



Members

Sen. James Banks, Chairperson
Sen. Edward Charbonneau
Sen. Susan Glick
Sen. James Arnold
Sen. Lindel Hume
Sen. Richard Young
Rep. William Friend, Vice-Chairman
Rep. Jack Lutz
Rep. Robert Morris
Rep. David Cheatham
Rep. Steven Stemler
Rep. Nancy Dembowski

WATER RESOURCES STUDY COMMITTEE

Legislative Services Agency
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Jessica Harmon, Fiscal Analyst for the Committee

Authority: IC 2-5-25

MEETING MINUTES¹

Meeting Date: October 20, 2011
Meeting Time: 10:00 A.M.
Meeting Place: State House, 200 W. Washington St., Room 233
Meeting City: Indianapolis, Indiana
Meeting Number: 2

Members Present: Sen. James Banks, Chairperson; Sen. Susan Glick; Sen. James Arnold; Sen. Lindel Hume; Sen. Richard Young; Rep. William Friend, Vice-Chairman; Rep. Robert Morris; Rep. Nancy Dembowski.

Members Absent: Sen. Edward Charbonneau; Rep. Jack Lutz; Rep. David Cheatham; Rep. Steven Stemler.

Chairperson Banks called the meeting to order at 10:03 a.m., and called upon Dr. Jack Wittman, National Director, Layne Geosciences, to present proposed recommendations to the Committee.

Dr. Wittman explained that the recommendations were developed through discussion and collaboration between Dr. Bill Blomquist, Dean of the School of Liberal Arts, IUPUI, Dr. John Steinmetz, IU, State Geologist and Director, Indiana Geological Survey, Dr. Ronald Turco, Director of the Indiana Water Resources Research Institute and the Purdue Water Center, and Dr. Wittman, following the presentations each had made at the last Committee

¹ These minutes, exhibits, and other materials referenced in the minutes can be viewed electronically at <http://www.in.gov/legislative>. Hard copies can be obtained in the Legislative Information Center in Room 230 of the State House in Indianapolis, Indiana. Requests for hard copies may be mailed to the Legislative Information Center, Legislative Services Agency, West Washington Street, Indianapolis, IN 46204-2789. A fee of \$0.15 per page and mailing costs will be charged for hard copies.

hearing. Dr. Wittman explained that the group had met several times since the Committee's last meeting, and the information he would present was the consensus of the group's opinions. (Attachment A) Dr. Wittman presented maps of water usage data across the state, and urged the state to use the data and the available talent in universities and state agencies to continue mapping aquifers in order to develop a policy on regional water systems and planning. This policy would approach managing drought risks in a manner that distinguishes regional differences in growth rates, water availability, and alternative sources available to the various regions. He would recommend the policy recognize the regional scale of water usage, the role of conservation and water reuse, the value of aquifer storage, and large scale inter-basin transfers of water.

Kevin Strunk, a professional consulting geologist, stated that he had worked on the state's original water shortage plan in 1991. He explained that water is assumed to be free, but actually needs to have a value placed upon it. He also pointed out that there is a lack of adequate funding for DNR and the Geological Survey for their work in water.

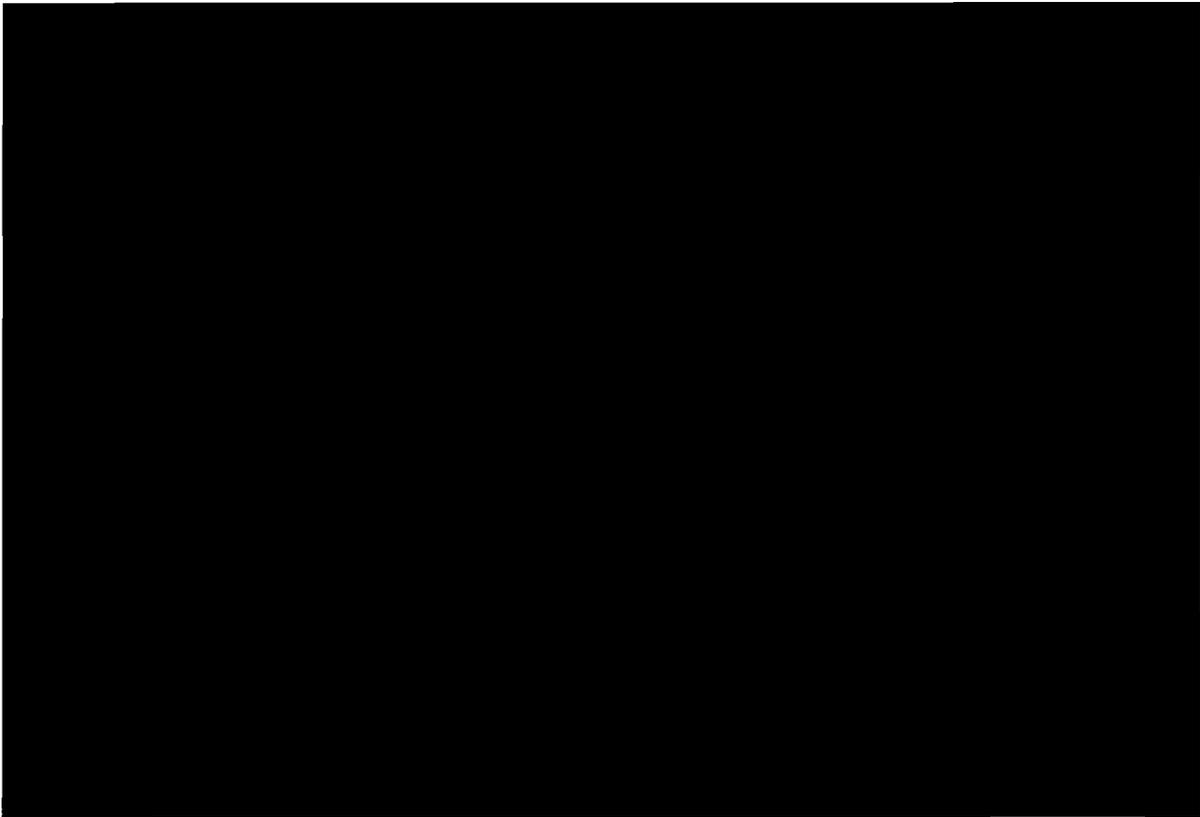
Tom Bruns, AqualN and chair of the Indiana Association of Water Companies, stated that Indiana has an amazing water supply that needs to be used for economic development. However, there are regional limitations, and the issue of central Indiana's long term water supply needs to be addressed. In addition, the state needs to work with the federal government to access the water supply from the reservoirs along the Upper Wabash River, which were built as flood control reservoirs, not for water storage; thus, the state does not have access to the reservoirs as a water supply.

