs
  - 2) Supports failover between centers
  - 3) Supports staff exchange
- 2) Leverage AWIPS II hardware baseline, SOA, and O&M
  - 1) Part of AWIPS II technology refresh cycle
  - 2) Expeditious research to operations through AWIPS II plugins
  - 3) Incorporated into Tier 1-3 AWIPS II support
- 3) Leverage open source seismic processing package (SeisComP3)
  - 1) De facto industry standard (in use at 30+ centers)
  - 2) Large community of developers share enhancements
  - 3) Professional support

#### Scheduling

AOP Milestone	Date	Status
NOAALink Task Order awarded to ERT/Raytheon/ISTI	Sep 20, 2013	Complete
Critical Design Review	Feb 20, 2014	Complete
AWIPS Hardware Install Completed @ Alaska (Delayed)	Dec 19, 2014 Jan 25, 2015	Ongoing
AWIPS Hardware Install Completed @ Hawaii (Delayed)	<del>Dec 19, 2014</del> Feb, 14, 2015	Ongoing
Tsunami System Operational	*FY16, Q1	Ongoing

<sup>\*</sup> Need to verify once new schedule comes out

#### Issues/Risks

#### Issue:

PTWC lacks the IT support staff needed to operate and maintain AWIPS equipment. This is a potential barrier to implementation. PTWC has requested the same IT support level that WFO's have for AWIPS. Specifically they have requested the following: (1)ITO, (1)ESA, & (1)Junior ESA, to support the operations and maintenance of AWIPS.

#### Mitigation:

Mike Angove has brought forth the staffing issue to Andy Stern & the NWS DAA.

#### Issue:

AWIPS Hardware Installation was forecasted to complete in December 2014. Recently awarded contract has a completion date of February 2015.

#### Mitigation:

Awaiting re-baselined schedule. Likely day for day slip. Anticipating sufficient slack in the schedule to accommodate the slip.



#### **Finances**

#### **Funding Sources:**

- 1) Spectrum Funds received from NTIA via MOU
  - 1) NOAALink Task Order \$8.262M
    - a) Warning system \$6.46M
      - b) T&M \$0.6M
      - c) O&M \$0.441M
      - d) Award Fee \$0.323M
      - e) Website \$0.241M
      - f) Tsunami animation \$0.147M
  - Project Management Support, NOAALink Task Orders, \$0.353M
  - 3) AWIPS II Hardware, Raytheon Task Order, \$0.6M

#### **Obligation Status**

All obligated

#### **Execution Status**

On track



Management Attention Required



Potential Management Attention Needed



# Agenda

# **Facilities Portfolio Quad**

- Overview Quad
- WFO Relocation
- WFO Construction
- WFO Maintenance

#### Facilities QPR

Project Status as of: September 30, 2014





#### **Project Information and Highlights**

#### Lead:

Deirdre Jones, Acting Director, OPS

#### Scope:

This budget funds construction related costs for NWS facilities including: WFO/WSO construction projects; and replacement of facility systems, e.g., HVACs, UPSs, roofs, etc. FY14 WFO TI/Relocation funding will provide TI & move costs for leased WFOs where failing conditions pose an elevated operational risk and improvements are needed for the continuity of weather Forecast and Warning operations. Funding also pays for costs associated with moving a WFO if required or if it is determined to mitigate the operational risk more effectively.

#### **Estimated Benefits:**

Complete 1990 modernization efforts for Pacific and Alaska Regions. This investment will also ensure the continued effective operations of these mission critical facilities; that NWS forecasters have adequate facilities, computing, and system resources they rely on; and ensure these facilities meet Federal regulations.



#### Scheduling

Milestone	Date	Status
ID#6 – Complete Bannister Business Case Analysis	5/30/14	Completed
Sign WSO Palau construction MOU	3/10/14	Completed
Sign WSO Chuuk design MOU	2/11/14	Completed
Award facility condition assessment & strategic facility plan	6/5/14	Completed
Finalize facility condition assessments & strategic facility plan	Q2 FY15	Pending



#### Issues/Risks

#### Issues:

- 1) Insufficient funding for all known facility discrepancies. HVAC, roof, UPS failures compete against and erode construction project funds.
- 2) FY14 PAC construction budget may not be sufficient to fund four WFO relocations (depends on scope).

#### Mitigation:

- 1) Establish a budget line item for system failures. \$673.5K was provided by OCFO for emergency failures in FY14.
- 2) Facility assessments currently underway and the development of strategic facility plans will guide priorities across nation. Focus current funding on highest priority WFOs.



#### **Finances**

## **Funding Sources:**

- WFO Tenant Improvements (TI)/Relocations: \$4,890K
- WFO Construction: \$7.879K
- 3) WFO Maintenance: \$6,844.4K, \$2.934.5K Sandy Supplemental

#### **Obligations Status:**

- 1) WFO Tenant Improvement (TI)/Relocations: \$0K
- 2) WFO Construction: \$5,133.1K
- 3) WFO Maintenance: \$6,686.9K \$2,893.7K Sandy Supplemental

#### **Execution Status:**

- 1) WFO Tenant Improvement (TI)/Relocations: \$4,890K Carryover to FY15. Will execute toward WFO Cleveland, WFO Phoenix and WFO Davenport
- 2) WFO Construction: \$2,745.9K carried over to FY15
- 3) WFO Maintenance: \$157.5K carried over to FY15







#### WFO Tenant Improvements (TI)/Relocations Project Status as of: September 30, 2014

#### **Project Information and Highlights**



#### Lead:

Mark Burkes, Facilities Management Branch Chief

#### Scope:

WFO TI/Relocation funding will provide TI & move costs for leased WFOs where failing conditions pose an elevated operational risk and improvements are needed for the continuity of weather Forecast and Warning operations. Relocation candidates:

- WFO Cleveland, OH Relocating to the Stokes Federal Building. A Reimbursable Work Authorization (RWA) and Statement of Work (SOW) will be submitted to GSA in November
- 2) WFO Phoenix, AZ current landlord needs to relocate us but collaborative relationship with the Salt River Project remains strong. Short term lease extension effective until 5/1/16. GSA has the POR and will begin working procurement.
- WFO Davenport/Quad Cities, IA BCA performed recommended relocation.
   RPMD scoring places it as capital lease; short term (6/2016) lease pursued with lessor. Relocation required.
- 4) WFO Topeka, KS facility conditions remain poor. New lease signed in 2012, escape clause allows cancellation in 2017.

