


Building Business Resilience with Information, Tools, & Services

Holly A. Bamford, PhD
 Acting Assistant Secretary for Conservation and Management
 National Oceanic and Atmospheric Administration

AMS Washington Forum
 April 23, 2015



Challenges and Threats to The Resiliency of Communities & Economies




Resilient Communities




Ecological
Social
Economic



Samples of NOAA's Data & Services

	DAILY	WEEKLY	MONTHLY	SEASONAL-ANNUAL	DECADAL
LOCAL	Weather Forecasts	Regional Snowfall Index	Heating & Cooling Degree Days	Temperature & Precipitation Outlooks	Climate Norms
REGIONAL	Data Portals	Hurricane Tracks	Heat Wave Prediction	Drought Outlook	Extreme Detection & Attribution
NATIONAL AND GLOBAL	Water Level Network	Drought Monitor	Monthly State of the Climate Reports	Annual State of the Climate Reports	National Climate Assessment

Climate.data.gov Toolkit.climate.gov



RESILIENCE IS BIG BUSINESS






OCEAN DATA + OCEAN PREDICTIONS
+ TOOLS + DECISION SUPPORT **DECISIONS & ACTIONS**



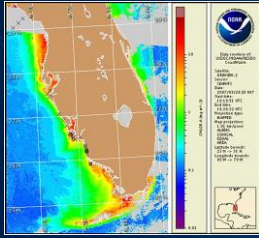
Ocean Acidification

Shellfish industry:

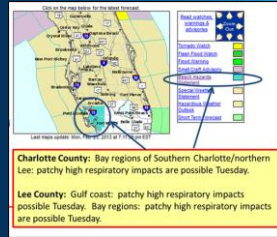
- \$111 million on West Coast
- At risk from ocean acidification
- Real-time data informs management decisions

Ecological Forecasting



HAB Forecasts and Beach Hazards Statement

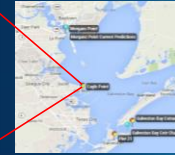
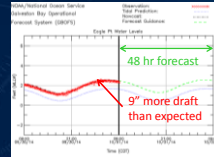
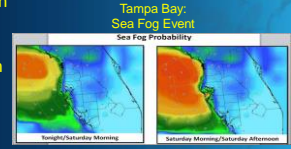


Economic effects of HABs in the U.S. are at least \$82 million/year*

* Hoagland and Scatena (2006). Based on subset of outbreaks in 1987-2000.

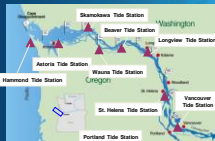
Maritime Economy and Shipping

- 98% of all products in U.S. reach us through ports.
- 45% of U.S. GDP is generated in coastal shoreline counties.
 - \$6.6 trillion
 - 51 million jobs & \$2.8 trillion in wages



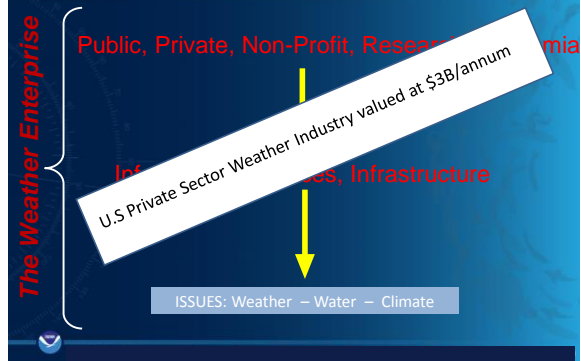
Houston-Galveston PORTS® Available Draft

Water Prediction



- \$8 Billion and 82 lives lost annually due to flood damage.
- \$2.2 Billion in losses as of July 2014 from the current CA drought.
- One foot vessel draft = 2,000 tons of cargo, valued at \$180,000/trip (\$6.4M/Yr)
- FOCUS Improved water level prediction.
- FOCUS: Improved water level and soil moisture prediction to aid in improved water management through precision irrigation as well as improved reservoir operations.
- FOCUS: Improved water prediction will aid vessel loading and sailing decisions

Can the Ocean Enterprise look like the Weather Enterprise?



Thank You