Vince Griffin, Indiana Chamber of Commerce, explained that historically the availability of water has not been a problem in Indiana. The state is in a unique position to develop a policy for the future of water, since there is not a current crisis occurring. He also stated that the state can create an economic driver with water.

Glenn Pratt, former IDEM assistant commissioner, stressed the need to educate people on water conservation and to protect the water supply from pollution.

The Committee next considered the proposed findings and recommendations submitted by Dr. Wittman. (Attachment B) The findings and recommendations were adopted by a vote of 8-0.

The meeting was adjourned at 11:05 a.m.



Recommendations for Action on a Water Resources Study Agenda

RON TURCO, PhD
DIRECTOR, INDIANA WATER
RESOURCES RESEARCH INSTITUTE

JOHN STEINMETZ, PhD
STATE GEOLOGIST & DIRECTOR,
INDIANA GEOLOGICAL SURVEY

BILL BLOMQUIST, PhD
DEAN OF LIBERAL ARTS AND
SCIENCES, IUPUI

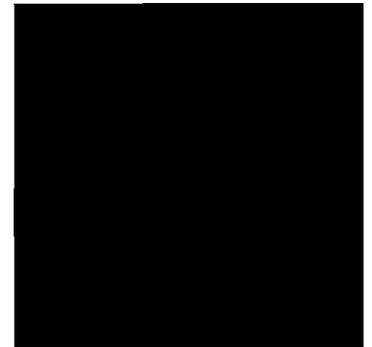
JACK WITTMAN, PhD
NATIONAL DIRECTOR, LAYNE
GEOSCIENCES

October, 2011

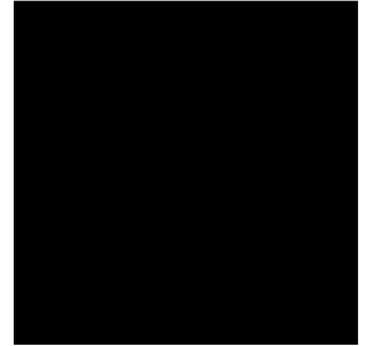
*Attachment A
Water Resources
Study Committee
10/20/2011*

Review of Testimony

- State is doing research and mapping, but:
 - Institutional infrastructure is not prepared for regional shortages
- Groundwater is a natural drought buffer, but:
 - Regional aquifers are absent in Southern Indiana
 - More vulnerable to drought
 - Central Indiana relies on heavily used local aquifer
- State policy – encourage economic stability and growth



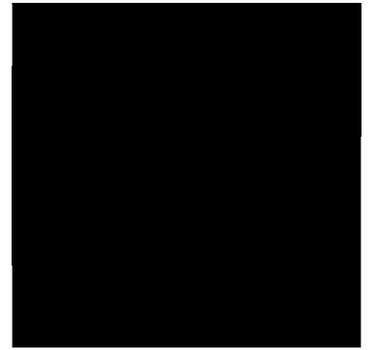
Recommendations for Legislative Action



1. Water research in Indiana needs to be supported
 - Report on current activities (university and agency)

2. Mapping aquifers is important to the economy of the state
 - Indiana Geological Survey work needs to accelerate

Recommendations for Legislative Action



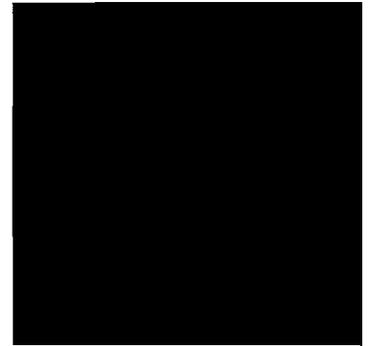
3. Develop policy on regional water systems and planning

Approach to managing drought risks that distinguishes regional differences in:

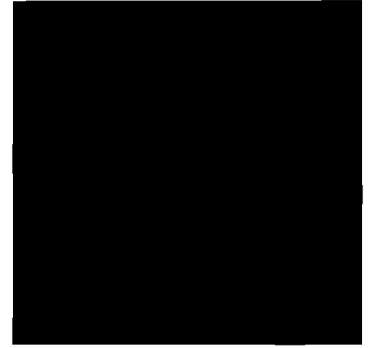
- Growth rates
- Water availability
- Regional alternatives

New water policy needs to recognize

- Regional scale of the problems
- Role of conservation and water reuse
- Value of aquifer storage
- Large scale inter-basin transfers

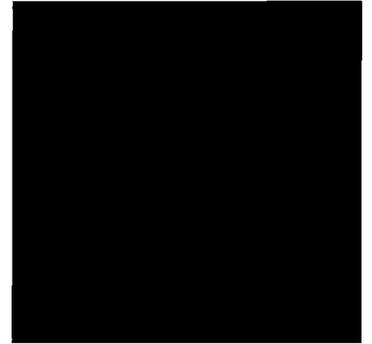


State should work with all stakeholders



- Create an inventory of Indiana's water resources
- Develop a framework and methods for:
 - Determining water needs
 - Assessing the connection between water needs and economic development
 - Identifying economical and environmentally sound means of meeting water needs
- Inventory those areas that will need water over the next 15 years
- Determine how those needs can best be satisfied in the event of a drought

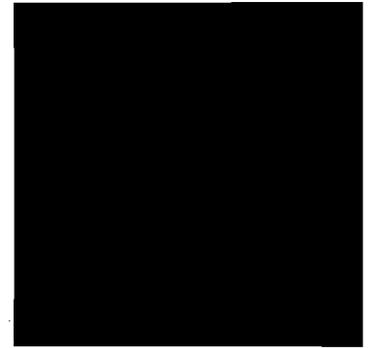
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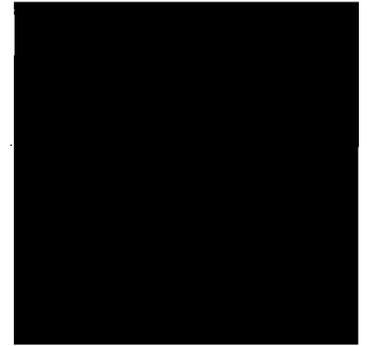
- Develop water and wastewater infrastructure investment priorities
- List alternatives to reform and restructure how water is used and regulated with special attention to a regional approach to water and wastewater
- Draft necessary legislation to create an effective system that will maximize the value of our water resources
- Develop a comprehensive plan (including legislation and regulatory rules) considering water and wastewater needs that promotes economic development

