



# **NOAA Response to Portfolio Review Task Force Report**

A Presentation to the  
NOAA Science Advisory Board

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# Outline



- Purpose
- Issue
- NOAA Responses to Recommendations
- Desired Outcome



# Purpose

- To present NOAA's responses to the SAB Portfolio Review Task Force (PRTF) Report *In the Nation's Best Interest: Making the Most of NOAA's Science Enterprise*



# Issue



- At NOAA's request, SAB established the PRTF in 2011 to conduct strategic assessment of NOAA's R&D portfolio
- Assessment resulted in 10 recommendations
- After thorough consideration, NOAA agreed with most recommendations & determined what actions it will take to address them



# Issue



- Responses were developed through coordinated effort of cross-NOAA senior-level workgroup, with support from NOAA Research Council
- This briefing provides highlights from the complete written response document delivered to the SAB



# PRTF Report Recommendations



- Intended to answer 2 overarching questions in the context of NOAA's vision & goals:
  - What R&D portfolio does NOAA need?
  - How should NOAA's R&D portfolio be organized & managed, & is its expertise appropriate?



# NOAA Responses



*\*Note: Actions listed are examples of work completed and planned – see written NOAA response for complete set of actions*

## 1a: Need greater socioeconomic science capacity

### Agree & have done:

- Established “**tiger team**” to recommend how to fill critical gaps identified in needs assessment
- Created new **senior-level social scientist** positions
- Established **partnership with NSF** Social Behavior Economics Division to leverage funds & bring researchers into NOAA to translate hazard research into operations & policy



# NOAA Responses



## 1a: Need greater socioeconomic science capacity

### Will do:

- Establish **NOAA committee** to advance, coordinate, & guide social science research, operations, & decision-making
- Task committee to develop a Social Science **Vision & Strategy** to fill critical gaps & identify opportunities to leverage capacity & funds
- Work to **fill most critical gaps** identified in 2013 social science needs assessment





# NOAA Responses



## 1b: Need greater integrated ecosys. sci. capacity

### Agree & have done:

- Worked with regional Fishery Mgmt. Councils to develop **Ecosystem-Based Fishery Mgmt. Plans**
- Developed tools/models to holistically assess large marine ecosystems & transfer scientific knowledge to mgmt., implementing the **Integrated Ecosystem Assessment Program** in 5 regions
- Established committee to implement a **holistic framework for integrating** natural & social science to enable multi-scale ecosystem understanding



# NOAA Responses



## 1b: Need greater integrated ecosys. sci. capacity

### Will do:

- Convene **cross-NOAA interdisciplinary teams** of natural & social scientists to synthesize research, obs., monitoring, modeling, etc.
- Continue to lead development of **Ecosystem-Based Mgmt.** principles & science framework, train managers in application, & conduct pilot projects
- Continue developing **Ecological Forecasting Roadmap** to increase ability to predict occurrences & effects of events such as HABs & hypoxia



# NOAA Responses



## 2: Support seamless integration of research & services in research to operations (R2O) & O2R

### Agree & have done:

- Drafted updates to **NOAA policy** to apply to transitions beyond NOAA, incorporate Technical Readiness Levels, & formalize role of testbeds/proving grounds
- Established **NOAA-wide committee** to plan, monitor, evaluate, & improve effectiveness of NOAA transitions
- Established, in collaboration with external partners, a “**Research Ready**” environment where non-NOAA scientists can run NOAA operational models in a research mode on NOAA computers



# NOAA Responses



## 2: Support seamless integration of research & services in R2O & O2R

### Will do:

- Complete & monitor **transition plan implementation** for projects with R2O &/or O2R
- Include “science & technologies transferred” as **core evaluation criterion** in regular external reviews of NOAA labs, centers, & programs
- Implement corporate, “GPRA-ready” **performance measures** of R2O & O2R activities across NOAA



# NOAA Responses



## 3: Have SAB, with NOAA, form special task force to address identified obs. & data sharing issues

Do not agree (NOAA mgmt. responsibility, plus already relevant ongoing efforts with SAB & others), but **have done:**

- **Defined/prioritized requirements** for obs. systems & **set guidelines** for data mgmt.
- Developed **NOAA Observing System Integrated Analysis** to assess impacts of obs. portfolio changes
- Formed **Quantitative Observing System Assessment Program** to study utility of current & future obs. systems



# NOAA Responses



## 3: Have SAB, with NOAA, form special task force to address identified obs. & data sharing issues

### Will do:

- Continue broader **observing system network coordination** through bodies such as Global Earth Observation System of Systems
- Convene **international workshop** on Tropical Pacific Observing Systems
- **Discuss with SAB options** (other than new task force) for SAB to advise NOAA on specific observing issues



# NOAA Responses



## 4: Enhance Chief Scientist (CS) role, including providing budget authority

- **Do not agree** – While CS should have broad oversight/influence, not clear that benefits of changing budget authority would be worth substantial costs



