



Maryland Climate Change Commission Scientific and Technical Working Group Planning



Don Boesch
July 20, 2007





Working Group Charge

Develop a *Comprehensive Climate Change Impact Assessment*:

- Advise the Commission, as well as other working groups, on the scientific and technical aspects of climate change;
- Inventory Maryland's greenhouse gas emission sources and sinks
- Calculate Maryland's "carbon footprint" to measure the impact of human activities on the environment based on the State's greenhouse gas production;
- Investigate climate change dynamics, including current and future climate models and forecasts; and
- Evaluate the likely consequences of climate change to Maryland's agricultural industry, forestry resources, freshwater supply, aquatic and terrestrial ecosystems, and human health





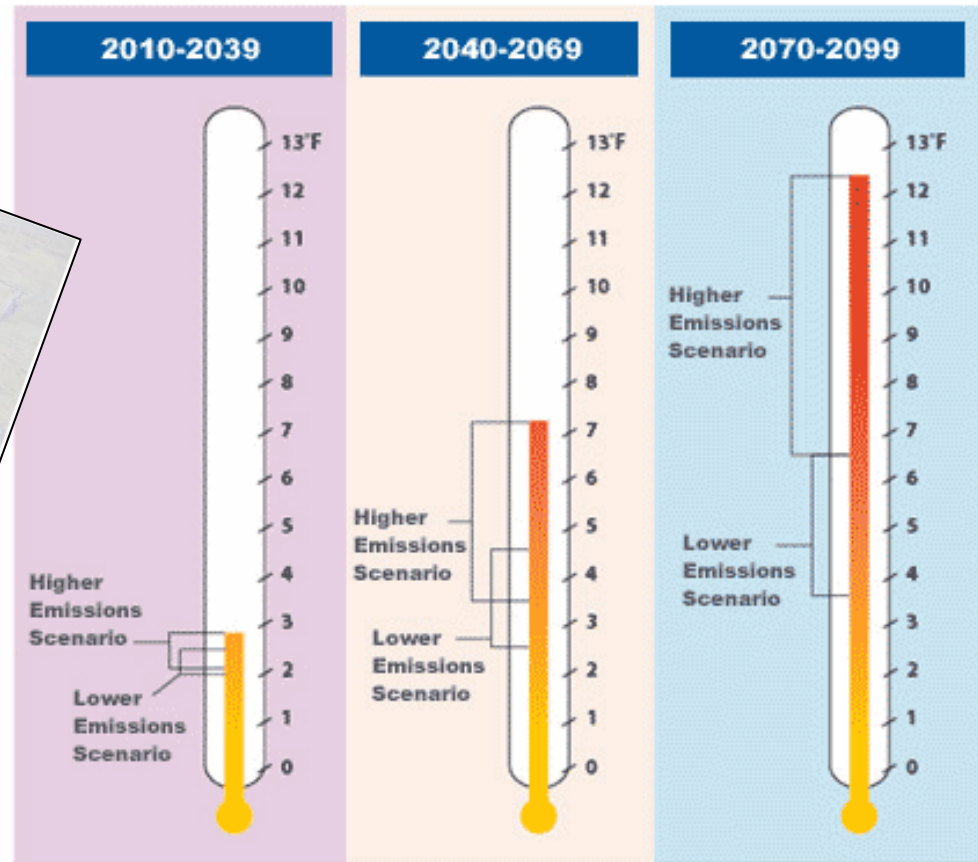
Roles

- **Chaired by USM (Don Boesch), MDE (Bob Summers) and DNR (Frank Dawson)**
- **Working Group members include scientists from Maryland's universities, federal agencies, and non-governmental organizations**
- **Prepare *Comprehensive Climate Change Impact Assessment***
- **The Center for Climate Strategies will inventory and forecast greenhouse gas emissions and sinks; STWG will review and advise**
- **Advise other WGs on scientific and technical aspects of climate change**