#### **Estimated Benefits:**

Mitigation of operational risk associated with failing leased facility conditions.



#### **Issues/Risks**

#### <u>Issues</u>:

- FY14 PAC construction budget may not be sufficient to fund four WFO relocations (depends on scope)
- Extensive project approval and planning lead times will push construction completion and moves into FY16 & beyond
- There may be other, yet to be identified, locations where either the lessor or RPMD lease scoring forces the NWS to relocate.

#### **Mitigation:**

- 1) Adopt WFO Scoring Criteria/Priority Ranking.
- Focus current funding on action toward highest priority WFOs. PAC Construction does not expire.
- Going forward, GSA involvement with leases transferred to them should identify locations requiring a move sooner.



#### **Scheduling**

Milestone	Date	Status
Award facility condition assessment & strategic facility plan	Awarded 6/5/2014	Completed
Generate/Present Cleveland BCA, Approval of Preferred Alternative	Approved 6/17/14	Completed
Present Davenport BCA & Preferred Alternative	Q2 FY15	Pending
Cleveland WFO Design Complete	Q2 FY15	Pending
WFO Cleveland – Award Construction Contract	Q4 FY15	Pending
Finalize facility condition assessments & strategic facility plan	Q2 FY15	Pending
Cleveland WFO Construction Complete	Q2 FY16	Pending
Cleveland WFO turned over to Cleveland Airport System	Q3 FY16	Pending



#### **Finances**

#### **Funding Sources:**

1) \$4,890K

#### **Obligations Status:**

1) \$0K

#### **Execution Status:**

Carryover to FY15. Will execute toward WFO Cleveland, WFO Phoenix and WFO Davenport.



## WFO Construction

Project Status as of: September 30, 2014





#### **Project Information and Highlights**

#### Lead:

Mark Burkes, Facilities Management Branch Chief

#### Scope:

- 1) NLSC/NRC (Bannister) relocation
- NWS to construct new WSO Palau
- 3) NWS to design renovations and addition to WSO Chuuk
- 4) NWS to construct new Upper Air Inflation Building (UAIB) location TBD

#### **Estimated Benefits:**

Relocate NLSC/NRC to new GSA leased facility

Complete 1990 modernization efforts for Pacific and Alaska Regions improving service delivery and mitigating operational risk



#### Scheduling

Milestone	Date	Status
ID#6 – Complete Bannister Business Case Analysis	5/30/14	Completed
Sign WSO Palau construction MOU	3/10/14	Completed
Sign WSO Chuuk design MOU	2/11/14	Completed
Finalize Palau land Lease	Q1 FY15	Pending
Finalize Chuuk land lease	Q1 FY15	Pending
Approve C-Req Bannister Shelving Procurement	Q1 FY15	Pending
Select location for UAIB replacement *	TBD	Pending

\* UAIB TBD – as of September 19, 2014, tentative location - WFO Miami to address elimination of clear zone from new ground lease. UAIB will need to be moved closer to the WFO. Study to evaluate options began October 14, 2014



#### Issues/Risks

#### <u>lssues</u>:

- 1) Bannister relocation may require substantial PAC construction funds
- 2) WSO Palau: new land lease not finalized
- WSO Chuuk: Current FY14 funding insufficient to fund entire project estimated at \$3.4M. Land lease revisions not finalized
- 4) HVAC, roof, UPS failures compete against and erode construction project funds. Currently no established project funding for system failures

#### Mitigation:

- 1) Bannister relocation funding passed in House and Senate marks
- WSO Palau new lease approved by DOC OGC, RPMD Western Region working.
   Expect new lease Q1 FY15
- 3) WSO Chuuk will use FY15 PAC construction to fund project shortfall. RPMD Western Region working land lease. Expect new lease Q1 FY15
- OCFO covers system failures as they arise, preventing complete erosion of construction project funds



#### **Finances**

#### **Funding Sources:**

- 1) \$2,909.5K FY14 Funds
- 2) \$4,969.5K Carryover Funds

#### **Obligations Status:**

1) \$5,133.1K obligated

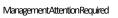
#### **Execution Status:**

\$2,745.9K carried over. Will be used to fund:

- WSO Chuuk
- Miami UAIB
- WFO Guam HVAC replacement

\* OCFO funded – 6 Emergency replacements in FY14 totaling \$673.5K









#### **WFO Maintenance**

Project Status as of: September 30, 2014

# Y

#### **Project Information and Highlights**



#### Lead:

Mark Burkes, Facilities Management Branch Chief

#### Scope:

Provides facility maintenance support to 122 WFOs, 19 WSOs, two data DCOs, and over 2,000 ancillary NWS owned facilities, leased facilities, support buildings, towers and land leases. These facilities protect critical and sensitive equipment and require annual, semi-annual or quarterly preventative maintenance and occasionally corrective maintenance to safeguard operations and reduce inherent risks to personnel and visitor safety; including the installation and maintenance of physical security systems in compliance with Department of Commerce and Department of Justice mandates.

#### **Estimated Benefits:**

Provide reliable engineering systems in support of the mission. Maintain generators, UPS, redundant and dedicated HVAC systems for computer rooms to enable electronic systems and weather forecasting systems to function properly.



#### **Scheduling**

No NWS level AOP milestones.