# NOAA Responses



## 4: Enhance Chief Scientist (CS) role, including providing budget authority

### Will do:

- Encourage nomination of **full-time CS**
- **Charge CS** with balancing & strengthening NOAA's R&D portfolio & continuing to influence R&D budgets through participation in NOAA leadership forums
- Develop & maintain comprehensive **R&D portfolio mgmt. database**





# NOAA Responses



## 5: Maintain strong/productive internal scientific staff

### Agree & have done:

- Established new **Science Career Track**, allowing non-competitive promotion of high-performing scientists
- Supported development of **new research scientist capacity**, especially in socio-economic & ecosystem sciences
- Developed **operating agreements** among labs/centers to leverage expertise, coordinate research, & facilitate R2O



# NOAA Responses



## 5: Maintain strong/productive internal scientific staff

### Will do:

- Encourage development of **lab/center staffing plans**, including identifying & removing obstacles to hiring, promotions, & rotations
- Attract & support development of researchers through **fellowships & other programs**, esp. those encouraging training & hiring of minorities/underrepresented groups
- Explore opportunities to increase use of **Interagency Personnel Assignments**



# NOAA Responses



## 6: Ensure Cooperative Institutes (CIs) have sufficient support & are aligned with priorities

### Agree & have done:

- **Consulted with CI Directors'** Exec. Committee on its concerns & potential ways to address
- Agreed with CIs on new **model to fund administrative activities**
- **Terminated 2 CIs** in 2013



# NOAA Responses



## 6: Ensure Cooperative Institutes (CIs) have sufficient support & are aligned with priorities

### Will do:

- Continue to have leading role for **SAB** in periodic **CI** reviews

*NOAA, with agreement of CI Directors' Exec. Committee, believes **no further action is required** to address this recommendation.*



# NOAA Responses



## 7: Examine alignment of funds & staff with strategic plan

### Agree & have done:

- Produced new **NOAA 5-Year R&D Plan**
- Assessed R&D “**progress to plan**”
- Completed **human resources needs assessments** for ecosystems research & social sciences



# NOAA Responses



## 7: Examine alignment of funds & staff with strategic plan

### Will do:

- Annually **review R&D execution & future budget formulations** in light of PRTF recommendations & NOAA strategic plan
- Establish & maintain **Project Portfolio Management System**
- Produce annual **State of NOAA Research report**



# NOAA Responses



## 8: Capitalize on extramural research community support/skills

### Agree & have done:

- Involved external community in **Science Challenge Workshops**
- Solicited external input for new **NOAA 5-Year R&D Plan**
- Engaged CI staff in developing plans for some activities supported under **Sandy Supplemental** Appropriation



# NOAA Responses



## 8: Capitalize on extramural research community support/skills

### Will do:

- Continue to engage partners in **longer-range planning & developing execution plans**, including integrating results into applications
- Work with external community & through full-time Chief Scientist to **build understanding of R&D needs, funding opportunities, & limitations**
- **Leverage external research expertise** in fields such as social/behavioral/economic sciences





# NOAA Responses



## 9: Accelerate development of existing talent

### Agree & have done:

- Collaborated with other agencies on **memo to OSTP on the impacts of travel & conference restrictions**
- Established **Science Career Track**
- Broadened **applicant pool** & increased **stipend** for **Presidential Early Career Award for Scientists & Engineers**



# NOAA Responses



## 9: Accelerate development of existing talent

### Will do:

- Work with DOC & OMB on **travel issues**, & where appropriate, give special consideration to early- & mid-career scientists for conferences & training
- Increase **interactions/exchanges with other institutions** that result in state-of-the art training/ professional enrichment for NOAA scientists
- Establish group of early- to mid-career Educational Partnership Program alumni to focus on barriers & opportunities for **career advancement of underrepresented minorities** at NOAA



# NOAA Responses



## 10: Work with others to create ways to manage funds flexibly/efficiently & to implement research priorities over several years

### Agree & have done:

- Proposed **restructuring budgets** of several offices to increase budget execution flexibility
- Developed budgets with **competitively awarded R&D funding** in areas of increased priority
- Advanced R&D through opportunities created by **event-linked or time-limited funding** (e.g., Sandy Supplemental)



# NOAA Responses



## 10: Work with others to create ways to manage funds flexibly/efficiently & to implement research priorities over several years

### Will do:

- Work toward restructuring budgets to **increase budget execution flexibility**
- Provide more information on **R&D accomplishments** in light of NOAA's strategic goals & objectives
- Reorganize office budget structures to **better support NOAA's strategic goals & objectives**



# Desired Outcome



- SAB is informed of NOAA's responses to the PRTF report, including several examples of actions NOAA is taking to implement the recommendations in support of its vision & strategic goals