Climate Change Impacts



Increase in mean annual temperature compared to 1961-90

**Northeast Climate
Impacts Assessment**

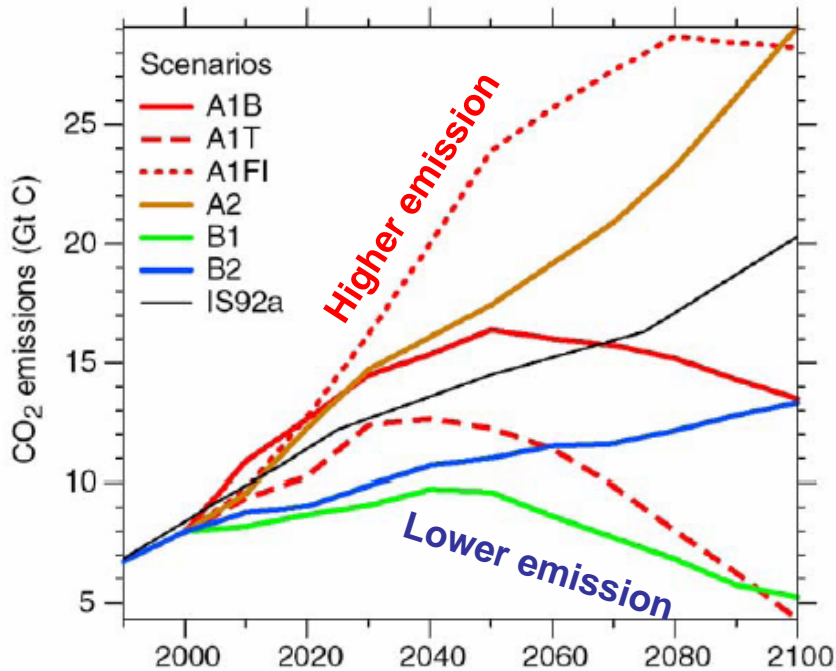
www.northeastclimateimpacts.org/



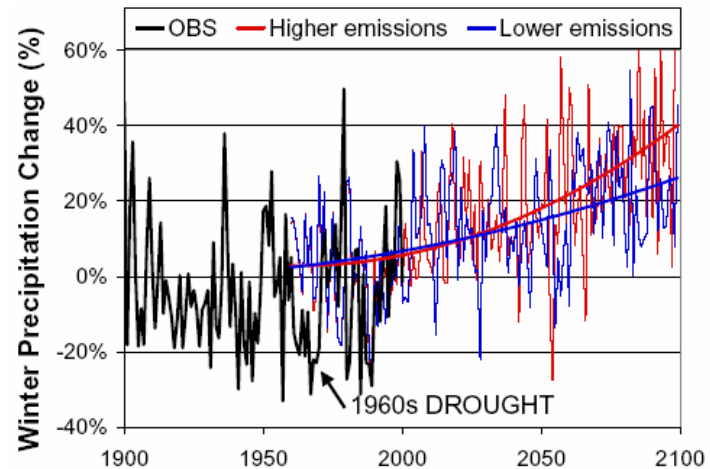
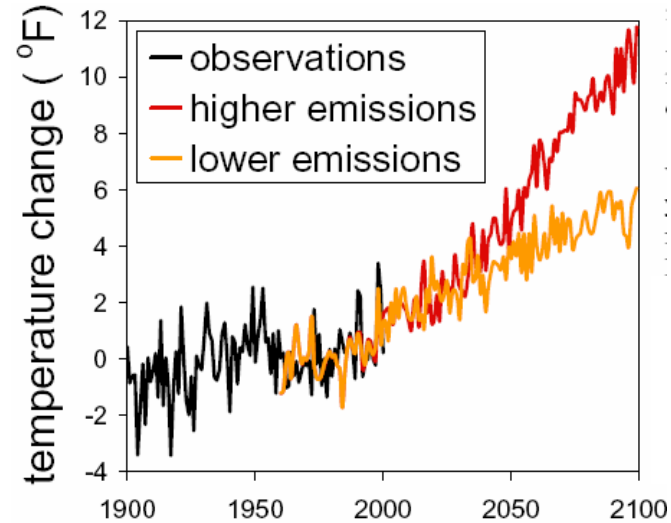
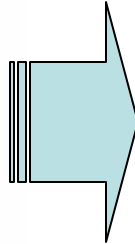


Employ Downscaled Models

Emission Scenarios



www.northeastclimateimpacts.org/





Working Group Principles

- **Involve other experts as needed**
- **Candid debate with appropriate transparency**
- **Integration of findings: minimize redundancy, maximize consistency**
- **Use IPCC protocol for communicating likelihood and confidence**
- **Peer review**
- **Effective, scientifically sound, public communication**





Working Group Process

- **Judicious use of meetings**
- **Web-based information sharing and communication**
- **Small teams (2-3) responsible for analysis and drafting on specific topics**
- **Active liaison with other Working Groups and CCS**
- **Preliminary report in November, 2007**
- **Draft final report in early Spring with simultaneous Commission and peer review**
- **Additional shorter communications media**





Vision for Report

- **Executive Summary**
- **Introduction to Climate Change**
- **Data, Models and Assessment**
- **Recent and Future Climate Changes in Maryland**
- **Consequences**
 - Coastal zone
 - Terrestrial and aquatic ecosystems
 - Water resources
 - Agriculture, forestry, fisheries
 - Human health
- **Implications for Mitigation and Adaptation**