Focus on Indiana's Assets and Strengths

- Existing water use data
- Available talent (Universities and State Agencies)
- Shared commitment to plan for future



Focus on Indiana's Assets and Strengths

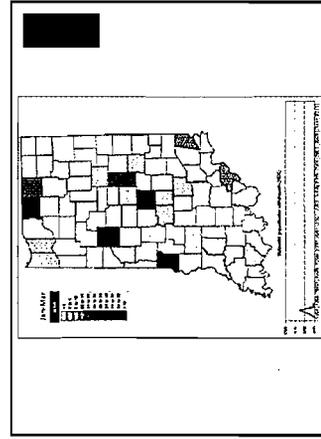
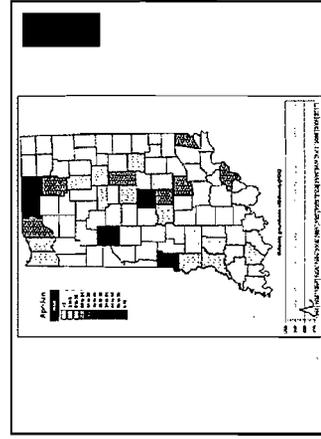
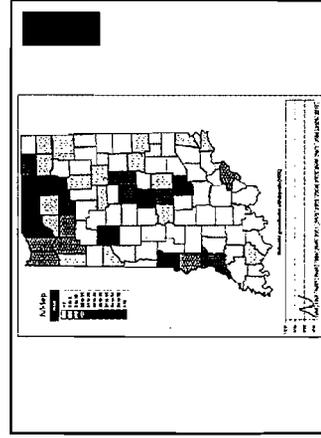
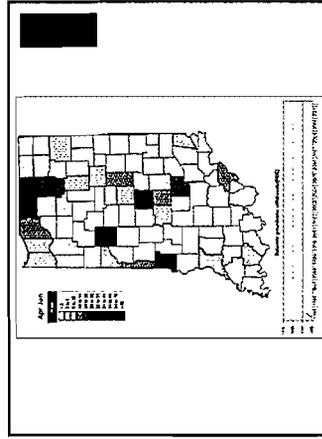
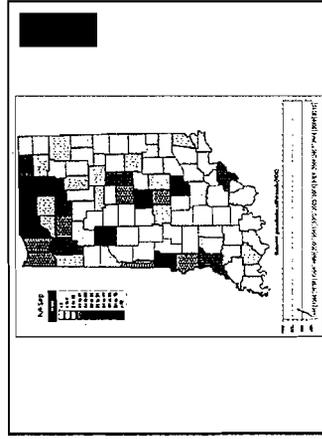
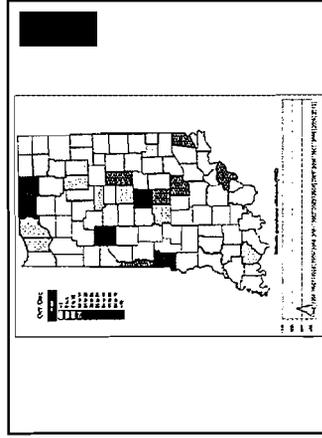
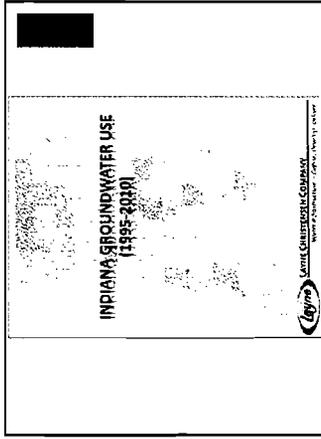
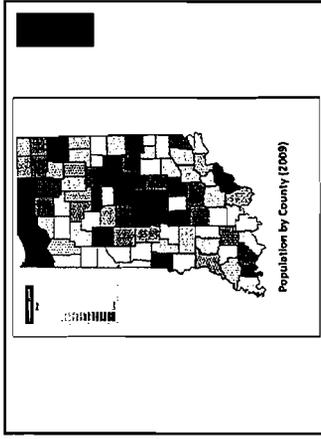
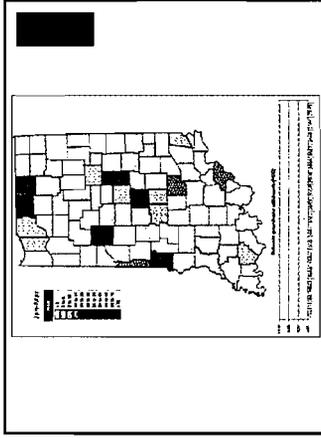


