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Illinois Should Create a Climate Change Task Force for the State

Elena Grossman, MPH • Research Specialist • Environmental & Occupational Health Sciences
Caitlin Donato, MPH • Research Associate • Environmental & Occupational Health Sciences

• **Climate change is affecting Illinois' health, agriculture, transportation, infrastructure, and the economy.**

• **The state should create a Climate Change Taskforce to develop a comprehensive climate change adaptation plan to assess how climate change affects different sectors and strategies to reduce the impact.**

• **To accomplish this, the Governor's Office should bring together key stakeholders from federal, state and local government agencies, universities, community and non-profit organizations, and private companies whose programs, policies, and businesses are impacted by climate change.**

What is the issue?

The effects from climate change are already happening in Illinois. There are more extreme weather events, worsening air quality, and expanding geographic ranges of mosquitoes and ticks. These changes affect health, agriculture, transportation, infrastructure, and the economy.

Temperatures in the 2000s have been higher than any other historical period, except the “Dust Bowl” era. Since 1995, Illinois has experienced above average precipitation in spring and summer. There are more extreme precipitation events that cause severe flooding. Historic floodplain maps are out of date. An urban flooding report found that from 2007-2014, more than 90% of urban flooding damage claims were outside the mapped floodplain.

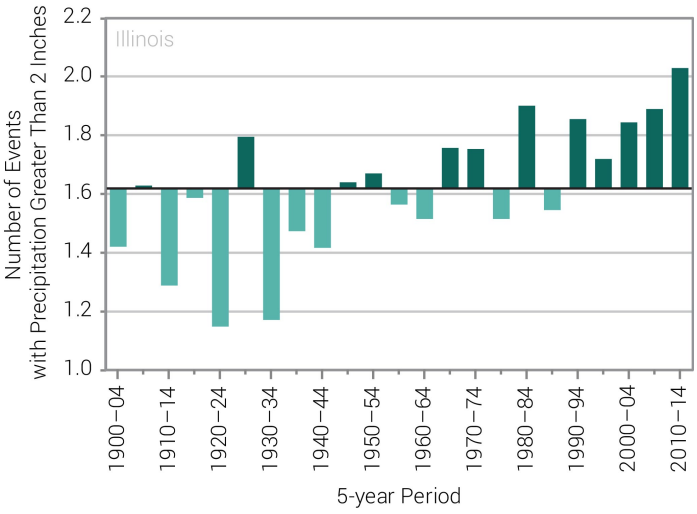

Figure 1: Observed Number of Extreme Precipitation Events in Illinois from 1900-2014
Frankson, R., K. Kunkel, S. Champion, B. Stewart, D. Easterling, B. Hall, and J. R. Angel, 2017: Illinois State Climate Summary. NOAA Technical Report NESDIS 149-IL, 4 pp.

Why is this important?

HEALTH
Rising temperatures and increasing precipitation will lead to more heat strokes and exhaustion, mold exposure, mental health distress, injuries, fatalities, water quality concerns, respiratory health problems, allergies, and diseases spread by ticks and mosquitoes like Lyme disease and West Nile virus.

AGRICULTURE
Rising temperatures, floods, and droughts could result in losing up to $13 billion per year from crop losses. Corn, soybeans, and livestock are particularly heat sensitive.

LABOR
As heat rises past human comfort levels, labor productivity falls. Midwestern states will likely see labor productivity decline across all high-risk sectors by as much as 3%.

TRANSPORTATION
Rising temperatures lead to pavement buckling and rutting, bridge joints expanding, and longer construction seasons. More frequent and severe rainstorms lead to more damage to bridges, disruptions to barge traffic, and road closures.

INFRASTRUCTURE
Rising temperatures require a greater demand on the electrical grid and more frequent and severe rainstorms lead to increased damage to trees, power poles, electrical lines, and the electrical supply.

Climate change adaptation is managing the unavoidable. Illinois is already experiencing these changes and responding to them is costly. Preparing for these changes is fiscally responsible and will protect lives.

