

Climate  
Science &  
Services

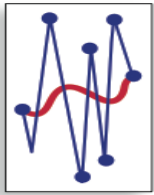
*Coastal Applications for Decision Making  
through Sea Grant Extension and Outreach*

# **NOAA CSC Climate Workshop Summary**

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For

Tricia Ryan, NOAA CSC



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*Coastal Applications for Decision Making  
through Sea Grant Extension and Outreach*

# Workshop Details

- Workshop convened in April 2007 to facilitate the use of climate information in Sea Grant extension
- Sponsored by NOAA Climate Program Office, NOAA Coastal Services Center, Sea Grant Assembly and National Sea Grant Office
- 63 Attendees from: State Sea Grant programs, state climatologists, NOAA and University climate scientists, NOAA Climate Program Office, NOAA Coastal Services Center, National Weather Service, USGS and others

# Workshop Objectives

- Increase the understanding of climate variability and change, impacts, and potential applications for research and information products in the Sea Grant community - (SG focus)
- Identify critical needs for climate-related decision support (e.g., climate information, products and training related to climate impacts and adaptation methodologies) – (NOAA focus)
- Identify potential opportunities for collaboration (e.g., climate extension programming, training, partnerships with regional/state climate offices) that use climate science and services to support decision making and sound coastal management (Both focus)

# Workshop Highlights

- Presentations from several climate scientists who participated in developing the IPCC (Intergovernmental Panel on Climate Change) Report #4
- Discussed many models and data relating latest climate conditions and forecasts
- Heard from Sea Grant colleagues across the country on local observations and impacts of climate variability
- Engaged in small breakout groups to further discuss issues and share resources

# Climate Change Models

Climate, Sea Level and Extreme Events: The latest from the IPCC by Jonathan Overpeck, University of Arizona

- Substantial change is inevitable, so we need **more focus on adaptation**
- Even BIGGER - very costly - change likely unless we act fast to greatly reduce carbon dioxide emissions to the atmosphere
- Affordable **solutions exist** and will benefit beyond climate change