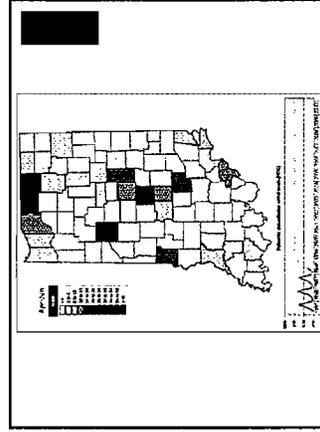
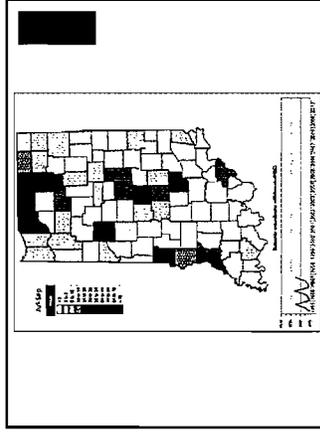
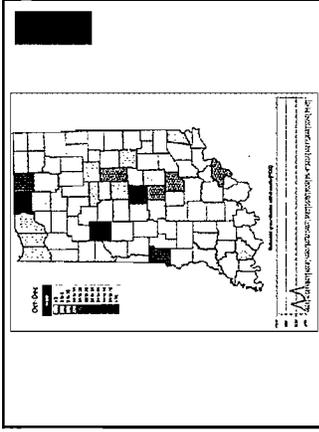
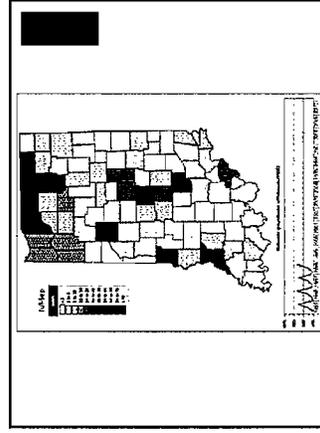
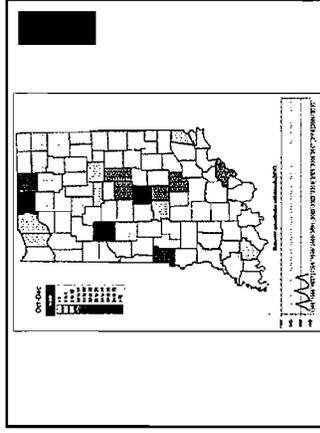
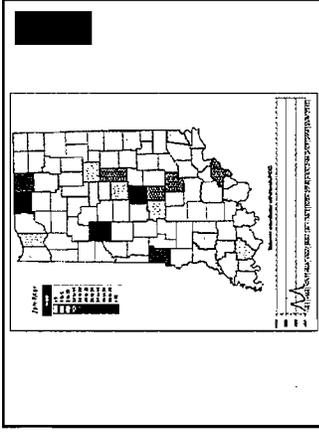
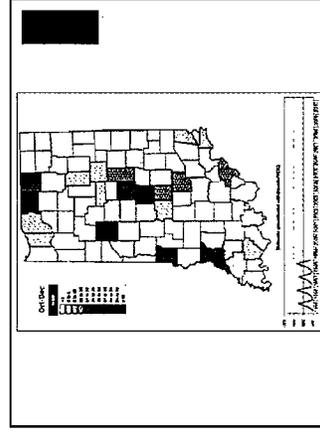
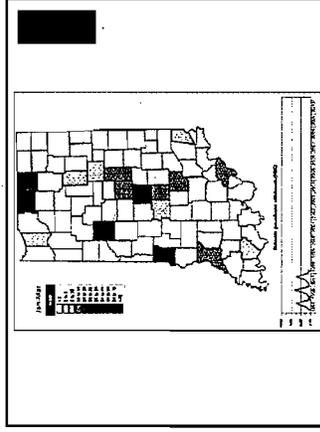
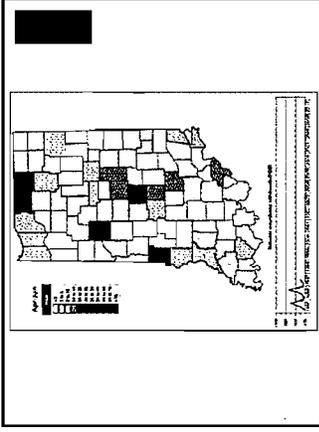
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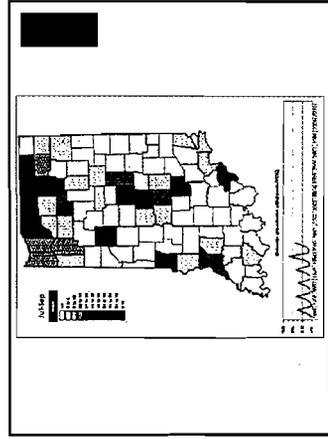
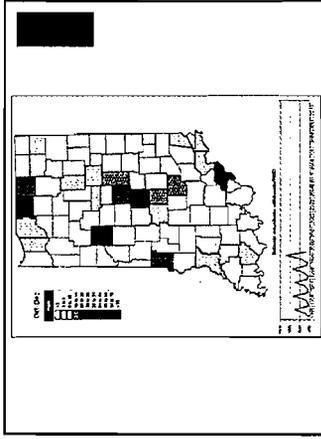
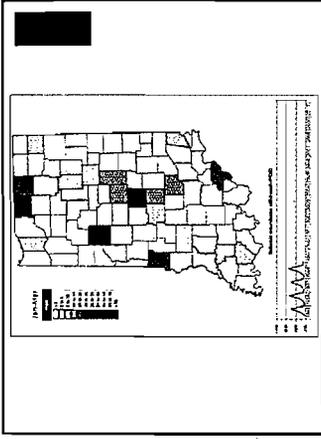
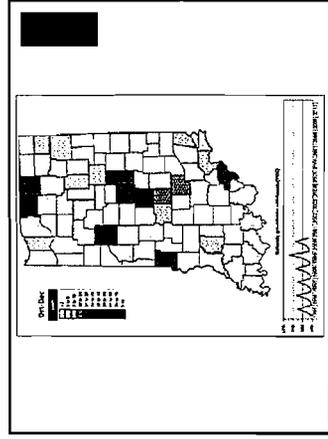
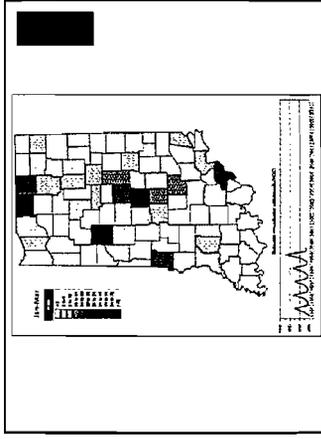
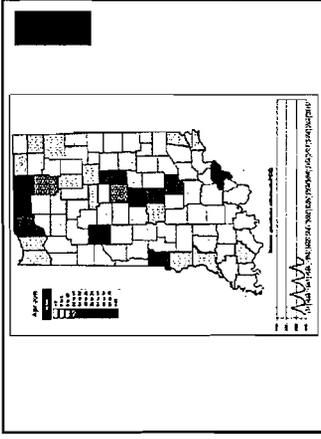
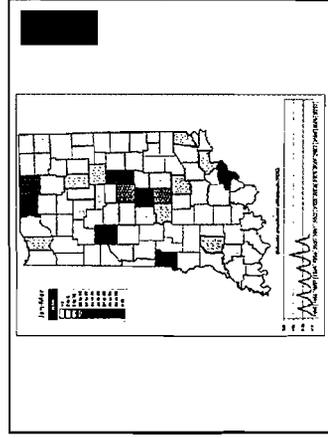
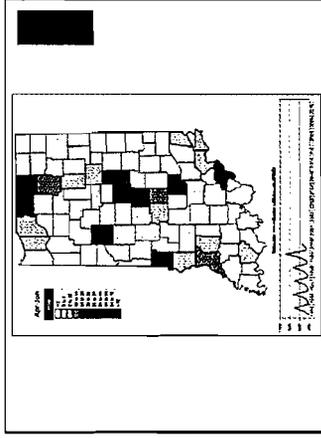
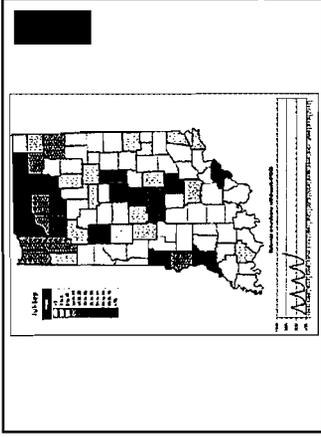
What can we learn from the data we have?

