

**ANNUAL REPORT
OF THE
WATER RESOURCES STUDY COMMITTEE**



**Indiana Legislative Services Agency
200 W. Washington Street, Suite 301
Indianapolis, Indiana 46204**

November, 2008

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2008

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WATER RESOURCES STUDY COMMITTEE

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**Irma Reinumagi
Attorney for the Committee**

**Bernadette Bartlett
Fiscal Analyst for the Committee**

A copy of this report is available on the Internet. Reports, minutes, and notices are organized by committee. This report and other documents for this Committee can be accessed from the General Assembly Homepage at <http://www.in.gov/legislative/>.

I. STATUTORY AND LEGISLATIVE COUNCIL DIRECTIVES

The Indiana General Assembly enacted legislation (IC 2-5-25-5) directing the Committee to do the following:

The water resources study committee shall study and may make recommendations concerning all matters relating to the surface and ground water resources of Indiana, including the following:

- (1) The usage, quality, and quantity of water resources.
- (2) Issues concerning diffused surface water, the common enemy doctrine of law, and runoff.

The Legislative Council assigned the following additional responsibilities to the Committee:

To study certain water issues to develop a proposal to begin the process of sophisticated planning that reflects the growing need for water. (HR 65)

II. INTRODUCTION AND REASONS FOR STUDY

The Committee met to receive the Department of Natural Resources' (DNR) annual progress report on the work of the Indiana Water Shortage Task Force and to study other issues concerning the usage of water resources in Indiana, including planning for water usage.

III. SUMMARY OF WORK PROGRAM

The Committee met three times during the 2008 interim. At the first meeting, held on August 21, 2008, the Committee received DNR's report concerning the work of the Water Shortage Task Force, and heard testimony concerning regional water boards and the impact of confined feeding operations (CFOs) and concentrated animal feeding operations (CAFOs) on water resources. At the second meeting, held on September 23, 2008, the Committee heard testimony from DNR concerning the 2008 floods and dams, from the Indiana Department of Environmental Management (IDEM) concerning CFO and CAFO regulation and wellhead protection, and from the public concerning CFOs and CAFOs. At the third meeting, held on October 29, 2008, the Committee heard testimony from DNR and the public concerning stream gage and groundwater observation well monitoring and funding, and adopted recommendations and the final report.

The minutes of these hearings can be found at <http://www.in.gov/legislative/interim>.

IV. SUMMARY OF TESTIMONY

Water Shortage Task Force Annual Report

DNR presented the Water Shortage Task Force annual report, as required under IC 14-25-14. Among the tasks completed by the Task Force are:

- a review of the 1994 Indiana Water Shortage Plan;
- a review of available monitoring information;
- a review of conflicts over surface and ground water allocation;
- the development and distribution of a suggested model ordinance for local units of government to have in place before a water shortage or drought;
- the review and modification, together with the State Climatologist, of existing drought trigger mechanisms;
- a review of consumptive uses of water; and
- the definition of water shortage management areas.

Tasks still to be accomplished include the consideration of a base flow policy for water resource planning projects; a review of policies and procedures regarding water conservation; and the establishment of water usage priorities.

The 2008 Floods and Dams

Indiana experienced three heavy rainfall events in 2008 that caused flooding in different areas of the state: January 8, which primarily affected the northern third of the state; June 6-7, which primarily affected the middle third of the state; and September 12-15, which was concentrated in northwest Indiana. During the June flood event, the Wabash River carved a new channel, creating a new island of over 1800 acres in southwest Indiana. Following the June storms, DNR worked with the Army Corps of Engineers to make site assessments of over 100 high hazard dams in affected counties. Many dams were identified as having been overtopped with possible damage; seven were categorized as "Emergency Action Required". DNR is continuing to work with the owners of these dams.

Wellhead Protection Program

IDEM administers the Indiana Wellhead Protection Program under the federal Safe Drinking Water Act. Unlike the rest of the United States, in which approximately two-thirds of the population receives drinking water from surface waters, in Indiana approximately 60% of the population receives drinking water from ground water sources. The Wellhead Protection Program is designed to protect wells from contamination. Under the Program, local planning teams are established to develop delineations (aquifer mappings that show the boundaries of the protection area), inventory potential sources of contamination, and develop management and

contingency plans. Currently, there are 638 approved protection plans in Indiana.

Regional Water Boards

Dave Stults, representing the Vernon Fork Water District, explained the regional approach to water planning, in which representatives of an affected area jointly determine available water resources and needs, including quality issues. The regional board program is administered by IDEM; currently, there are around 20 regional water boards in the state. While the Vernon Fork district primarily depends on surface water, other districts use more ground water. Funding for the districts is a problem, as no state funds are provided, and county funds are inadequate to carry out tasks such as engineering and accounting.

CFOs and CAFOs: Impact on Water Resources

Several witnesses presented testimony raising concerns about the effect of CFOs and CAFOs on ground and surface water. Agricultural manure spills were a concern, as was manure management, particularly when multiple farms receive approval to spread manure on the same fields, increasing the chance of runoff. While CFOs and CAFOs have a greater impact on surface water, ground water contamination was also a concern. In addition, locating CFOs and CAFOs near streams that flow into state parks and reservoirs may have an adverse impact on tourism; a three-mile setback for new CFOs and CAFOs was proposed. Concern was also expressed over IDEM's administration of programs that monitor CFOs and CAFOs.

