



Watershed Planning Advisory Council

Final Interim Report To The Iowa Legislature

December 1, 2010



**Watershed Planning Advisory Council
Interim Report
November 24, 2010**

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Executive Summary

The Watershed Planning Advisory Council (WPAC) was established by the 2010 Iowa Legislature in [House File 2459](#) for purposes of assembling a diverse group of stakeholders to review research and make periodic recommendations to various state and federal agencies regarding methods to best protect water resources in Iowa, assure an adequate supply of water, mitigate and prevent floods, and coordinate the management of those resources in a sustainable, fiscally responsible, and environmentally responsible manner.

The advisory council is comprised of mostly non-governmental organizations and associations that were involved in the 2008 [Watershed Quality Planning Task Force](#) (WQPTF). That task force made recommendations to the Iowa Legislature in 2009 on how to improve watershed planning effectiveness, and led to creation of the [Water Resources Coordinating Council](#) (WRCC).

The WPAC seeks to continue to the original work of the WQPTF by consulting with other governmental or non-governmental organizations in the development of its future recommendations for watershed planning and implementation effectiveness, and advise the WRCC member agencies and the legislature as necessary on these matters.

The WPAC meets at least quarterly since September, 2010. The general discussion so far includes incorporating flood mitigation issues and recommendations from other groups into the work of the council, a review of the WRCC recommendations from 2009 (an outcome of the 2008 WQPTF recommendations), WPAC members' subcommittee preferences, establishment of a workgroup to draft a December 2010 interim report to the Legislature, and an upcoming meeting schedule.

Legislative representation to the WPAC will need to be reappointed in 2011.

The WPAC subcommittees and their charges are:

- Subcommittee No. 1 - Improving and sustaining water quality; Facilitating implementation of existing programs.
- Subcommittee No. 2 - Creating economic incentives for compliance; Providing incentives for the development of pollution control quantification protocols and procedures.
- Subcommittee No. 3 - Providing greater flexibility through community-based, non-regulatory and performance-driven watershed management.

Subcommittees have so far identified the following topics for further discussion and development into possible recommendations in the coming year:

- Inventory of Existing Programs and Impediments.
- Leadership of WPAC, WRCC Process & Coordination.
- Unsewered Communities.
- Conservation Ethic.
- Improving Watershed Prioritization.
- Strategic Planning & Review for Watersheds in the Next 20 Years.
- Enhance Watershed Planning, Coordination, And Implementation by Creating Goals and Strategies Referencing Land Use for Iowa's Six Major River Basins and Three Major River Regions.
- Considerations for Data & Applied Science at the Community-Based Watershed Scale.
- Educational needs for watershed audiences.
- Assess incentives structure and implications for watershed planning and implementation (potential for innovation – Reverse Auction).
- Reporting and Accountability - Define key indicators of watershed performance, status and trends.
- Assess planning capacity and capabilities at multiple watershed levels.

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Background

The Watershed Planning Advisory Council (WPAC) was established by the 2010 Iowa Legislature in [House File 2459](#) for purposes of assembling a diverse group of stakeholders to review research and make recommendations to various state entities regarding methods to protect water resources in the state, assure an adequate supply of water, mitigate and prevent floods, and coordinate the management of those resources in a sustainable, fiscally responsible, and environmentally responsible manner. The advisory council seeks input from councils of governments or other organizations in the development of its recommendations. The advisory council meets at least quarterly and at other times as deemed necessary. The advisory council may appoint a task force to assist the advisory council in completing its duties.

A brief history of legislation and activity that led to the formation of the WPAC and this interim report to the 2011 Iowa Legislature, as called for in HF 2459, can be found in the appendix of this report.

The WPAC met for the first time September 22, 2010. The agenda included discussion of incorporating flood mitigation issues and recommendations from other groups into the work of the council, a review of the [Water Resources Coordinating Council](#) recommendations from 2009, WPAC members' subcommittee preferences, establishment of a workgroup to draft a December 2010 interim report to the Legislature, and an upcoming meeting schedule.

Watershed Planning Advisory Council Membership

Organization	Member Name or Delegate
House of Representatives Seat 1	Vacant**
Iowa Drainage District Association	Vicki Stoller
Iowa Environmental Council	Linda Kinman
Iowa Soybean Association	Roger Wolf, Vice Chair, Subcommittee No. 3 Chair
Department of Natural Resources	Bill Ehm, Subcommittee No. 2 Chair
Iowa Conservation Alliance Seat 1	Jeremy Rosonke
Iowa Association of Business and Industry	Scott Ickes
Department of Agriculture and Land Stewardship	Chuck Gipp
Iowa Rural Water Association	Emily Piper
Iowa Corn Growers Association	Gary Edwards
Iowa Farm Bureau Federation	Rick Robinson, Subcommittee No. 1 Chair

Iowa Pork Producers Council	Cody McKinley*
Soil and Water Conservation Districts of Iowa	Darrel Weems
House of Representatives Seat 2	Betty DeBoef
Growing Green Communities	Tom Hadden, Chair
Iowa Association of Municipal Utilities	John Dunn
Iowa League of Cities	Jessica Hyland Harder
Iowa Water Pollution Control Association	Jay Brady
Iowa Conservation Alliance Seat 2	Rich Meyer
Senate Seat 1	Dick Dearden
Senate Seat 2	David Johnson

*Replaces Jeff Schnell for IPPA

**Awaiting designation of new representative from the House

Water Resources Coordinating Council

In 2008, the Iowa Legislature passed [House File 2400](#), which sought to continue the work of the [Water Quality Planning Task Force](#), through the creation of the WRCC. The purpose of the council is to preserve and protect Iowa's water resources, and to coordinate the management of those resources in a sustainable and fiscally responsible manner. In the pursuit of this purpose, the council shall use an integrated approach to water resource management, recognizing that insufficiencies exist in current approaches and practices, as well as in funding sources and the utilization of funds. The integrated approach used by the council shall attempt to overcome old categories, labels, and obstacles with the primary goal of managing the state's water resources comprehensively rather than compartmentally.