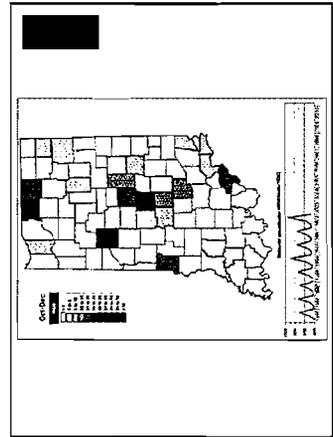
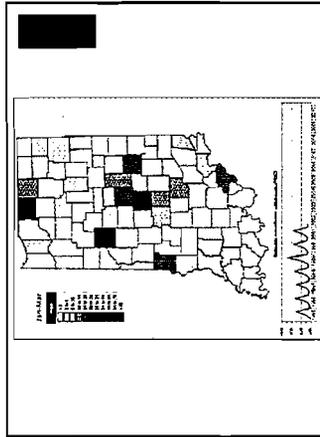
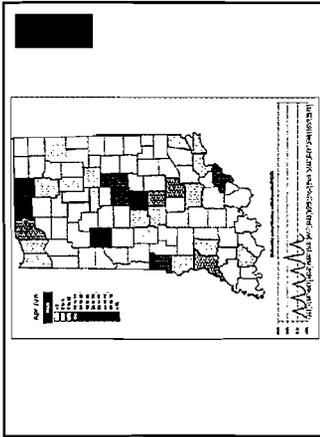
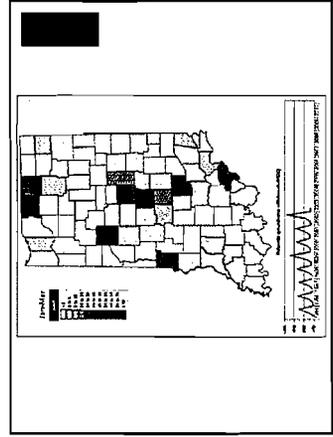
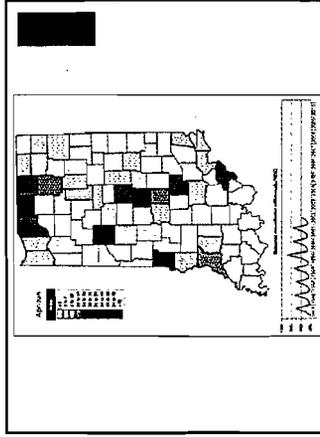
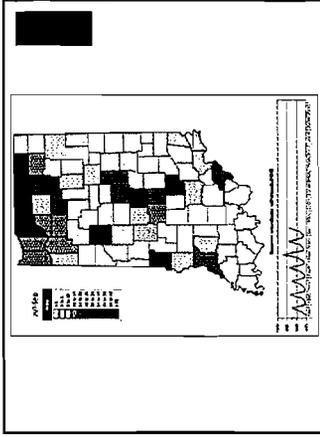
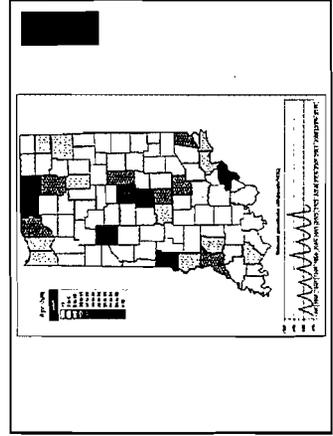
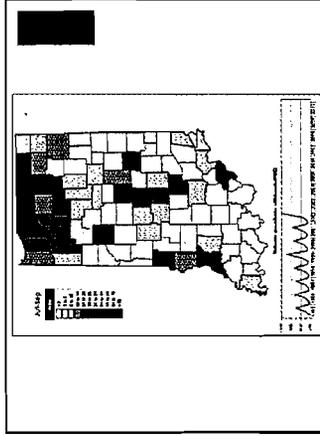
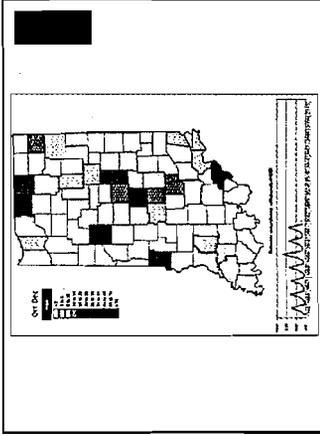
Water use data
seasonal - county scale