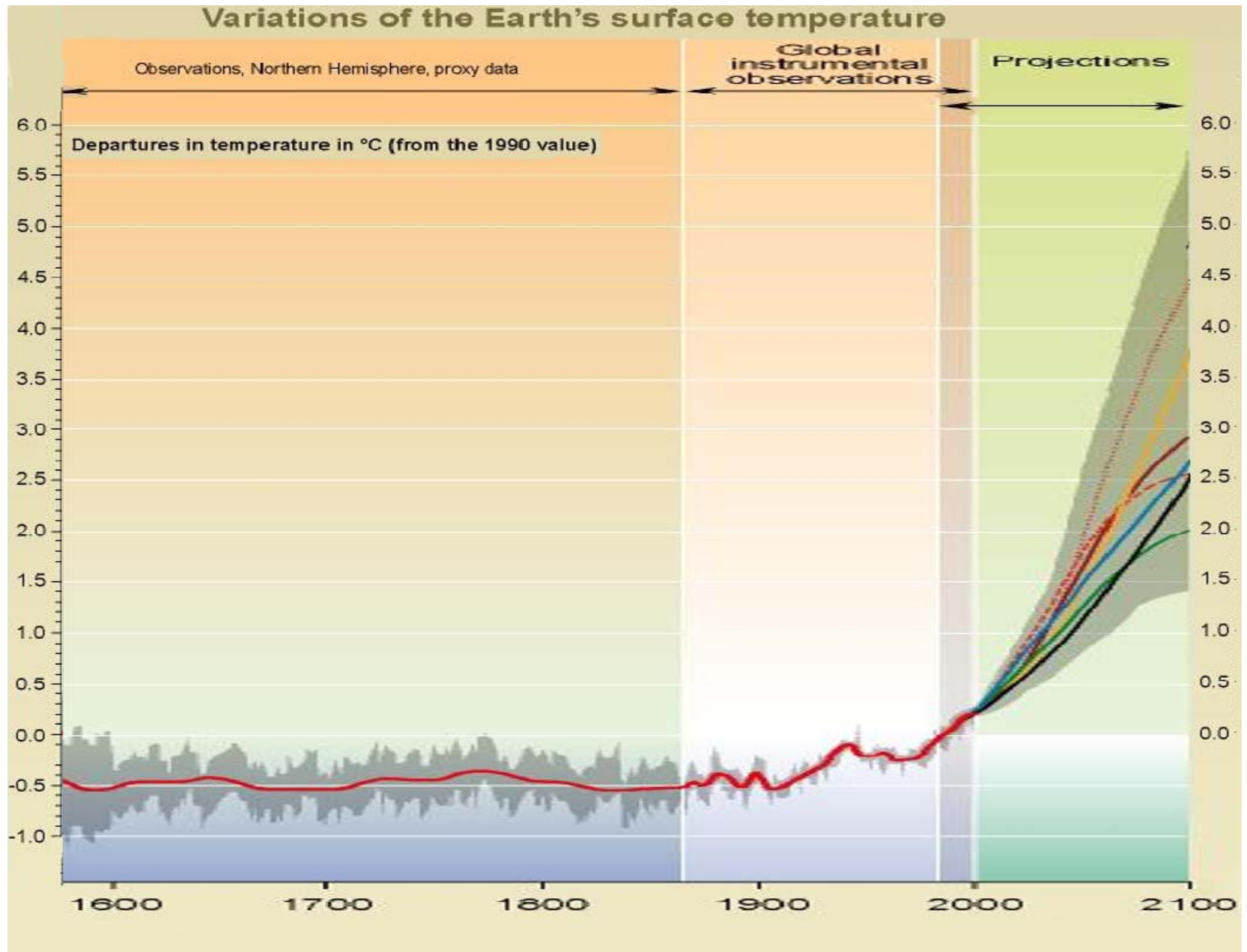
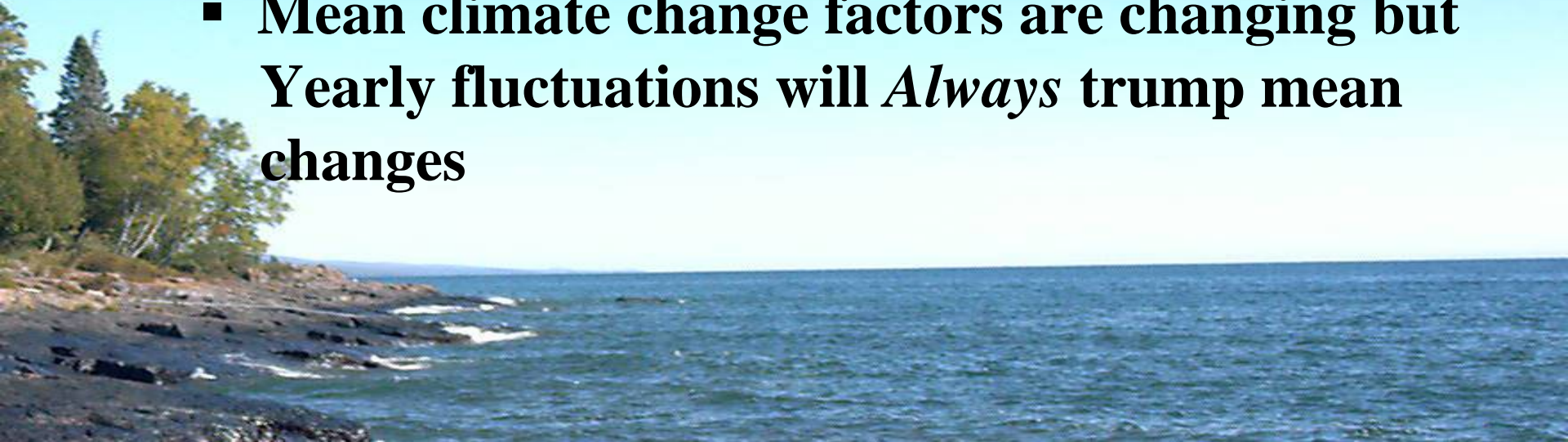


Figure from the 2001 IPCC 3rd Assessment report (multiply by 1.8 to convert to °F)

