Preparing for Climate Change in Washington State

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February 16, 2006

The Water Center: Annual Review
What do we know about climate change?

- Climate is changing
- Changes in snowpack and streamflow caused by rising temperatures will have important consequences for resources across the Pacific Northwest
- These changes are likely to be most acute during the summer, exacerbating existing conflicts
Climate change will force resource managers and planners to deal with increasingly complex trade-offs between different management objectives.
Choices and change

- Climate changes projected for the next few decades are largely unavoidable
- Today’s choices will shape tomorrow’s impacts
- Planning should begin now
A Sea Change in Perceptions

Evolving regional engagement in planning for climate change…

1995
Few managers saw role for climate info, recognized predictability of climate, or possessed a conceptual framework for applying climate info

1997
First regional-scale examination of climate change impacts on PNW
Most stakeholders unfamiliar with potential impacts of climate change, unprepared to use such information, and desired information at a finer scale than typical climate change analysis

2001
Senior-level water resources managers recognize climate change as a potentially significant threat to regional water resources & acknowledge climate change information as critical to future planning

2001- present
Increasing public & private pressure on resource management agencies to include climate change impacts in long-term planning

2005
A state-wide conference draws 600+ managers, etc. to discuss how best to prepare for climate change. Washington State promises to head follow-up
600+ attendees familiarize themselves with climate impacts and begin strategizing methods of preparing for/adapting to climate changes.
Conference Outcomes

- Climate change impacts on water unite all sectors
Conference Recommendations

- Address information gaps
  - monitoring
Conference Recommendations

- Address information gaps
  - monitoring
  - more detailed climate impacts
Conference Recommendations

- **Address information gaps**
  - monitoring
  - more details on climate impacts
  - improve provision of information:
    - education/outreach/translation
    - improve linkages between science and management
Conference Recommendations

- Address information gaps
- Develop new approaches to decision making
  - Design for surprises. Policies & management practices should be flexible.
  - Develop risk management approaches.
Conference Recommendations

- Information gaps
- New approaches to decision making
- Take actions to increase the resilience of regional systems
  - fish & shellfish
  - urban water supply
  - forestry
  - agriculture …

Log weirs placed in a small coastal Washington stream to create pools and habitat for coho salmon. NWFSC.
Conference Recommendations

- Information gaps
- New approaches to decision making
- Increase the resilience of regional systems
- Factor climate change into existing & future plans & regulations
Who’s Preparing for Change in the PNW?

- Snohomish Basin Salmon Recovery Forum
- Northwest Power and Conservation Council
- Seattle (City Auditor, SPU)
- King County
- Washington (DOE, CTED)
- USFS (Okanogan, Wenatchee & Colville long-term forest management plans)

Gov. Gregoire’s 2006 Energy Policy Brief:

“Goal #4: Address Global Warming
Washington State is facing climate issues, such as lower snow packs and summer droughts, which will only become worse as global warming advances. ... The Governor will convene a forum of the state’s top economists to analyze the economic impacts of climate change based on the latest scientific information and a state inventory of greenhouse gas emissions. This process will provide the foundation to make effective decisions about critical, long-term infrastructure investments, and to further reduce greenhouse gases.”
By preparing for a changing climate, we can build the ecological, political & socioeconomic capacity required to cope with climate change in Washington state.

The time to start is yesterday now!
More information on PNW climate impacts and planning for climate change is available from

The Climate Impacts Group
www.cses.washington.edu/cig