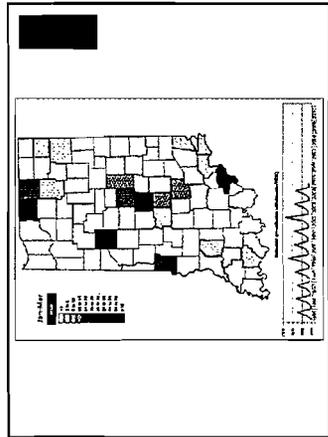
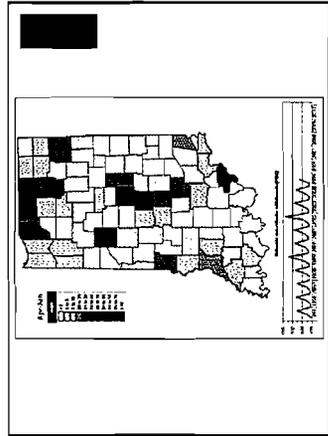
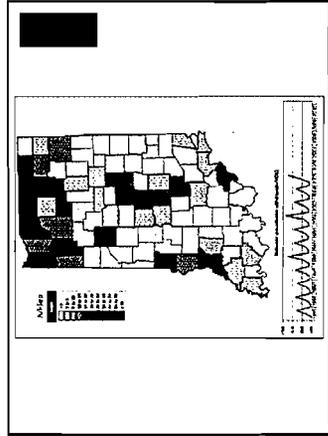
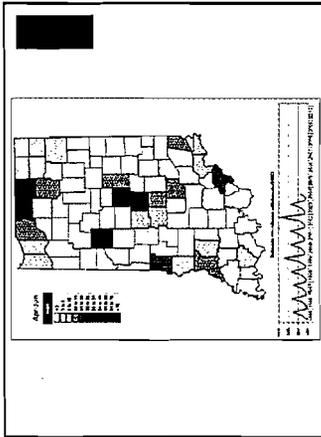
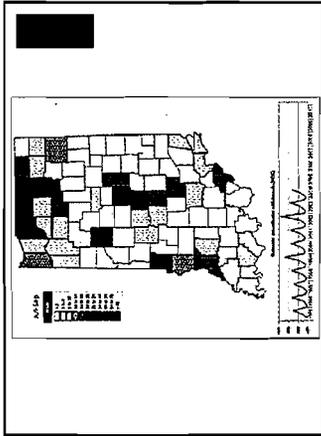
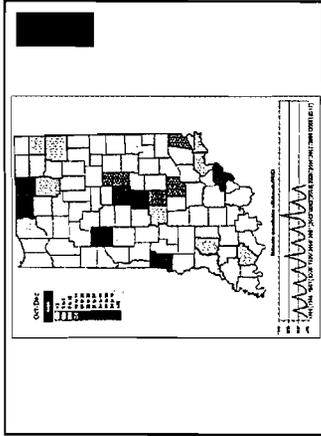
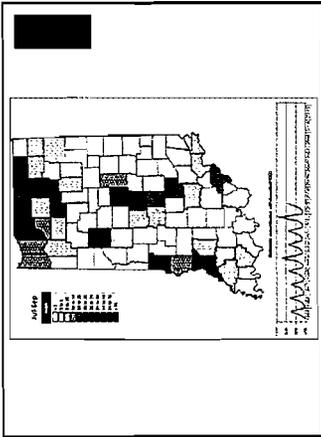
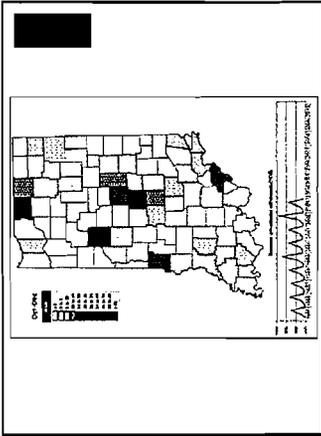
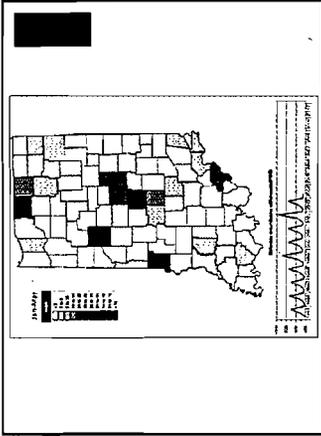


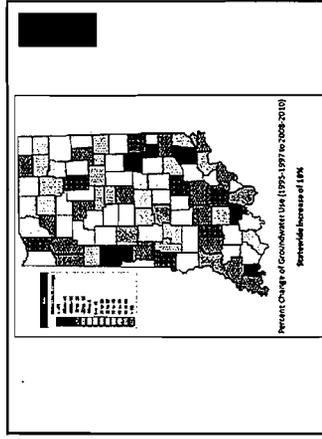
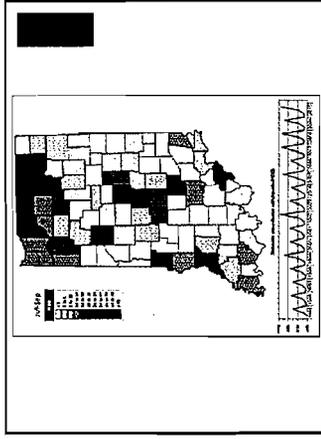
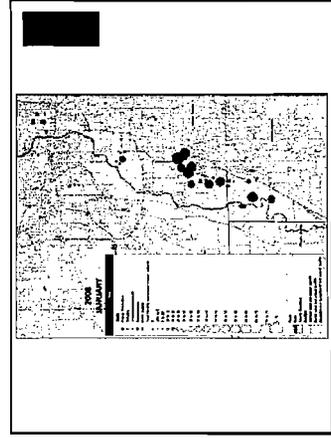
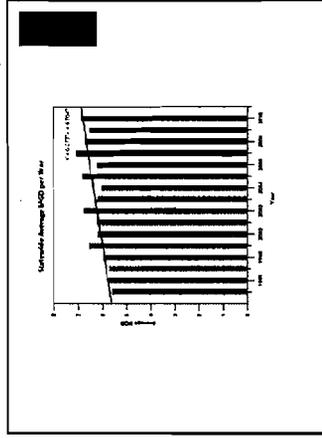
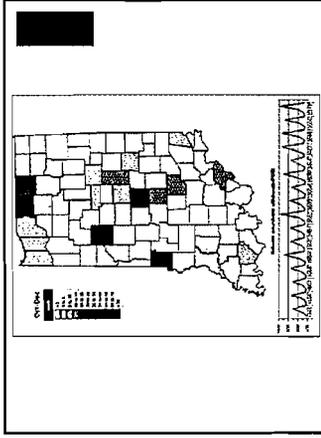




