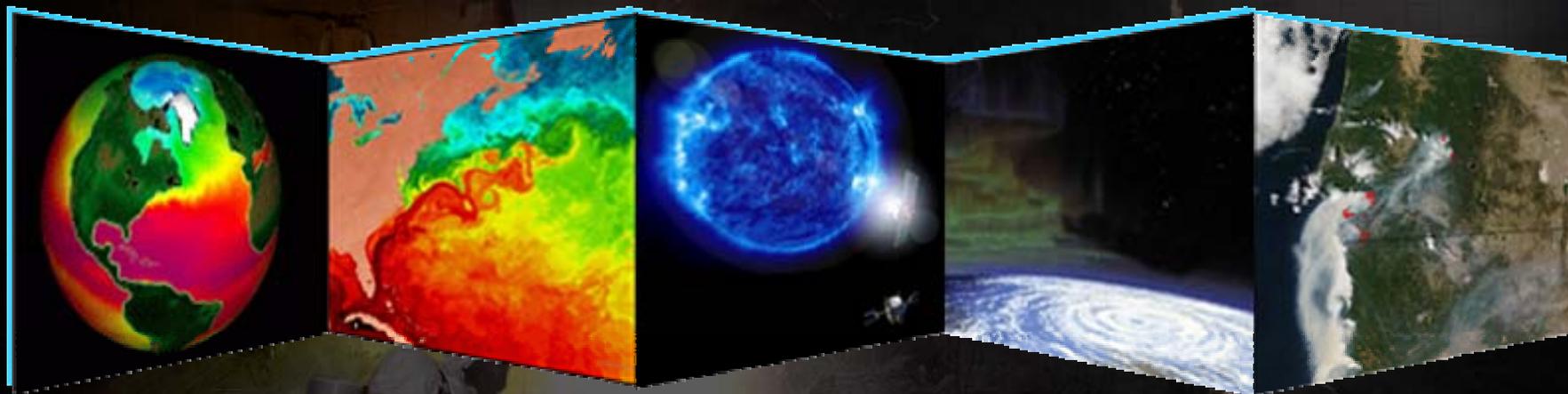


NOAA National Weather Service

Future in the Digital Age



Brig. Gen. David L. Johnson, USAF (Ret.)

*NOAA Assistant Administrator for Weather Services and Director,
National Weather Service*



NOAA Presentation

December 13, 2006

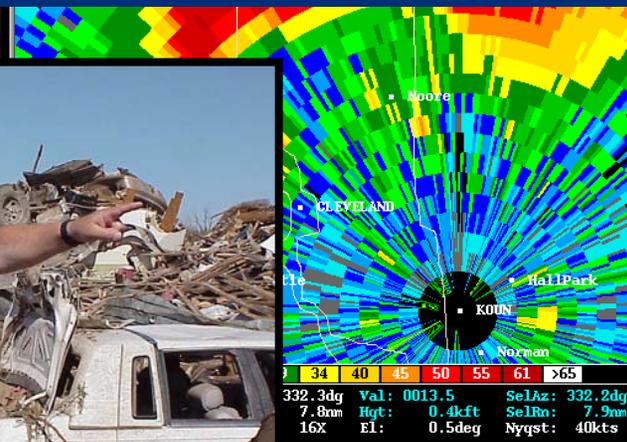


NOAA National Weather Service

Overview

- Provide weather, water, climate forecasts and warnings to protect **lives, livelihoods, and Your way of life**
- 76 billion observations
- 1.5 million forecasts
- 50,000 warnings