#### Issues/Risks

#### Issues:

- NWS facilities are operating in a break/fix environment and most building systems are at end of life. Current maintenance level of \$6.1M is approximately 1% of NWS estimated \$610M Plant Replacement Value (PRV). The Federal Facilities Council recommends investing 3-4% annually, or \$18.3M for maintaining NWS facilities properly.
- 2) Staffing shortages in OOS and the field are causing major impacts to execution.
- 3) AGO unable to award maintenance projects before end of FY (even when projects were submitted within AGO applicable cutoff dates)

#### Mitigation:

- \$4M facility assessment currently underway will assess 1/3 of NWS sites and capture current conditions of facility, risks/potential impact to mission, and estimate repair costs (plan to conduct 1/3 of assets annually). Establish emergency failure maintenance funding and increase out year maintenance funding levels.
- 2) Re-org staffing level and filling vacancies in field will mitigate
- 3) Ensure AGO is aware of operational impacts to NWS



#### **Finances**

#### **Funding Sources:**

- 1) \$6,583.2K FY14 Funds
- 2) \$261.2K FY13 Carryover Funds
- 3) \$2,934.5K Hurricane Sandy Supplemental

#### **Obligations Status:**

- 1) \$6,438.2K FY14 Funds
- 2) \$248.7K FY13 Carryover Funds
- 3) \$2,893.7K Hurricane Sandy Supplemental

#### **Execution Status:**

Execution completed. Unobligated funding included in carryover.

## <u>Agenda</u>

## AFS Portfolio

- Overview Quad Andy Stern
- NWC Don Cline
- GPRA Doug Young
- Aviation Weather Mark Zettlemoyer
- Climate Fiona Horsfall
- Fire Weather Heath Hockenberry (phone)
- Hydrology Mary Mullusky
- Marine Weather Wayne Presnell
- Public Weather Eli Jacks
- Severe Weather John Ferree (phone)
- Space Weather -Bob Rutledge (phone)
- Tropical Mike Dion (phone)
- Tsunami Mike Angove
- Winter Weather Eli Jacks

# Analyze, Forecast & Support (AFS) Portfolio

Portfolio Status as of: 30 Sept 2014

#### **Project Information and Highlights**



Andrew Stern, Acting Portfolio Manager

#### Scope:

AFS consists of the forecast and warning, capability of the National Weather Service (NWS) which includes the operations of a national network of field offices and national centers. AFS also provides national leadership in the provision of 11 national service programs, as well as supporting the field mission with policy information, requirements, performance evaluation, and a safe working environment through funding of the portfolio's facilities.

#### **Estimated Benefits:**

The benefits of AFS include the creation of an integrated field structure, a focus on more consistent guidance and forecasts through use of a common operating picture, better articulation of service cost and ability to provide mission-based requirements to lead the portfolios toward NOAA Strategic and Weather Ready Nation goals.

#### **Highlights**

- Creation of CaRDS template to improve investment decision making
- Multi portfolio partnership created to stand up OPG
- Key vacancies are being filled at field offices and training center



#### Issues/Risks

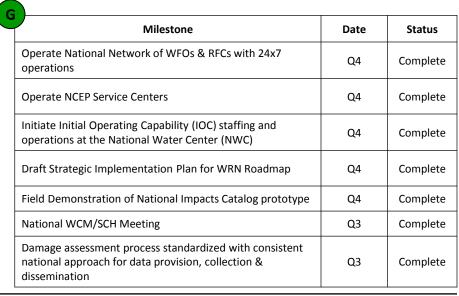
#### Issues/Risks:

- 1) Timeliness of filling critical vacancies
- Timeliness of FAA funding of CWSUs
- 3) Challenges associated with operating in a duality (PPA vs Portfolio with pending HQ Reorg)

#### Mitigation

- Senior leadership support to request better throughput from WFMO and use of other avenues
- NWS leadership actively engaged with FAA counterparts; Better starting point expected in FY15
- Use of project codes to indicate funding linkages to portfolios; Routine communications with FMCs from OCFO and Portfolios

#### Scheduling



# G

#### **Finances**

#### **Funding Sources:**

FY 2013 LWF Carryover:\$16.9M

FY 2014 LWF: \$570 M

#### **Obligation Status**

FY 2013: \$15.68M FY 2014: \$553.18M

#### **Execution Status**

Unfunded Balance of CWSU Reimbursable \$718K WRN Contract support \$158 K

National WCM conference \$396K

OPG Support \$227K

Training \$1.45M (Carryover \$441K and \$1.01M Ominbus)

## **National Water Center (NWC)**

Q4 Program Status as of: 30 September 2014



#### **Project Information and Highlights**

#### Scheduling

#### Lead:

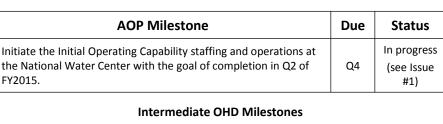
Don Cline, Project Manager

#### Scope:

The NWC will be a research and operations facility, which in partnership with the RFCs, will deliver state-of-the-science hydrologic analyses, forecast information, and decision support services to address the nation's growing water resources challenges. Leveraging partnerships to achieve this goal (including on-site staff from other Federal water agencies), the NWC is envisioned to become the most trusted and authoritative source for water resources information and predictions.

#### **Estimated Benefits:**

Initial NWC activities and development will form the basis and foundation for driving NOAA's hydrology program forward (data services, archive, verification/evaluation, national modeling framework, RFC backup). This developing capability is in full concert and directly supports the goals and interactions associated with IWRSS. Demonstrated capability at the NWC will encourage IWRSS partners and others (e.g. FEMA) to bring staff and resources (both research and operations) to the NWC.



Ongoing construction management	Q2	Complete
Assume beneficial occupancy of the NWC	Q2	Complete
Install furniture, network; service contracts in place	Q2	Complete
Establish Service Level Agreement (SLA) with NCO for the provision of NWC compute and storage requirements	Q2	Complete
Complete AV for auditorium and operations center	FY15 Q1	Delayed



## Issues/Risks

#### Issues/Risks:

- Initial staffing and operations profile has been approved by Congress
- Interaction and agreement with NWSEO is incomplete potential barriers to being able to staff and operate the NWC.
- OHD Director's position has been vacant and filled by individuals (4) in an "acting" capacity since September 2012.
- Staffing and operations of the NWC is not fully base-funded in new PPA structure.
- Installation of AV for auditorium delayed until Q1 FY15. 5)