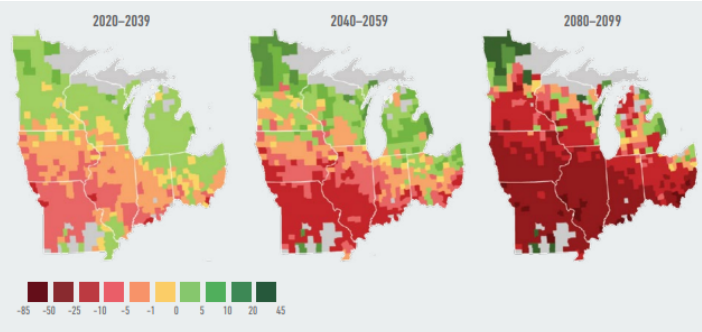

Figure 2: Projected Change in Corn, Soybeans, and Wheat Yields
Median percent change in yield of corn, soybeans, and wheat relative to current production without significant adaptation.

What should policymakers do?

Illinois should create a state Climate Change Task Force to develop and implement a statewide Climate Adaptation Plan. The Plan should assess how climate change affects different sectors and strategies to reduce the impact including public health, transportation, agriculture, emergency management, natural resources, aging, labor, and the economy.

Climate change equally affects multiple sectors and the solutions live in many state agencies. Fro these reasons, the statewide Climate Adaptation Plan should be a centralized effort and organized through the Governor's Office.

Massachusetts and Rhode Island provide model legislation. Massachusetts directed executive agencies to develop and implement a statewide Climate Adaptation Plan, and to build a framework for each state agency and municipalities to assess their vulnerability to climate change. The Secretary of Energy and Environmental Affairs and the Secretary of Public Safety coordinate efforts to strengthen the resiliency, prepare for and mitigate impacts from climate change and extreme weather events.

Rhode Island created a coordinating committee for climate adaptation planning and implementation, supported by the Division of Administration Statewide Planning program. The committee is directed to integrate vulnerability assessments developed by state agencies, set goals to reduce climate change impacts, and to advance sustainable solutions.

The Governor's Office should:

1. Identify a climate change expert to lead this initiative. The expert should start with assessing work currently being done to address climate change within state agencies, universities, community-based organizations, and private companies.
2. Identify key agencies and organizations whose practices and policies are affected by climate change
3. Secure funding to develop a Climate Adaptation Plan
4. Convene participants to develop the Plan.

The Governor's Office should take responsibility for implementing these actions

Agencies and organizations to involve:

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- Illinois Department of Public Health
- Illinois Environmental Protection Agency
- Illinois Department of Agriculture
- Illinois Department of Transportation
- Illinois Department of Labor
- Illinois Department of Aging
- Illinois Department of Commerce & Economic Opportunity
- Illinois Emergency Management Agency
- Illinois Department of Natural
- Illinois Department of Human Services
- U.S. EPA Region 5
- State and local OSHA offices
- Local health and environment departments
- Chicago Metropolitan Agency for Planning; other planning organizations
- Illinois Public Health Association
- University Schools of Public Health
- University Colleges of Engineering
- University Colleges of Urban Planning
- Public health and Environmental organizations
- Community organizations

Sources

Climate Adaptation in Illinois: http://www.idot.illinois.gov/assets/uploads/files/about-idot/pamphlets-&-brochures/events/multi-modal-planning/fall-planning/climate%20change.pdf

Heat in the Heartland: Climate Change and Economic Risk in the Midwest: https://riskybusiness.org/site/assets/uploads/2015/09/RBP-Midwest-Report-WEB-1-26-15.pdf

Illinois Climate and Health Profile Report: https://braceillinois.uic.edu/files/2015/05/IL_ClimateHealth_Report.pdf

National Oceanic and Atmospheric Association National Centers for Environmental Information State Climate Summaries for Illinois: https://statesummaries.ncics.org/chapter/il/

Report for the Urban Flooding Awareness Act: https://www.dnr.illinois.gov/WaterResources/Documents/Final_UFAA_Report.pdf

MA establishing an integrated climate change strategy for the commonwealth: https://www.mass.gov/files/documents/2016/09/nl/executive-order-climate-change-strategy.pdf

Resilient RI Act: http://webserver.rilin.state.ri.us/BillText/BillText14/HouseText14/H7904.pdf