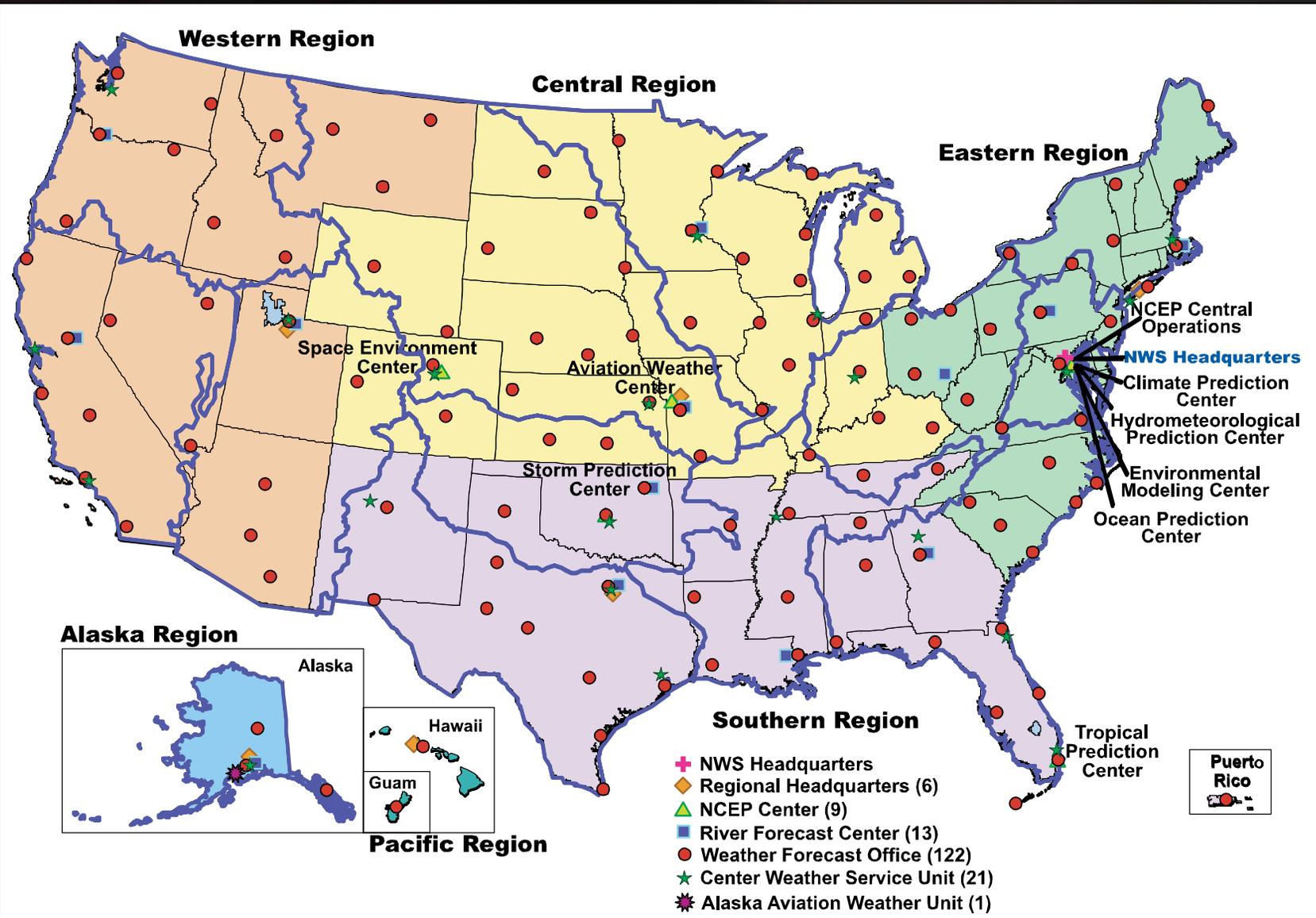
- A Typical Year Brings:
 - 7 Hurricanes
 - 1,000 Tornadoes
 - 5,000 Floods
 - 10,000 Violent Thunderstorms
 - Drought Conditions
 - 500 Deaths; 5,000 Injuries; \$14 Billion in Losses





NOAA National Weather Service

Overview





NOAA Vision and Mission

- **Vision:**

- *An informed society that uses a comprehensive understanding of the role of the oceans, coasts, and atmosphere in the global ecosystem to make the best social and economic decisions.*

- **Mission Goals:**

- *Protect, Restore, and Manage the Use of Coastal and Ocean Resources Through an Ecosystem Approach to Management*
- *Understand Climate Variability and Change to Enhance Society's Ability to Plan and Respond*
- *Serve Society's Needs for Weather and Water Information*
 - **To Protect Life and Property, and provide support to the Security of our Homeland**
- *Support the Nation's Commerce with Information for Safe, Efficient, and Environmentally Sound Transportation*
- *Provide Critical Support for NOAA's Mission*



Future Focus

- **Future Focus Goal: Maintain and improve our status as the standard for the weather enterprise by remaining relevant in a rapidly evolving digital age.**
 - *Meeting the increasing demands for services in the digital age and beyond*
 - *Applying evolving science and technology*
 - *Working even more effectively*



Future Focus

- **NWS 2015 Vision for Services Evolution**
 - *Provide superior, focused response for high-impact events while maintaining excellence in other important services*
 - *Strengthen partnerships with all sectors*
 - *Create capacity (more time) to support high-impact events and integrate NOAA environmental information services*
 - *Accelerate science & technology infusion*
 - *Enhance employee work life*



Future Focus

Therefore we are changing so ...