#### Action/Mitigation:

- First 5 OHD vacancy positions advertised. Evaluating about 130 UCAR Visiting Scientist Program applications for about 40 NWC positions.
- Regular interaction with NWSEO on NWC mission, vision and functions. 2)
- 3) Accelerate plans to define and fill the NWC Director position.
- Working with CFO to establish a more stable and sustainable resource foundation for the NWC.
- 5) AV installation now scheduled for late October/early November



#### **Finances**

#### **Funding:**

- \$750K FY13 LWF Carryover
- \$2,000K AHPS funds to staff and operate the NWC
- \$200K Shortfall from original plan CFO to provide to OHD
- 4) \$987K NWC PAC (construction reserve)
- Total: \$3,937K
- Total estimated FY2014 costs (beyond construction) are \$6,977K
- \$2.2M to complete A/V for Auditorium and Operations Center identified

#### **Obligation Status**

- Q1 no funds obligated from FY13 LWF Carryover, AHPS or NWC PAC
- Q3 obligated \$2.2M from FY13 LWF Carryover for NWC AV
- Q3 Total of \$1.6M AHPS funds obligated including \$750K (AHPS) transferred to NCEP/NCO for NWC compute and storage

#### **Execution Status**

Q4 - \$707K Obligated by NCEP/NCO; \$290K obs for NWC PAC (\$716K c/o); \$1,855M obligated for NWC Staff O&M - \$145K c/o for deferred NWC O&M cost

Note: \$566K obligated from LWF for 3 PCS moves to NWC in FY14

## GPRA Performance Reporting

## Project Status as of: 30 September 2014

## **Project Information and Highlights**



#### <u>Lead</u>:

Doug Young, Service Performance Program Manager Beth McNulty, Service Performance RDs, OAA, DAA; Execution Managers Sreela Nandi, Coordination and Reporting

#### Scope:

Most NWS Services

#### **Estimated Benefits:**

- Measuring and reporting performance leads to accelerated service improvement.
- Setting ambitious, yet achievable, goals can challenge the workforce to find new and creative ways to raise their level of performance to meet the more difficult targets.
- 3) Tracking performance reveals areas of service deficiency and potential areas of new S&T or training investment.



#### **Scheduling**

GPRA Measure	+/-	GPRA Measure	+/-
Tornado LT	-	Winter Storm LT	
Tornado % Acc.	-	Winter Storm % Acc.	
Tornado FAR		Seasonal Temp.*	
Flash Flood LT	-	Precip. Forecast*	-
Flash Flood % Acc.	-	Hurricane Track*	N/A
Marine Wind Spd. % Acc.	+	Hurricane Intensity*	N/A
Marine Wave Hgt. % Acc.		Space Wx % Acc.*	
Aviation IFR C/V % Acc.			
Aviation % FAR			

#### Operational Performance Legend

No Issues – on track or met goal within 5%
At risk – more than 5% to 10% below goal
Below Goal – more than 10% below goal



## **Issues/Risks**

#### <u>lssues</u>:

- 1) OCWWS Performance Management program does not have the capacity to adequately support essential verification programs. Describing the need for additional resources is a current high-priority activity.
- 2) Current GPRA measures are not climatologically suitable for all NWS regions; some national goals are not achievable in all NWS regions.
- GPRA measures are often not well-linked to investments and don't fully reflect other vital aspects of NWS service (e.g., societal outcomes, DSS).

#### **Mitigation:**

- FY15 funding has been identified to help address essential Performance Management resource needs. A draft plan to revitalize the verification program is in progress with a scheduled delivery date in late FY15 Q1.
- 2) Propose NWS regions create and report on regional goals and supplemental metrics to reflect service performance important to their users.
- Social science contractor and associated team will help develop a framework for societal outcome-based metrics related to WRN and DSS.



#### **Finances**

#### **Funding Sources:**

 \$2,113,916.46 (through 11/04/2017) - OCWWS funding for 4 contractors to maintain and operate the Performance Management System (NOAA8203)

#### **Obligation Status**

- 1) FY14 \$ 311,469.00 POP from 02/05/14 11/04/14
- 2) FY15 \$ 106,111.90 POP from 11/05/2014 02/04/2015





#### **Aviation and Volcanic Ash Program** Q4 Program Status as of: 30 September 2014

#### **Project Information and Highlights**



Mark Zettlemoyer, Acting Program Lead

#### **Key Individuals:**

Bob Maxson, Director, Aviation Weather Center Don Moore, MIC, Alaska Aviation Weather Unit and Anchorage VAAC Tom Evans, Acting MIC, Met Watch Office Honolulu

#### **Highlights:**

- CWSU MIC meeting at the FAA Command Center 16-19 September defined issues and goals for the CWSU program
- NTSB visit to NCEP with Aviation participation set groundwork for future coordination.
- Received public comments from NWS Public Information Statement and FAA Federal Register Notice to transition text-based Area Forecast to existing graphical products. FA Alternatives document prepared to support FAA Safety Risk Panel on 13 November.

#### Scope:

Provision of domestic and international aviation weather products and services in support of safe and efficient flight

#### Issues/Risks

#### Issues:

- 1) CWSU Funding. FAA slow to provide funds for CWSU costs; NWS covered approximately \$600K during FY14 for labor, PCS and discretionary.
  - FAA "assures" a smoother FY15. Will need to raise ceiling to cover full funding.
  - Senior leadership guidance needed on negotiating position for new FAA IA.
- 2) CFO CWSU Support Guidance
  - Regions request clarification of CWSU support with respect to CFO guidance on expending NWS resources on reimbursable agreement--does this extend to NWS IT, computer systems, and communications? Don't want to reverse CWSU progress.
- 3) Robust Met Watch Office back-up is not in place.

#### Mitigation:

- 1) Discussing issues up OCWWS chain; DAA discussion scheduled for Nov 19.
- 2) Provide updated CFO guidance to Regions to allow limited expenditures on equipment and IT [request forthcoming].
- 3) Pricing HNL equipment backup for AAWU and arranging training with 17 OWS.
  - Developing issues to be briefed up through OCWWS.



