Program Updates & Strategic Plan Progress

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NOAA CO-OPS Director

Hydrographic Services Review Panel
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CO-OPS FY15-19 Strategic Plan Goals

I. Customer Service
Demonstrate a customer-centered operating model that responds to emerging customer requirements and feedback.

II. Integrated Observing System
Develop one cohesive observing system with integrated products and services that are responsive to evolving customer needs.

III. Advanced Products and Services
Continually improve and evolve CO-OPS products and services to meet customer needs and keep pace with rapid changes in requirements, technologies, and media.

IV. Human Capital and Infrastructure
Align our organization’s workforce, resources, and infrastructure to consistently deliver high-quality and cost effective products and service.
Customer Service

• **New customers**
  o Reinsurance Association of America, Water Quality Boards

• **Customer engagement**
  o Engagement Strategy
  o LA/Long Beach Project
  o Gulf of Mexico outreach
  o Modeling workshop

**Future priorities:**
• Gulf of Mexico next steps
• Additional modeling meetings
• Identifying new customers
Customer Service

• Technical Assistance and Training
  o Building community practices around water level observations and data analysis
  o Training series - In person course “Working with Water Level Data”
  o Videos, decision support materials, and job aids
Customer Service

• Educating customers to increase utility of CO-OPS products
  o IOOS RAs
  o USACE natural and nature-based engineering
  o South Florida Compact
  o Community engagement on new Regional Sea Level Trends and Scenarios Tech Report
  o “Nuisance” flooding education and outreach
Customer Service

- Website improvements
  - ForeSee surveys
  - Customer Satisfaction Index
  - Added GIS capabilities
  - Homepage update

Future priorities:
- Continuing website updates
- Improving functionality of products
Integrated Observing Systems

- **NWLON enhancement and filling gaps**
  - Partnerships with USGS, NERRS, NPS, TCOON, IOOS, NWS
  - Station hardening
  - Co-location of CORS
  - Low-cost tide gauge study

### Future priorities:
- Local-to-national integration of networks (implementing tiered data policy, commercialize low-cost tide gauge)
Integrated Observing Systems

• PORTS®
  o 28 PORTS® in network
    - 5 pending: Matagorda, Miami, Corpus Christi, Port Everglades, King’s Bay
  o New partnerships to integrate products (IOOS HFR)

Future priorities:
• PORTS® over AIS
• Sustainable business model for PORTS®
Integrated Observing Systems

- **Tidal Current Surveys**
  - Surveys: Casco Bay, Puget Sound (3-year survey), Cape Fear

**Future priorities**: 5 year plan:
- **FY17**: Puget Sound Phase 3 and recon of NY/NJ Harbor
- **FY18**: South Texas and Columbia River – Newport, OR
- **FY19**: Nantucket Sound, MA and Isanotski Strait/AK Peninsula
- **FY20**: Central Texas and LA/Long Beach, Port Hueneme & Santa Barbara
Integrated Observing Systems

• Technology development and infusion
  o Microwave water level transition
  o iATON current system
  o Hermit
  o GPS buoy (tri-office)

Future priorities:
• Hermit with real-time capability
• Continuous GPS
• Waves from MWWL and current meters
Advanced Products and Services

- Coastal Preparedness
  - Nuisance flooding reports
  - Coastal Inundation Dashboard and upgrade of Storm QuickLook
  - High Tide Bulletin

Future priorities:
- Apply regional sea level trends and scenarios to products
- Continue Dashboard expansion and enhancement
Advanced Products and Services

- International Great Lakes Datum Update
  - Bilateral plan completed
  - Seasonal gauging
  - Data collection started (FY17-23)

Future priorities:
- Publish and educate IGLD update
- Tidal datum epoch update
Advanced Products and Services

- **VDatum**
  - Surveys: short-term gauges installed in NE, Pacific NW
  - Models: South Atlantic Bight, San Francisco Bay

**Future priorities:**
- Additional models and surveys (IGLD)
Advanced Products and Services

• New tools:
  o Water Level Processing Interface
  o Datums Calculator
  o MAPTITE

Future priorities:
• Water level processing interface for tiered data
Advanced Products and Services

• Modeling
  o Existing suite
  o New paradigm for CONUS coverage
  o NCEP collaboration

Future priorities:
• Complete upgrades
• NWS integration
• Real-time data assimilation
• Ice module
Advanced Products and Services

- Ecological Forecasting
  - Improvements to Gulf of Mexico harmful algal bloom forecast satellite imagery
  - Developed a Lake Erie HAB Forecast Initial Operating Capability

Future priorities:
- Operationalize Lake Erie forecasts
- Gulf of Maine
Human Capital and Infrastructure

• Human Capital
  o FY14 and FY16 Organizational Health Surveys and Action Plans
  o Training and recognition
  o Onboarding
  o Communications

• Diversity and Inclusion

Future priorities:
• Measure effectiveness of CO-OPS action plans
• Support NOAA/NOS diversity and inclusion plans
Human Capital and Infrastructure

- Reliable Operating System completion
- KEEP training program
- Environmental Compliance
- Sustainability Roadmap
Human Capital and Infrastructure

- **IT Infrastructure**
  - Re-engineering the Information Architecture within CO-OPS (RIAC)
  - Sandbox capability
  - Legacy system modernization
  - Cyber security
NOAA CO-OPS Partnerships

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<th>Societal Benefits</th>
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Legend: NOAA in-house, External to NOAA, Partnerships, Contracts
Grand Challenges

- **Filling demands for water level needs**
  - NWLON gaps
  - Local requirements
  - Partnership challenges

- **Sustainable business model for PORTS®**
  - Program oversubscribed
  - New administration
  - Exploring alternatives
Questions