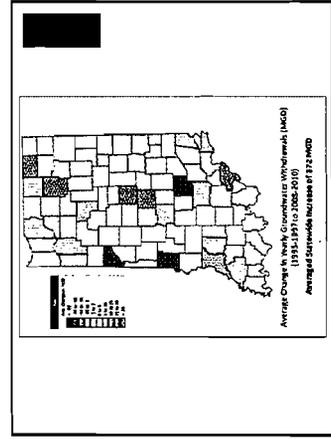
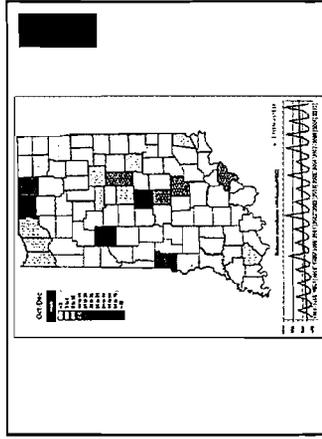
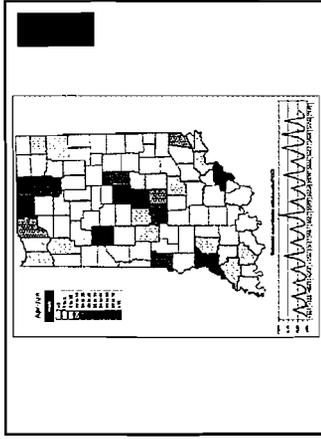


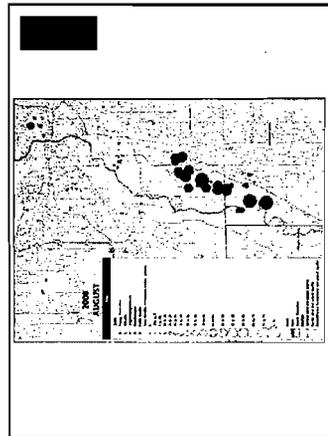
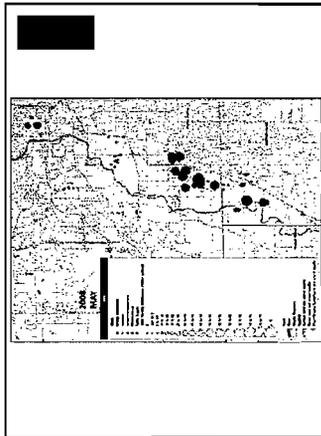
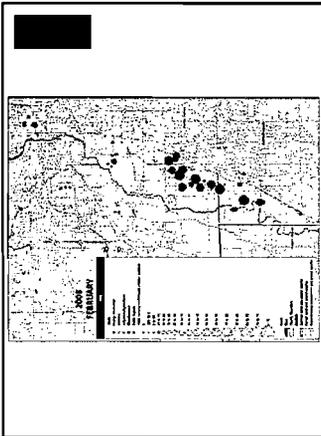
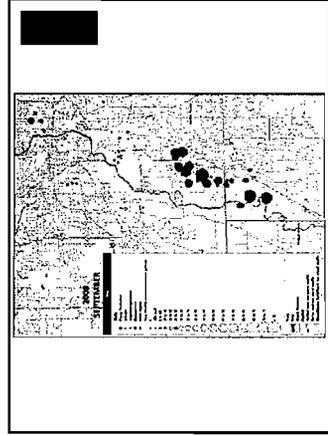
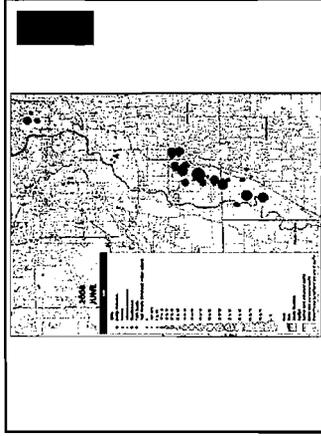
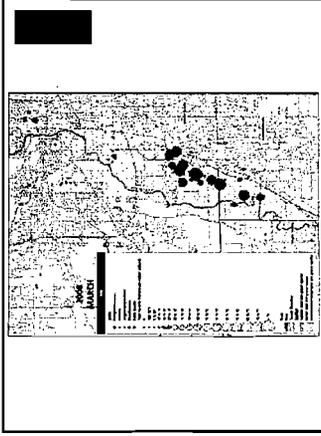
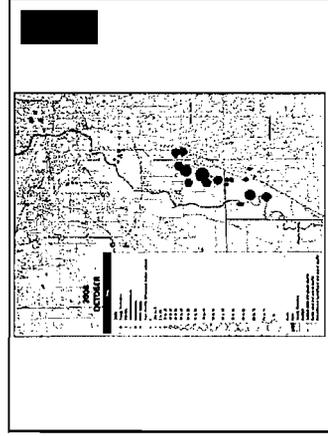
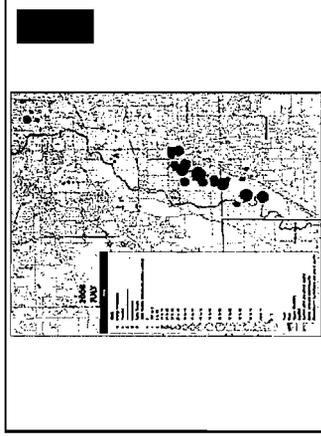
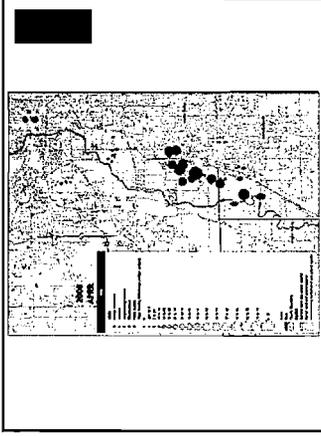