#### Scheduling

Milestone	Date	Status
National Plan to address providing a Common Operating Picture for convection to provide a consistent forecast for stakeholders will be created	Sep 30, 2014	Developed
Business case that explores costs and benefits of bringing the Washington VAAC into NWS for corporate decision will be developed	Jun 30, 2014	Developed
One new COMET training module on improving aviation forecasting developed to mitigate a gap identified in the Aviation Professional Development Series	Sep 30, 2014	Developed
Implementation Plan for the use of a single/consistent ceiling and visibility grid for Alaska	Jun 30, 2014	Deferred

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#### **Finances**

Funding Sources: Aviation PPA FY2014 Funding \$4,902,383 (plus additional \$883K of FY13 Carryover)

Contracts: \$2,350,049 BOPs: \$1,657,564 Grants: \$670.000

Travel/Supplies: \$168,816

#### **Execution Status**

Contracts: Completed **BOPs: Completed** 

#### **GPRA (through September 2014)**

Aviation Forecasts IFR Accuracy: 62% (goal 65%)

Aviation Forecasts IFR False Alarm Ratio: 36% (goal 38%)





Management Attention Required



Potential Management Attention Needed



## **Climate Services Program**

Q4 Program Status as of: 30 September 2014

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#### **Project Information and Highlights**



#### <u>Lead</u>:

Fiona Horsfall, Program Lead Mike Halpert, Acting CPC Director

#### Scope:

1) NWS to provide climate information to US public

#### **Estimated Benefits:**

 US public can make climate-informed decisions using NWS climate data and forecast products

#### **Scheduling**

G Milestone	Date	Status
Develop and implement an experimental day 8-14 probabilistic US hazards outlook for select variables	July 31	Complete
ThreadEx Extremes (COOP data) provided to WFOs for uploading into AWIPS database (via NCF) for climate info	August 31	Complete
Develop NMME-based US Drought Outlook guidance	December 31	Complete
Provide enhanced availability to arctic products through the CPC website to support Alaska Region.	July 31	Complete
Issue Atlantic and Pacific Hurricane Seasonal Outlooks	May 22	Complete
Update the Atlantic Hurricane Seasonal Outlook	Aug. 7	Complete
Upgrade Climate Forecast System Reanalysis sea ice initial conditions with PIOMAS data from the University of Washington	September 30	Complete
CPC GIS operational services migrated to NCEP Central Processing	September 30	Complete



## **Issues/Risks**

#### Issues:

L) None

#### Mitigation:

1) N/A



#### **Finances**

#### **Funding Sources:**

- 1) NWS Base funding
- 2) CPC additional sources from CPO (all competitive requiring proposals )

#### **Obligation Status**

NA

#### **Execution Status**

NWS Climate program is making adequate progress.

#### **GPRA (through September 2014)**

• US Seasonal Temperature Forecast Skill Score: 25.6 (Target 23)

#### Fire Weather Program

Q4 Program Status as of: 30 September 2014





#### **Project Information and Highlights**

#### <u>Lead</u>:

Heath Hockenberry, Program Lead

#### Scope:

NWS provides a comprehensive suite of fire weather products and services to protect firefighters and the public. This suite includes routine fire weather outlook, forecast and warnings products, on-demand spot forecasts for federal and state partners, and a certified cadre of Incident Meteorologists (IMETs) capable of supporting Incident Management Teams with critical weather expertise.

#### **Estimated Benefits:**

- Fire weather outlooks, forecasts and warnings support partner resource allocation and planning
- Spot forecasts issued using WFO-customized forecast portals for wildland fire, marine, HAZMAT and search and rescue scenarios.
- Front line, "Weather-Ready" incident management, utilizing IMET forecasts for firefighter safety, public safety, management planning and fire-line tactics.),



#### Issues/Risks

#### <u>lssues</u>:

 IMET overhead request and associated National Agreement change briefed to fire agency on July 16<sup>th</sup>. Agreement now being reviewed by the fire Agencies.

#### Mitigation:

• Work closely with Agency specialists and DOC Legal to edit National Agreement. Will raise any issues that cannot be resolved to senior leadership.



#### **Scheduling**

Milestone	Date	Status
Certify or Re-Certify IMETs to maintain workforce fire weather skills	Third quarter	Complete (Type I IMETs)
Disseminate a prototype of the new fire weather spot interface for comprehensive testing	Fourth Quarter	Complete Reviewing field comments weekly
Develop an impact-based verification methodology for National Fire Danger Rating System forecast parameters	Fourth Quarter	Complete Plan to run on prototype data in FY 15
Achieve IMET reliance on thin client	Third quarter	IMET training complete. Operational use now ongoing



#### **Finances**

#### **Funding Sources:**

Base

#### **Obligation Status**

- Fire program budget of 460K (including FY 13 carry-over).
- Budgets cover IMET laptops and equipment, IT Contractor, Training, Travel, Software and Australia operational forecaster exchange).

#### **Execution Status**

FY 14 carryover funds being utilized to procure IMET Sondes. Additional IMET equipment and software (GR2 Analyst, IMET Sondes) to be procured in FY 15.

#### **Hydrology Service Area** Status as of: September 30, 2014

## **Project Information and Highlights**

Scheduling



#### Lead:

Mary Mullusky, Acting Chief, Hydrologic Services Division

#### Scope:

Lead national effort to sustain and enhance hydrologic forecast and warning services

#### **Estimated Benefits:**

- Less fatalities, economic loss, and property damage from floods and droughts as a result of improved impact-based decision support
- More efficient and effective management of water supplies using integrated water forecasts, and
- Economic benefits from increased efficiencies in water usage in the transportation, hydropower, agriculture and recreation sectors.