...we can do more

- Within the NWS***
- With other parts of NOAA***
- With other agencies***
- Through more effective use of existing resources***

...and better

- Better performance during high impact events***
- Through, better research, better outreach, better training, better knowledge of impacts***



Future Focus

Guiding Principles

- **We will maintain 122 Weather Forecast Offices.**
- **Employees will have a job as long as they want one and can do the job**
- **There will be no degradation of service.**
- **We will provide equitable services across the Nation.**
- **We will continue to be transparent in our planning**
<http://www.nws.noaa.gov/com/digitalera>
- **We will demonstrate operability, performance, effectiveness, and efficiency before committing to changes.**



Future Focus

Current Operations

1. Producers of Our Forecasts → Customers of Our Expertise
2. Static Resource Allocation → Dynamic Resource Allocation
3. Phenomenon-Based Forecasts → Impact-Based Forecasts
4. Product-Based Services → Decision Support Services
5. Coordination → Collaboration
6. Weather-Centric → Earth System Science-Based
7. Deterministic (best forecast) → Probabilistic (uncertainty range)

Future Operations



Future Focus

- What do our customers want?
- High-Impact Event Support!





Future Focus

CONOPS Team Report

- **New concept of operations to...**

- *Improve service by providing greater focus on high-impact events*
- *Find more effective ways of operating*
- *Maintain local expertise*
- *Take on additional environmental information service responsibilities*
- *Increase the quality of work life for employees*

... through a Cluster Peer Concept of Operations

A “Clustered Peer” is a group of equal offices that can readily realign resources to collaborate with each other, as well as other offices, to deliver products and services