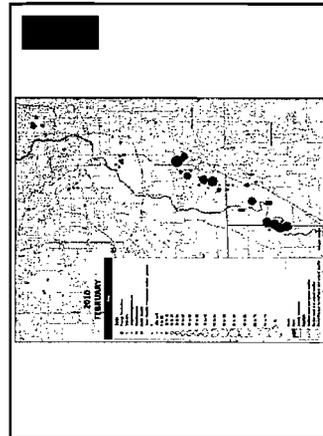
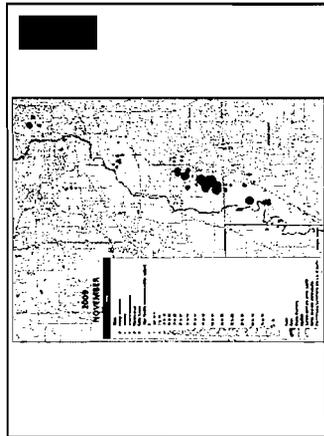
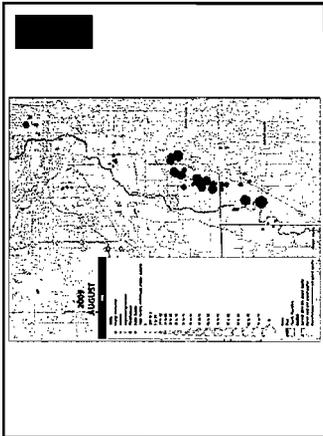
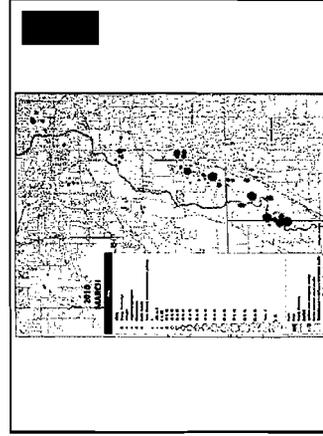
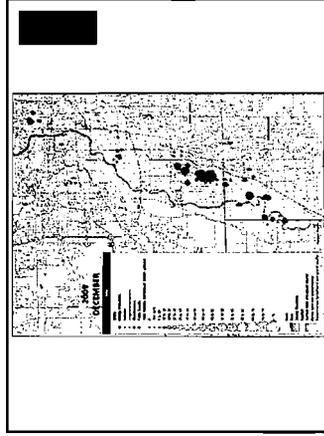
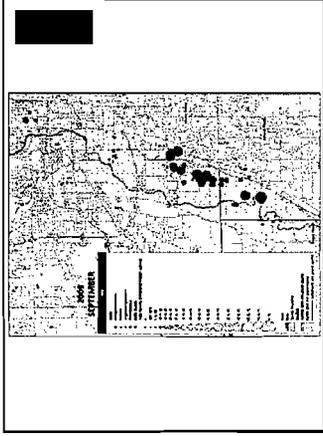
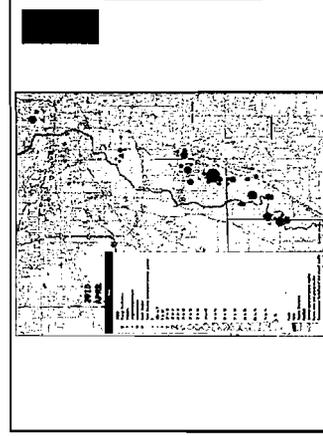
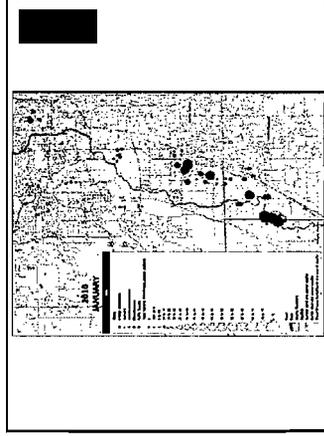
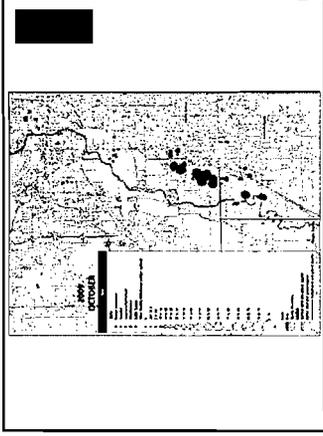




Water use data
local scale







2011 WATER RESOURCES STUDY COMMITTEE

adopted
8-0

FINDINGS AND RECOMMENDATIONS

During the 2011 Summer Session, the Water Resources Study Committee met to learn about the status of the resource. Testimony was provided that indicated that while the state was doing research and mapping, the institutional infrastructure that regulates and manages water resources may not be prepared to manage the serious economic effects of regional shortages. Groundwater is the natural alternative to surface water during drought, however, regional aquifers are absent in the rocky hills of the southern half of the state, and are, as a result more vulnerable to drought. The central part of the state includes the largest metropolitan area, which is reliant on a local aquifer that is being aggressively pumped. If the state policy is meant to encourage economic stability and growth, the state needs to take advantage of existing data, available talent, and a shared commitment to plan for a future that can ensure a safe and abundant supply of water.

Recommendations for Legislative Action

Given this information and testimony, the Committee discussed possible legislative actions that may be recommended, including regional water systems and planning, and a look at the various types of water research occurring in Indiana.

1. Water research in Indiana needs to be supported.

The Committee recommends that there be a comprehensive assessment of research being done in the state that helps our institutions manage supplies of water. This would include research and technical activities at any of the universities/higher education institutions in Indiana (in particular the Indiana Water Resources Research Institute) as well as in the state agencies. The results of this assessment will be presented to the Water Resources Study Committee at its first scheduled meeting in 2012.

2. Mapping aquifers is important to the economy of the state.

The Committee recommends that the state consider ways to specifically encourage and support the mapping work being done by the Indiana Geological Survey. The current pace of mapping, at an appropriate scale for decision-making, is not adequate to address immediate groundwater resource questions. These maps become important to our understanding of water availability.

Attachment B
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3. Develop policy on regional water systems and planning.

The state needs to consider an approach to managing the risks of drought that distinguishes the different needs of each part of the state based on differences in growth, water availability, and regional alternatives. New policy needs to be developed that recognizes the regional scale of the problems, considers the use of conservation and water reuse, aquifer storage, and large scale inter-basin transfers.

4. The Committee recommends that the state should work with all stakeholders to:

- a. Create an inventory of Indiana's water resources.
- b. Develop a framework and methods for (i) determining water needs, (ii) assessing the connection between water needs and economic development, and (iii) identifying economical and environmentally sound means of meeting water needs.
- c. Inventory those areas in Indiana that will need water over the next 15 years.
- d. Assess and develop a review of those areas in the state that have water resources, those that have water needs. Perform an analysis of how those needs can best be satisfied - even in the event of a drought.
- e. Develop water and wastewater infrastructure investment priorities.
- f. Create a comprehensive list of alternatives that can reform and restructure how water is used and regulated with special attention to a regional approach to water and wastewater.
- g. Draft necessary legislation, regulations and best management procedures that are necessary to create an effective system that will maximize the value of our water resources.
- h. Develop a comprehensive plan (including legislation and regulatory rules), considering water and waste water needs, that will realize a secure and advantageous position for our state's citizens, businesses and industries and promote aggressive economic development.