<u></u>			
G Milestone	Date	Status	
10th annual National Flood Safety Awareness Week	Mar 16-22	Complete	
The National Hydrologic Outlook in support of the 2014 NOAA Spring Press Conference	Mar 20, 2014	Complete	
National Annual Flood Loss Summary for WY2013	Mar 28, 2014	Complete	
24 x 7 operational support provided to address issues related to AWIPS and CHPS hydrologic software at 13 RFCs and 122 WFOs	Ongoing	Complete	
IWRSS Stakeholder Engagement Forums conducted and documented	Q4	Complete	
Three (3) charters for IWRSS interagency; 1) Flood Inundation Mapping Design Team, 2) System Interoperability/Data Synchronization Design Team, and 3) National Water Modeling System Requirements Team	Q4	2 of 3 Complete	
Flash Flood Summit	Q4	Complete	
Implement experimental polygon-based flood warnings	ERQ1 CRQ2 WRQ3	Complete	



#### Issues/Risks

#### Issues:

- Three (3) charters for IWRSS interagency. National Water Modeling System Requirements team has been delayed indefinitely. This team needs to be informed by the Federal Geographic Data Committee - Open Water Data Initiative and a potential OSTP supported National Water Modeling Initiative.
- 2) Flash Flood Warning Lead Time – The information through July shows the flash flood warning lead time as 60 minutes. With convective events normally dominating August and September, there is a risk of flash flood warning lead time for the year being below the annual target.

#### Mitigation:

Delivered Two (2) charters for IWRSS interagency. Monitoring and participating in the Federal Geographic Data Committee - Open Water Data Initiative and the potential OSTP supported National Water Modeling Initiative.



#### **Finances**

#### **Funding Sources:**

1) FTE

#### **Obligation Status**

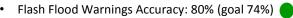
N/A

#### **Execution Status**

N/A

#### **GPRA (through July 2014)**

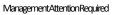
Flash Flood Warning Lead Time: 60 min (goal 60 min)



Flash Flood Events: 2245





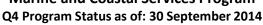








# **Marine and Coastal Services Program**





#### **Project Information and Highlights**

#### Wayne Presnell, Acting Program Lead

#### Scope:

- Oversight of the Marine and Coastal Weather Services Program. The program provides current, accurate information relating to the U.S. coast, coastal and offshore waters, the Great Lakes, and the open oceans.
- Extend weather, water, and climate services to provide ecological and health-based forecasts and services

#### **Estimated Benefits:**

- Ensure the safety of life and protection of property
- Promote international and interstate commerce by improving the efficiency of marine operations
- · Mitigate environmental impacts
- Enhance the quality of life for the United States
- Advise local authorities and members of the public of changes in ecosystem components and their affects on people, economies and communities to help make decisions to protect their health and well-being.



#### Scheduling

Milestone	olution of marine wave height eat Lakes updated to be at their Dec 4, 2013 Complete	
Temporal resolution of marine wave height grids in the Great Lakes updated to be at their smallest native resolution		
Enable the implementation of prototype Vibrio (pathogen) models for four regions. Set up web pages to display the Vibrio forecasts (STI)	March 31, 2014	Complete
Transition to new offshore marine zones in order to provide more detailed forecasts	April 1, 2014	Complete
Expand experimental beach hazards statement and surf zone forecast to all CR Great Lakes WFOs	June 30, 2014	Complete
Operational Alaska sea ice services expanded from 5 to 7 days/week	June 30, 2014	Complete
Operational National Marine Weather Web Portal on NIDS	Sep 30, 2014	Missed



#### Issues/Risks

#### **Issues: Marine Web Portal**

- NIDS will not port current application to operational status citing underlying data issues and non "weather.gov" look and feel.
- 2) NIDS awaiting change to IDP structure and initial development of three other projects before providing assistance to Marine Web Portal.

#### **Mitigation: Marine Web Portal**

- IDP (Integrated Dissemination Program) will store all GIS data on one server. Marine Web Portal will then pull all data from IDP server.
- Possible merging of NOS nowCOAST application. NOS will brief NWS DAA on 2) 11/17/14.



#### **Funding/GPRA Reporting**

**Funding Sources: N/A** 

#### **GPRA (through August 2014)**

- Marine Wind Speed Forecast Accuracy: 79% (goal 74%)
- Marine Wave Height Forecast Accuracy: 84% (goal 76%)









#### **Public Weather Program**

Q4 Program Status as of: 30 September 2014



#### **Project Information and Highlights**



#### **Scheduling**



#### Lead:

Andy Horvitz, Program Lead

#### Scope:

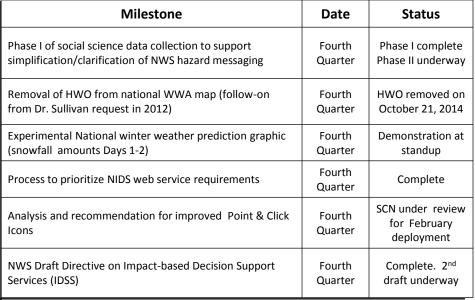
NWS provides a wide range of products and services for sensible elements that impact the public, including wind, heat, and cold. The Program articulates policy for provision of generalized weather forecasts and information in textual, graphical and digital form.

The Program leads efforts to promote spatial and temporal consistency among products issued across the scope of the Program. In addition, the Program is leading efforts to both simplify and clarify NWS hazard messaging and to deliver operational web-based requirements related to NIDS.

#### **Estimated Benefits:**

- Provision of timely, accurate and consistent weather forecast information to promote public health and safety and enhance the national economy.
- Protection and preparation of the public for expected hazards within Program scope.
- A public better prepared to react to key hazards as a result of improved clarity of NWS textual and graphical products.
- Continual provision of dependable and up-to-date gridded forecast information to serve as an authoritative source for the public and our partners.







#### Issues/Risks

#### Issues:

Tight deadlines to develop hazard simplification prototypes in time for AMS.

#### Mitigation:

Working closely with social scientists and new "brain trust" team of NWS experts to meet OMB survey filing deadlines.



#### **Finances**

#### **Funding Sources:**

ERG already funded for ongoing Phase II work. \$100K requested via AFS process for Phase III in FY 15/16.

#### **Obligation Status**

Phase II funds already obligated by OCWWS

#### **Execution Status**

OCWWS will prepare BOP funds for Phase III when contract is awarded

#### **GPRA (through August 2014)**

Precipitation Forecast Day 1 Threat Score: 34% (goal 32%)



#### **Severe Weather Program**

Q4 Program Status as of: 30 September 2014



#### **Project Information and Highlights**



#### Scheduling



Complete

#### Lead:

John Ferree, Program Lead

#### Scope:

The NWS provides forecasts of tornado and severe thunderstorms up to 8 days in advance, continually refining and increasing the specificity of these forecasts to issuing watches in the hours prior to events, and tornado warnings, severe thunderstorm warnings, and frequent update statements during the event. There is close coordination on policy and procedures with national and regional headquarters, the Storm Prediction Center, WFOs, and key partners.