IDEM presented a report on its CFO and CAFO activities. Improvements made to the administration of the animal feeding operation regulatory program include the reassignment of inspectors to increase monitoring, the implementation of compliance assistance inspections for new operations, a reduction of the backlog of staff review of manure management plans, and a consolidated database. Other witnesses testified that the number of spills is not significant enough to warrant a change to the existing statutes, and that CFOs and CAFOs are, on the whole, well managed in Indiana.

Stream Gages and Groundwater Observation Wells

DNR presented a report on stream, lake, and reservoir gages and groundwater observation wells. In recent years, the number of gages and wells has been declining: in 2003, there were 343, while in 2008, there are 221. Because of the declining number, there is a lack of historical and real-time data concerning stream flow, hindering flood and drought monitoring. Funding is the primary reason for the declining number, with DNR, the United States Geological Survey, and local units having reduced funds for monitoring. DNR asked the Committee to consider a resolution dealing with funding for the gages and wells.

Additional testimony demonstrated support for steady funding and increased monitoring from various groups. Environmental groups consider stream flow and ground water level monitoring a critical issue, while businesses also depend on accurate daily data. In addition, recreational stream users consult gages to determine whether to visit streams, leading to interstate and intrastate tourism. Public safety officials use gaging data to determine when to close streams for recreational use.

V. COMMITTEE RECOMMENDATIONS

The Committee made the following recommendations (each adopted unanimously, nine members present):

Concerning Drinking Water:

Indiana has long been blessed with adequate, reliable, and affordable drinking water. To date, there has not been a comprehensive plan that would identify future needs and how we will meet those needs. As our Hoosier population grows and existing drinking water supplies become further stressed, planning is even more vital. While there are many details that would be involved, it is clear that any plan should identify the quantity available, where future needs exist, how the resource can be fairly managed, including the determination of ownership rights, and how it will be delivered. Also, an external group comprised of professionals and key stakeholders should be established to:

1. oversee this effort;
2. develop a mission statement, including time frames; and
3. submit an annual report to the Water Resources Study Committee.

Understanding that our drinking water availability is an environmental protection and economic necessity, Indiana cannot afford to delay this effort any longer.

Therefore, the Water Resources Study Committee recommends to the Legislative Council that the 2009 General Assembly give this important issue their careful consideration.

Concerning Stream Gages:

The Committee recommended that the following resolution be introduced in the 2009 legislative session:

Whereas, current funding for maintaining Indiana's stream and lake gage and ground-water observation well network is derived from several sources, including the United States Geological Survey (USGS), Indiana Department of Environmental Management (IDEM), Indiana Department of Natural Resources (DNR), Indiana Department of Transportation (INDOT), and

United States Army Corps of Engineers (USACE), as well as local governments and other private entities;

Whereas, Indiana currently has one hundred seventy-four (174) stream gages, thirty-seven (37) ground-water observation wells and ten (10) lake gages that are operated and maintained by the United States Geological Survey;

Whereas, the number of stream and lake gages and ground-water observation wells in Indiana's network has been reduced from a total of three hundred forty-three (343) in the year 2003 to a total of two hundred twenty-one (221) in the year 2008 due to the reduction of funds available within the operating budgets of state and federal agencies and local units of government;

Whereas, it is essential to understand the quantity of water in Indiana's streams, lakes and aquifers in order to properly manage the state's water resources, predict the occurrence of droughts and floods, and enhance disaster preparedness;

Whereas, the current network of stream and lake gages and ground-water observation wells continues to experience increases in annual maintenance and repairs;

Whereas, existing and new stream and lake gages and observation wells will be needed to enhance understanding of Indiana's surface water and ground-water systems and enhance predictive capability;

Whereas, funding for maintaining and expanding Indiana's stream and lake gage and ground-water monitoring well network must compete for resources within the budgets of IDEM, DNR and INDOT; and

Whereas, a stable funding source is critical to the network's long term viability; Therefore:

Be it resolved by the House of Representatives and Senate of the

General Assembly of the State of Indiana:

SECTION 1. That DNR, IDEM, INDOT and the Indiana Department of Homeland Security (IDHS), are urged to evaluate the current status of Indiana's stream and lake gage and ground-water monitoring well network by December 31, 2009.

SECTION 2. That IDEM, DNR, INDOT and IDHS are urged to develop and enter into a Memorandum of Understanding to allow for the periodic evaluation of the stream and lake gage and ground-water observation well network, to collaborate on funding, to consolidate existing agreements, and to identify the network funding requirements during each biennial budget preparation cycle.

WITNESS LIST

Terry Bush, Hoosier Canoe Club

Krista Carr, Union County

Pat Carroll, Indiana Department of Environmental Management

Barbara Sha Cox, Indiana CAFO Watch

Nick Ellis, Jefferson County

Gina Hartman, Union County

Ryan Hoff, Indiana Department of Natural Resources

Bob Kraft, Indiana Farm Bureau

Andrew Maddocks, Depauw Environmental Policy Project

Ron McAhron, Indiana Department of Natural Resources

Bruce Palin, Indiana Department of Environmental Management

Sandra Pflum, Indiana Department of Environmental Management

Michael Platt, Indiana Pork Producers

Glenn Pratt, Sierra Club

Rae Schnapp, Hoosier Environmental Council

Dave Stults, Vernon Forks Water District

Adam Warnke, Indiana Department of Natural Resources

Kate Wright, Depauw Environmental Policy Project