Future Focus

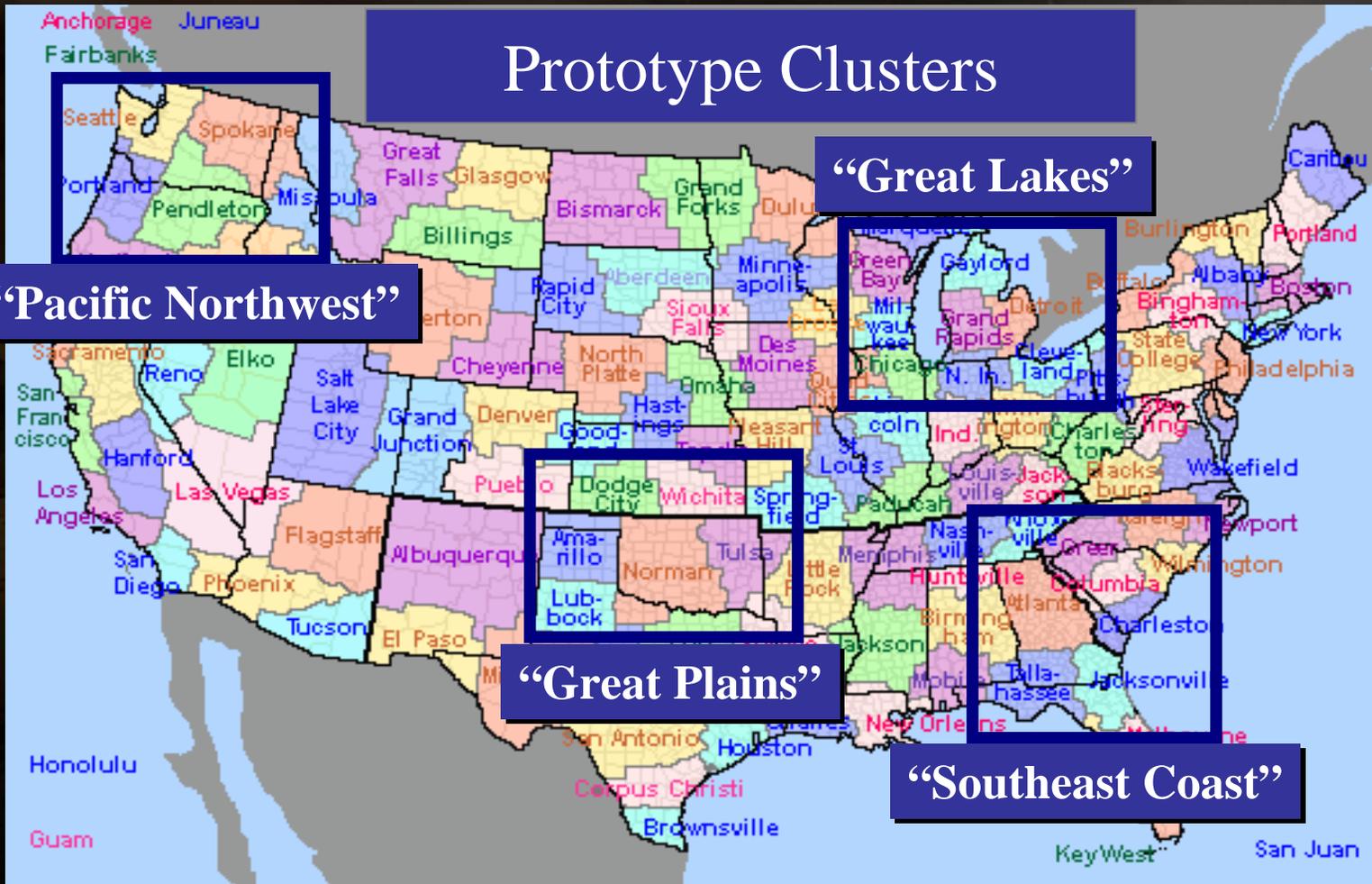
Prototype Clusters

“Pacific Northwest”

“Great Lakes”

“Great Plains”

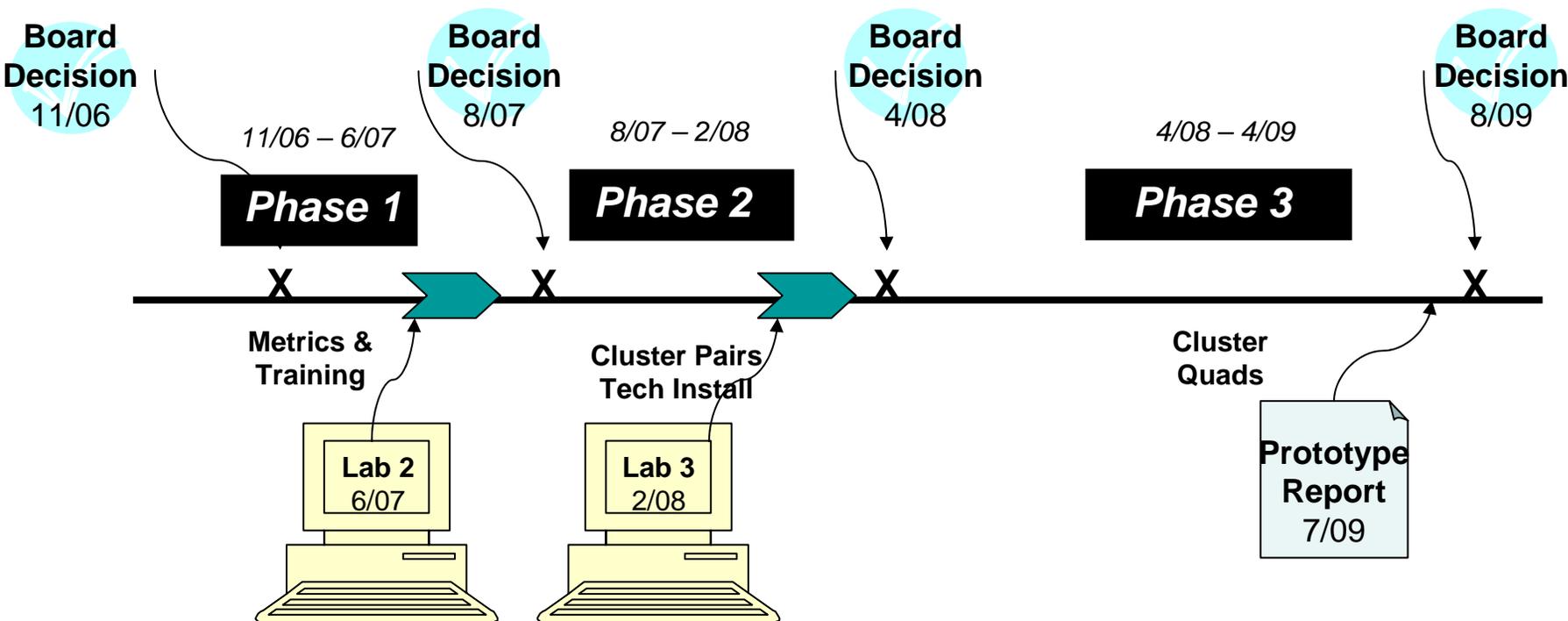
“Southeast Coast”





Future Focus

Proposed Prototype Timeline





Future Focus

Closing Thoughts

- **NOAA NWS Services Evolution**
 - *Increased High-Impact Service Emphasis*
 - *Offices Working in Collaborative Clustered-Peer operations*
 - *Integrated Within NOAA CONOPS as a unified Environmental Information Agency*
- **The Way Forward “A Phase of Discovery”**
 - *Labor Management Process*
 - *Field Prototyping*