#### **Estimated Benefits:**

Accurate and timely forecasts and warnings of tornadoes and severe thunderstorms that meet the demands of an increasingly sophisticated society, in terms of their expectations for information content, flow, and delivery, and lead to a public response of moving to safe places for the protection of lives and property.



#### Milestone Date Status Expansion of Experimental Impact Based Warnings to Second include 5 Southern Region offices, 1 in Eastern Region Complete Quarter and 2 in Western Region on March 25 2014 The damage assessment process standardized with Fourth consistent national approach for data provision, Complete Quarter collection and dissemination Implement Graphical Hazard Weather Outlook (GHWO) Fixing software Fourth built from NDFD at all ER WFOs. Nationwide issues for 2015 Quarter implementation is a FY15 milestone national push Operational SPC Day 1-8 Outlooks that meet partner needs and Fourth Day 1-3 10/22 enhance public communication of severe weather Quarter hazards Day 4-8 12/16

Complete analysis of warning inconsistencies across WFO boundaries and false alarms. Establish actions for FY15 Third Quarter implementation

#### Issues/Risks



- Social science advises we still require feedback from the general public on IBW.
- Developing proposal to better message for straight line winds (e.g., Derechoes) within SVRs, including possibility of including an extreme wind tag within IBW.

#### Mitigation:

- Will expand IBW experiment to at least 10 additional WFOs in FY 15 and, in parallel, conduct social science to gather public feedback for possible adjustments in FY 16-17.
- Briefed AA on straight line wind proposal now coordinating options with Regions.



#### Finances

#### **Funding Sources:**

- Base
- FY14 Omnibus distribution funded iPads for each WCM/SCD to support the Data Assessment Toolkit use in the field

#### GPRA (through July 2014)

Tornado Warning Lead Time: 9 min (goal 13 min)



Tornado Warnings Accuracy: 61% (goal 72%)



Tornado Warnings False Alarm Ratio: 70% (goal 72%)









## Space Weather Program

## Project Status as of: 30 September 2014

#### **Project Information and Highlights**



#### <u>Lead</u>:

Tom Berger, Program Lead

#### Scope:

- To deliver space weather products and services that meet the evolving needs of the nation.
- Includes all resources required to operate the Space Weather Prediction Center in Boulder CO

#### **Estimated Benefits:**

 A nation prepared to respond to and mitigate the effects of space weather through reliable, timely, and actionable forecasts, warnings, and alerts and data products.

#### **Scheduling**

Milestone	Date	Status
SWPC enters IOC for AWIPS 2 NCP	Sept 2014	Now Q1 FY15
DSCOVR Ground System Operational Checkout	Sept 2014	Complete
Geospace model on NCEP R&D system	Sept 2014	Complete
SWPC Alternate Processing Site (APS) fully operational	Dec 2014	In Progress
Host annual Space Weather Workshop in Boulder, CO	April 2015	In Progress
Form new Space Weather Event Liaison Team	May 2015	In Progress
DSCOVR replaces ACE in SWPC Operations	June 2015	In Progress
Geospace model delivered to NCO for WCOSS integration	Sept 2015	At Risk
WSA-Enlil model domain expanded to Saturn in support of SpWx forecaster training	Sept 2015	At Risk
SWPC/EMC execute a real-time, research parallel run of the Whole Atmosphere Model on the NOAA WCOSS	Sept 2015	At Risk

# Y

#### Issues/Risks

#### <u>lssues</u>:

- Projected base funding from STI is not sufficient to support WSA-Enlil upgrades and the continued development of the Regional E-Field Product
- Projected base funding from STI will not allow for a second year of support from the University of Michigan for the transition of its Geospace model to WCOSS.
- Projected base funding from STI will not allow for all necessary WAM development activities required to both meet the interim FY15 milestone as well as the FY18 full implementation date.

#### **Mitigation:**

- SWPC has received carryover FY14 funding to proceed with its WSA-Enlil upgrade. No funding to be made available for the Regional E-Field Product however.
- Current efforts on the Geospace remain on track, however delays could require additional funding which we will not have for FY15. If this occurs, the Geospace code handoff to NCO will be delayed to at least FY16.
- 3) SWPC has received carryover FY14 funding to support the completion of its FY15 milestone, however the time to bring a contractor on board may still make this milestone late. Even with these carryover funds, STI funding for FY15 is still insufficient to continue data assimilation and coupling tasks. This will further delay our FY18 full implementation milestone.



#### **Finances**

#### **FY14 Funding Sources:**

- 1) \$8.72M SWPC Base Funding
  - \$6.19M Labor
  - \$2.53M Non-Labor
- \$908,000 NESDIS funding to support continued development of DSCOVR ground processing system.

#### **FY15 Funding Sources:**

- 1) Preliminary \$10.66M Total SWPC Base Funding
  - AFS \$3.12M (\$3.25M requested)
  - STI \$6.28M (\$7.79M requested)
  - OBS \$400K (\$400K requested)
  - DIS \$51K (\$51K requested)
  - CP \$804K (\$820K requested)
- \$589,000 NESDIS funding to support deployment and O&M for DSCOVR ground processing system.

#### **GPRA Goals**

Space Weather % Acc.\*



Y



#### **Tropical Program**

Q4 Program Status as of: 30 September 2014

# Y

#### **Project Information and Highlights**



#### <u>Lead</u>:

Michael Dion, National Tropical Program Leader

#### Scope:

 To oversee the delivery of tropical products and services to serve the weathersensitive U.S. coastal population and those responsible for its safety.

#### **Estimated Benefits:**

1) To save lives, mitigate property loss, and improve economic efficiency by issuing the best watches, warnings, forecasts and analyses of hazardous tropical weather, and by increasing understanding of these hazards.



