

## The Illinois Global Climate Change Program

In response to mounting questions about global climate change and its impacts, the Global Climate Change Program was established in 1991 at the Illinois State Water Survey (see box). It was designated as Illinois' center for scientific research and information related to global climate change by Joint House Resolution 81 of the Illinois General Assembly. The Program will provide accurate and timely information to Illinois decision makers, the general public, and the scientific community about the potential future state of the climate, and how altered climate conditions may affect Illinois.

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**The Program's goal is to provide for Illinois a center of expertise addressing the global climate change issue with a three-way focus, including studies of climate change and its effects, monitoring of climate-related environmental changes, and the timely dissemination of information about the issue.**

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Illinois has already moved forward on this important issue in several ways. Since the late 1940s, the Water Survey has studied the climate and water resources of the state under its mandate "to monitor and study the atmospheric and water resources of Illinois." As a result, there is more information about the climate and water resources of Illinois than any other comparable region of the world.

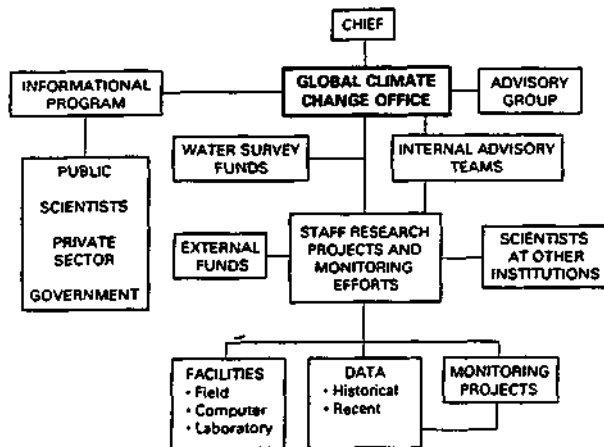
Although significant research progress has been made, some major information gaps remain. First, the Program must better assess the effects of

potential climate changes on the hydrologic cycle and other biological systems of the state. Second, the Program must assess the range and types of socioeconomic impacts that would ensue from the climate-induced changes in the physical-biological systems. The Program must also quickly implement systems to detect global changes. Detecting the onset of a climate change and its effects is of crucial importance to any mitigatory action.

### Program Objectives

- To gain improved understanding of the climate of Illinois.
- To describe past fluctuations in the climate and hydrologic cycle and to predict possible future fluctuations.
- To investigate anthropogenic (human) influences on weather processes and ultimately on climate conditions.
- To determine and quantify the effects of climate fluctuations on the hydrologic cycle and other environmental systems.
- To predict how future climate shifts can and will alter land surfaces, the hydrologic cycle, agriculture, and other weather-sensitive sectors.
- To assess the impacts of climate-altered conditions on the socioeconomic structure of Illinois and the Midwest.
- To provide Illinois decision makers, the general public, and the scientific community with accurate and timely information developed from the above activities.

**The Organizational Elements and Structure of the Illinois Global Climate Change Program**



**The Program**

The Program staff include a Director, an Assistant Director, and administrative support. To achieve the Program's objectives and perform the functions of the Office, as detailed in *The Plan for the Illinois Global Climate Change Program*, the Director has established three standing advisory teams composed of Water Survey staff members: the Implementation Team, the Climate Scenario Team, and the Information Team.

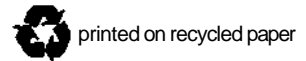
History and Geological Surveys, and at other state institutions, federal agencies, national laboratories, and state universities.

Another important component is the provision of updated data and information on climate change to all interested parties in Illinois. Through various types of publications and meetings, information will reach audiences from the scientific and educational communities, and the general public. The Water Survey library has also established a special collection housing publications related to climate change and its effects. A key word bibliography is maintained to provide users with easy access to the many materials on this subject.

Program funds are derived from a mixture of sources including state funds and those generated from external agencies and institutions through grants, contracts, and cooperative agreements.

**Further Reading**

Illinois State Water Survey, *The Plan for the Illinois Global Climate Change Program*, MP 135. Champaign, IL:1991.




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**Illinois cannot make wise decisions about the climate change issue without high-quality scientific and technical information about the subject.**

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Aside from specific physical areas and economic sectors, the Program will promote multidisciplinary projects to investigate regional-scale impacts of climate change. Identified regional studies include the Chicago metropolitan area, the Great Lakes basin, and the Illinois River Basin.

The Program will encourage the involvement of scientists (and institutions) in addition to those at the Water Survey. The large, diverse research and monitoring program planned also affords opportunities for collaboration with staff members at the University of Illinois, at the Illinois State Natural

The Illinois State Water Survey was founded in 1895. It is the primary agency in Illinois concerned with water and atmospheric resources. Its research and service programs anticipate and react to practical problems related to the quantity, quality, and use of ground, surface, and atmospheric water resources in the state of Illinois. Much of the Survey's work is facilitated by an extensive database collected and developed over the course of a century.