

Climate Change Advisory Committee Meeting

November 18, 2010



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Welcome & Introductions

Members Proxy and Sign-In



Agenda

- Welcome and Introductions
- Proposed Bylaw Amendments
- Action Items:
 - September 16th Meeting Minutes
 - Bylaw Amendments
 - CCAC Meeting Schedule for 2011
- Update Action Plan: Key Dates and Timeline
- Implementation Subcommittee Report
- Public Comment
- Lunch
- Presentations by Climate Adaptation Co-Chairs
- EPA Webcast
- Adjourn

Discussion of Bylaws

Proposed Amendments to Bylaws:

Under *Article IV: Membership*

C. Alternates

1. “Appointed Committee members may have formally appointed alternates.”
2. “Alternates will have voting rights.”

Proposed 2011 Meeting Schedule

Bimonthly meetings on third Thursday
(same schedule as 2010)

- Additional meetings may be added as need arises
- Goals for 2011
 1. Implementation subcommittee
 2. Climate Adaptation working groups
 3. Action Plan Update – Subcommittees will reform
- Regular meetings
- WebEx meetings

Action Items

- September 16 Meeting Minutes
- Approval of Bylaw Amendments
- CCAC Meeting Schedule for 2011
 - Questions or comments prior to approval?
 - Motion to approve/second/vote

Update to Action Plan

- Key Dates for 2011 and 2012
- Timeline
- Contractor procurement

Implementation of Action Plan

- Implementation Subcommittee Meeting was held on November 3 (3rd conf. call)
- Agriculture and Forestry work plans reviewed; consideration for prioritization
 - Ron Ramsey
 - George Ellis
 - Mark Hammond (Magnotta's alternate)

Public Comment



Lunch



PA Climate Adaptation Report Overview

16 stakeholder meetings held over 8 months.

- Outcome is PA Climate Adaptation Report
 - Risks, vulnerabilities and key recommendations identified by four workgroups
 - Executive summary will identify cross-cutting issues + ongoing/next steps
- Timeline – Workgroups are nearing completion of draft reports due by November 22.
- Combined draft report will be sent to CCAC.
- Final report is planned for release in early January 2011.

Presentations: Climate Adaptation Co-Chairs

- **Natural Resources**
 - Nels Johnson, The Nature Conservancy
 - Sally Just, Dept of Natural Resources & Conservation
- **Public Health and Safety**
 - Jim Logue, Department of Health
 - Ian Greeves, Temple University
- **Tourism and Outdoor Recreation**
 - Tim Schaeffer, Fish & Boat Commission
 - Ed Boito, PennFuture
- **Infrastructure**
 - Danielle Spilla, PennDOT
 - Yasmin Snowberger, PUC
 - Liz Garland, American Rivers

Public Health and Safety Workgroup

- Three important risks were identified by stakeholders:
 - Heat Stress
 - Flooding
 - Drought

Public Health and Safety Workgroup

Heat Stress

- Leading cause of weather-related deaths
- Proactive heat wave response plans
 - Early warning systems
 - Heat advisories
 - Cooling stations

Public Health and Safety Workgroup

Flooding

- Groups vulnerable include elderly, poor, infants and children and those w/underlying chronic diseases and disabilities
- Components for managing risk and partners – model developed
- Case study: January 1996 flood

Public Health and Safety Workgroup

Drought

- Center for Disease Control and Prevention (federal agency)
- Health issues
- Preparedness and response

Public Health and Safety Workgroup

Recommendations

1. Revise climate change action plan to address the public health response.
2. Proactive planning will prevent deaths. Partners should implement guidelines to deal w/threat of heat related deaths and illnesses.
3. Take advantage of federal resources to implement measures to prevent and control adverse health effects caused by flooding.

Public Health and Safety Workgroup

4. Take advantage of federal resources to implement measures to prevent and control adverse health effects caused by drought.
5. Take advantage of grant opportunities for Environmental Health Tracking Program.
6. Support efforts to increase data quality for surveillance systems and data bases.
7. Increase interdisciplinary collaboration among medical and health professionals.

Public Health and Safety Workgroup QUESTIONS?

James N. Logue, Dr.PH., M.P.H.

jlogue@state.pa.us

717 787-3350

Tourism and Outdoor Recreation Workgroup

- Cultural and Heritage
- Passive Recreation
- Theme Parks
- Individual/Aerobic
- Swimming
- Nature Viewing
- Bicycling
- Fishing
- Camping
- Animals
- Adventure
- Hunting
- Winter Sports
- Motor Biking
- Boating
- Golf
- Organized Team Sports
- Yard Work

Tourism and Outdoor Recreation Workgroup

- Risks and Vulnerabilities
 - Seasons: some longer and some lost
 - Hotter weather
 - Less snow for ski areas
 - Too hot for some activities
 - More severe storms
 - Impact any outdoor activity
 - Negative impacts to species
 - Trout
 - Birds

Tourism and Outdoor Recreation Workgroup

- Actions

- Green infrastructure (native grasses)
- Hard infrastructure (trails; lighting)
- Stormwater management (storage; reuse)
- Shading and cooling (trees; misters)
- Conserve habitats (small dam removal)