#### Scheduling

Milestone	Date	Status
Complete initial development and delivery of required instructional components for 2014 TC season	April 1, 2014	Complete
Complete blended-learning course for Effective Tropical Messaging	June 1, 2014	Complete
Implement experimental tropical inundation graphic	June 1, 2014	Complete
Operationalize critical P-Surge enhancements required for the Storm Surge Watch/Warning before the 2014 hurricane season, including updated SLOSH basins in NAVD-88, gridded tide inundation computations, time components, and new above ground height products	July 8, 2014	Complete
Develop and test prototype collaborative storm surge warning graphic with WFOs and NHC	May 1, 2015	In progress. Previously listed as Sept. 30, 2014.
Storm surge training for external partners module	May 1, 2015	On Track



#### Issues/Risks

#### Issues:

- 1) Storm Surge Watch/Warning development was delayed.
- 2) Additional staffing is needed at NHC to support Storm Surge Program.

#### Mitigation:

- Storm Surge Watch/Warning development now proceeding thanks to a collaborative effort between many NWS entities and Raytheon. Development platform stability has greatly improved. On track to implement storm surge watch/warning graphic by May 1, 2015.
- 2) TO change is with CFO for 1 additional FTE.



#### **Finances**

#### **Funding Sources:**

- 1) \$250,000 Sandy Supplemental (line 5)
- 2) \$200,000 Sandy Supplemental (line 18)
- 3) \$490,000 Sandy Supplemental (line 17b)

#### **GPRA Goals**

- 1) Reduce Hurricane Forecast 48-hr track error to 83 nm.
- 2) Reduce Hurricane Forecast 48-hr intensity error to 12 knots.

#### **Obligation / Execution Status**

All funding has been awarded and executed.

## **NOAA/NWS Tsunami Program**

## Milestone Status as of: 30 September 2014

#### **Program Information and Highlights**



#### Lead:

Michael Angove, Program Manager

#### Scope:

- Provide oversight and resource allocation for US National Tsunami detection, forecast, warning and mitigation capability
- Represent the US in the Global Tsunami Warning System (UNESCO/IOC)

#### **Estimated Benefits:**

- Accurate and timely tsunami detection forecast and warnings
- Community tsunami resilience though mitigation efforts such as TsunamiReady™

#### Scheduling

<del></del>			
G FY14 Milestones	Date	Status	
Incorporate Social science research looking into TsunamiReady™ recognition criteria	Jul 2014	Complete	
TWC Re-alignment/consistency recommendation report created and provided to NWS leadership	15 Jul 2014	Complete	
Recognize 10 new TsunamiReady™ Communities		Complete	
DART: Maintain data availability level of 80%	15 Jul 2014	Ongoing	
Tsunami IT Modernization Critical Design Review	Feb 2014	Complete	
Complete Alaska Tsunami Forecast Model V2 results for the Atlantic basin and incorporate into forecast products.	Jul 2014	Complete	
Fielding new international and domestic tsunami forecast products in Pacific per International Oceanographic Commission (IOC)	Sep, 30 2014	On schedule	



#### Issues/Risks

#### Issues:

- Ongoing staffing concerns at TWCs, ITIC, and CTWP related to:
  - Expiration of Term Watchstanding Billets at NTWC
  - AWIPS-II implementation at TWCs (ITO/ESA)
  - New Product fielding in Pacific and hosting responsibilities for **UNESCO 2015 PTWS ICG Meeting**
  - **CTWP Mission refinement**
- Organizational unification of TWCs remains unresolved.

#### **Mitigation:**

- Staffing issues being addressed by TSU Program including:
  - Comprehensive TWC Staffing alignment discussions ongoing w/ DAA
  - Short-term contract support to ITIC and PTWC
- TSU Program working with AR/PR to ensure consistency between TWCs 2)



#### **Finances**

#### **Funding Sources:**

- 1) \$22,816,680 Program Base funding (non-labor) (2yr)
- 2) \$2,187,327—SPECTRUM balance (1yr)

#### **Obligation Status**

Base: 89% Obligated (\$2.565M remaining balance as of 29 Sep 2014)

Spectrum: 100% Obligated

#### **Execution Status**

Base: 89% Executed (\$20.2M as of Sep 29 2014)

Spectrum: 100% Executed





# **Winter Weather Program**

## Q4 Program Status as of: 30 September 2014





#### **Program Information and Highlights**

#### Lead:

Eli Jacks, Acting Program Lead

Scope: NWS provides a comprehensive, consistent, coordinated suite of winter weather products and services that enhances public safety and minimizes economic impacts. The Program leverages Weather Prediction Center's operational and modeling expertise with Regional and local needs and knowledge to enhance decision support services, mitigate impacts, and inform the public. Through the ongoing Winter Weather Experiment, advancement from research to operations can be tested and evaluated and appropriate training can be developed. In concert with the public program, efforts at message simplification can be tested and delivered.

#### **Estimated Benefits:**

More spatially and temporally consistent winter weather products and services that provide enhanced capabilities, extended watch and warning times, improved communication, and leveraging of available resources at the national down to the local level.



#### Scheduling

Milestone	Date	Status
NDFD snow and ice predictions to 72-h	Fourth Quarter	Service Change Notice issued. New grids operational as of October 15
Sterling pilot project (ER)	First - Second Quarter	ER to expand to additional WFOs (OKX, PHI and BOX) for 2014-15 season
Prototype Winter Storm Watch Collaborator to foster spatially-consistent Watch issuances (WPC)	Second Quarter	Internal experiment planned for this winter
Field participation in test bed experiments to support R2O, including the Winter Weather Experiment (STI, WPC)	Second Quarter	Report Completed



#### Issues/Risks

#### Issues:

• WPC will not have resources in place for winter 2014-15 to support 4X daily snowfall products.

#### Mitigation:

 NCEP front office and WPC working with NWSEO to update TO; AFS to provide additional funding.



#### **Finances**

#### **Funding Sources:**

Base

#### **GPRA (through April 2014)**

Winter Storm Warnings Lead Time: 22 hours (goal 20 hours)



Winter Storm Warnings Accuracy: 89% (goal 90%)