# Clark Take-Home Points #1

- Global warming is real but *Regional* predictions are difficult
- Most GL regional models predict more frequent & intense storm activity but total precip is ????
- Most GL models predict lower water levels but there is **NO** consensus yet
- Mean climate change factors are changing but *Yearly* fluctuations will *Always* trump mean changes



# Workshop Outcomes

- Increased SG understanding of climate impacts and the need to frame these issues within the context of hazards, fisheries, coastal development, etc... **(infrastructure!)**
- Enhanced SG understanding of NOAA's climate research and services
- Understand the need to make climate change **relevant** to people we are working with – but it is difficult to get **local** information

# What's Next

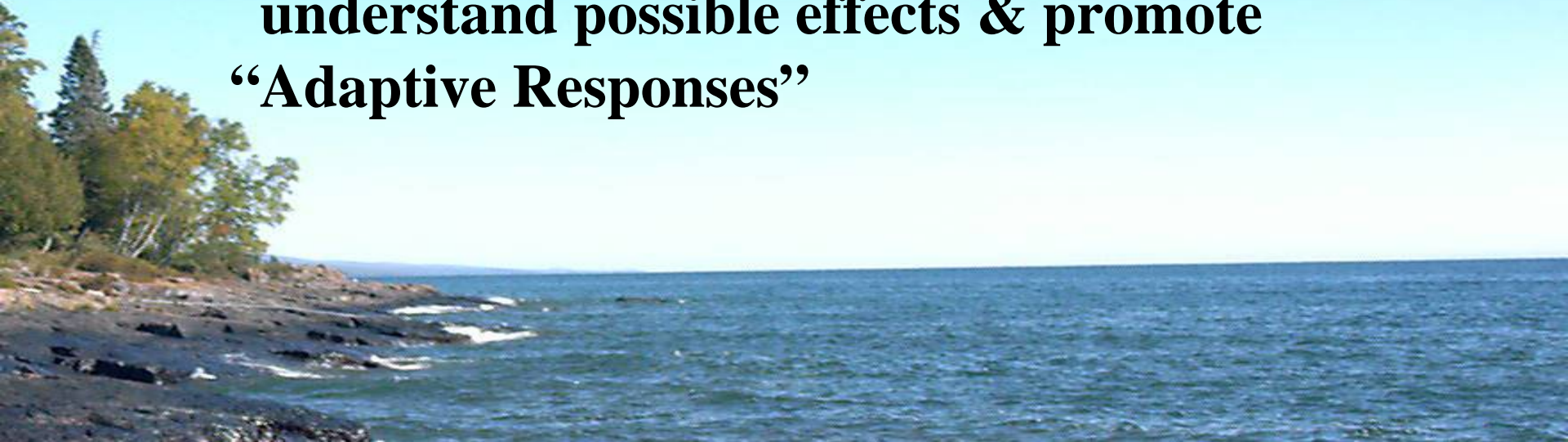
- Draft National Sea Grant Strategic Plan identifying climate as a **cross cutting theme**
- Establish a multi-institutional task team to explore requirements and implementation
- Plan to create a **web-based community of practice** for Sea Grant climate partnership
- Climate, NWS and Sea Grant extension agents convening **state level meetings** to build functional partnerships

# What's Next

- Workshop follow-up email sent to attendees to **start tracking** activities
- **Funds awarded** to develop and test a model of public outreach about climate change (to Oregon Sea Grant program)
- **Hired** Dr. Greg Zielinski as the first Regional Climate Extension Specialist (SC/NC Sea Grant position)

# Clark Take-Home Points #2

- **NOAA “Hot” on climate change, both in programs and funding support!**
- **NOAA actively seeking to support “program” and “product” needs wrt climate change**
- **For GL infrastructure – Expect variability in climate (WL’s, storm activities, etc) so understand possible effects & promote “Adaptive Responses”**



# For More Information

- Workshop Web Page @  
<http://csc.noaa.gov/sgcw/agenda.html>

Or

- Contact [Tricia.Ryan@noaa.gov](mailto:Tricia.Ryan@noaa.gov)