Tourism and Outdoor Recreation Workgroup

- Incentives, Methods, and Procedures
 - Adaptation criteria in grant programs
 - Model practices at state facilities
 - Business incentives (tax credits)
 - Staff and budgets to promote implementation

Tourism and Outdoor Recreation Workgroup

- Schedules
 - Adjust work, school, and sports schedules
 - Move football to later in fall
 - Seasons
 - Change state park interpretive season
 - Medical and first aid staff
 - Need to aid heat-stressed participants

Infrastructure Workgroup

- Water infrastructure
- Transportation
- Energy
- Insurance
- Communication
- Land Use
- Buildings

Infrastructure Workgroup

- Vulnerabilities
- Risks
- Implementation strategies and data gaps
- Prioritization

Infrastructure Workgroup Climate Categories

- higher temperatures during summer months
- wetter winters – more intense winter storms
- more extreme heat events
- more high impact storms resulting in more flooding and greater floods
- drier summers resulting in drought
- sea level rise – salt water intrusion

Infrastructure Workgroup Recommendations

- Transportation
 - Research materials that withstand higher temps
 - Work during cooler parts of day
 - Intense inspections of facilities after high impact storms

Infrastructure Workgroup Priority Recommendations

- Energy
 - Reduce peak and overall demand
 - Increase renewable power generation
 - Smart Grid planning
 - Climate change weather data incorporated into PJM load forecast
 - Include DEP in PJM planning efforts
 - Continue programs like Keystone Help to upgrade heating and cooling systems
 - Encourage PJM, FERC and NERC to develop climate change adaptation strategies

Infrastructure Workgroup Priority Recommendations

- Water
 - Integrate water management planning with no-regret cost effective priorities
 - Encourage conservation measures at all times
 - Provide training and support to water supply and wastewater treatment facility operators
 - Support stormwater, land use and flood management to prioritize natural function and minimize hazards to existing structures

Infrastructure Workgroup

Co-benefits

- Energy reliability is key for other sectors
- Water supplies are imperative for safe, reliable electric grid and water treatment and delivery systems are dependent on power supplies
- Transportation is backbone of economy and other sectors including tourism and public health

Infrastructure Workgroup Next Steps

- Include adaptation in next update of Climate Change Action Plan
- Form and fund Adaptation Team
- Implement and monitor Adaptation Plan
- Build capacity within and outside state government for adaptation
- Pursue research on data gaps.

Natural Resources Workgroup



Forests



Agriculture



Freshwater



Wildlife

Natural Resources: Key Risks

- 1) Shifts in **species composition** that change ecological function and economic value
- 2) Increased **interaction of disturbances** (fire, storms, diseases, invasive species) that have unpredictable impacts
- 3) Barriers to **connectivity** that restrict movement of wild species to new habitats where they can survive
- 4) Changes to **stream flows and shallow groundwater** with impacts on aquatic/wetland species, crops and livestock
- 5) A **lack of genetic diversity** in wild species and agricultural varieties that limits their ability to persist in the face of climate change

Natural Resources: Key Management Issues

Species and Ecosystem Management

- Adapt to changes in species composition and geographic ranges
- Counter increased stress from existing and new disturbances
- Compensate for decline in genetic diversity
- Protect, restore, and connect large and resilient core habitats

Environmental Management

- Cope with physical and chemical changes in water flow and quality
- Understand climate impacts on soil biology, chemistry and physics

Natural Resources: Key Management Issues

Education and Institutional Management

- Bolster public and policymaker awareness of climate change impacts
- Increase coordination among researchers and natural resource managers to achieve greater efficiency and effectiveness
- Provide local governments with better information and tools to integrate climate impacts and strategies (e.g., floodplain changes, key connectivity areas)
- Expand knowledge about the economics (costs, benefits, and co-benefits) of taking action to minimize climate impacts on natural resources

Natural Resources: Information Gaps

- What Data Is Most Relevant, What Indicators Are Needed, and What's Available Now?
- Need to Scale-Down Global and Regional Climate Models and Link to Ecological Models
- Need Better Data/ Models on Land-Use and Energy Development Affects on Ecosystem Resilience
- Need Better Data on Habitat and Connectivity Needs For Climate Sensitive Species
- Increased Collaboration/Networks to Collect and Share Data

Natural Resources: Recommendations

- 1) View existing actions through lens of climate change*
- 2) Integrate climate change strategies into organizational plans and budgets*
- 3) Develop an integrated monitoring system*
- 4) Create a consortium to promote collaborative research, monitoring and data sharing*

Natural Resources: Recommendations

- 5) Promote sustainable land use planning and development*
- 6) Focus on building resilience into conservation networks and strategies*
- 7) Expand education and coordinate outreach on current and expected impacts, emphasize practical responses*

EPA Webcast: 2:00 pm – 3:30 pm

“Climate Impacts and Risk Communication”

- First of three-part Webcast series covering climate change adaptation for state and local governments

ADJOURN