The WRCC has a common goal to develop an integrated approach to water resource management, and recognizing the insufficiency of current approaches, programs, practices, funding and utilization of current funding programs. This approach seeks to overcome old polarities such as quantity versus quality, land versus water, the chemical versus the physical and biological, supply versus demand, political versus hydrological, and point versus non-point. This approach seeks to manage water comprehensively rather than compartmentally. The purpose of this recommendation is to coordinate programs, not to duplicate or supersede agency authorities and responsibilities.

WRCC Membership

1. The director of the Department of Natural Resources or the director's designee.
2. The director of the Soil Conservation Division, Iowa Department of Agriculture And Land Stewardship or the director's designee.
3. The Secretary of Agriculture or the secretary's designee.
4. The director of the Department of Public Health or the director's designee.
5. The director of the Homeland Security and Emergency Management Division of the Department of Public Defense or the director's designee.
6. The dean of the College of Agriculture at Iowa State University or the dean's designee.

7. The dean of the College of Public Health at the University of Iowa or the dean's designee.
8. The dean of the College of Natural Sciences at the University Northern Iowa or the dean's designee.
9. The director of the Department of Transportation or the director's designee.
10. The director of the Department of Economic Development or the director's designee.
11. The director of the Iowa Finance Authority or the director's designee.
12. The Governor, who shall be the chairperson, or the governor's designee.
13. The dean of the College of Engineering at the University of Iowa or the dean's designee.
14. The director of the Rebuild Iowa Office or the director's designee, until June 30, 2011.

The WPAC met for the first time September 22, 2010. The agenda then and since included discussion of incorporating flood mitigation issues and recommendations from other groups into the work of the council, a review of the WRCC progress and recommendations from 2009, member subcommittee preferences, establishment of a workgroup to draft a December 2010 interim report to the Legislature, and a 2011 meeting schedule. For the WPAC to plan its work, it is important to understand the history (detailed in the appendix), progress and results of the WRCC.

WRCC Progress & Results To-Date

- Representatives of the WRCC are working with the Corps of Engineers to develop a comprehensive plan for the Iowa-Cedar river basin including a website.
- The WRCC was assigned the responsibility of the Flood Plain Task Force following the floods of 2008 (see WPAC history section, report appendix). The Flood Plain Task Force participated in various meetings in Des Moines as well as statewide, and came up with 25 different recommendations. As a result of these recommendations, the WRCC provided the Legislature a report on November 15, 2009. Several recommendations became law:
 - HF2459 authorized the establishment of Demonstration Pilot projects and Watershed Management Authorities.
 - HF2531 added flooding issues to the existing authorization of the WRCC to provide watershed education and marketing and encouraged the formation of flood plain managers association.
- Because of the WRCC recommendations, the flood events of 2008 and the resulting legislation, Iowa was able to secure \$10 million in federal Housing and Urban Development funding for the purposes outlined in HF 2459 and HF 2531:
 - \$8.8 million will go to the Iowa Flood Center at the University of Iowa to coordinate establishment of one or more watershed demonstration Pilot projects.

- \$800,000 will go to DNR to coordinate establishment of at least three Watershed Management Authorities.
 - \$300,000 will go DNR for distribution to ISU Extension for flood education
 - \$100,000 to DNR for distribution to the new Iowa Flood Plain and Stormwater Management Association for startup needs including office support, fundraising, and educational curriculum.
- Larger Watershed Assessment, Planning & Prioritization. HF 2400 charged the DNR with the development of regional watershed assessments for the approximately 56 Hydrological Unit Codes (HUC) 8 watersheds. In cooperation with a number of its partners, the DNR has developed a regional assessment tool that supplements the [NRCS Rapid Watershed Assessment](#) by providing additional watershed information in eight key issue areas This assessment tool should be beneficial to watershed stakeholders who are interested in improving water resources at the watershed scale. The first DNR regional watershed assessment covers nutrients. Assessments of other issue areas will follow as they are developed. Note that the text for each HUC-8 assessment is the same, but the data, charts, and maps provided are specific to the individual watershed. <http://programs.iowadnr.gov/iowawaterweb/rwa.aspx>. The eight key issue areas are:
 - Nutrients (completed)
 - Habitat
 - Sediment
 - Pathogens
 - Recreation
 - Flood inundation areas (completed)
 - Alluvial water quantity
 - Water quality index (ongoing)
- NRCS Rapid Watershed Assessments - USDA's Natural Resources Conservation Service (NRCS) has developed a Rapid Watershed Assessment (RWA) protocol to assess the current conditions of HUC-8 watersheds. HUC-8 watersheds generally range in size from 250,000 to 2,000,000 acres. NRCS is developing RWAs throughout the state of Iowa and will use the results to help focus conservation programs that it administers. <http://www.ia.nrcs.usda.gov/technical/RWA.html>
- As a result of the cooperative USDA-DNR regional watershed assessments, the USDA awarded Iowa with funding for 18 projects that will help landowners and producers within the Mississippi River Basin voluntarily implement conservation and management practices that prevent, control and trap nutrient runoff from agricultural land. During the next five years these Iowa projects will receive \$36 million. This includes \$14 million for Wetland Restoration and Enhancement Program funds for 10 projects coordinated by the Iowa Department of Agriculture and Land Stewardship-Division of Soil Conservation. The other eight projects are

funded through the Cooperative Conservation Partnership Initiative (CCPI) which is administered through the Conservation Stewardship Program, Environmental Quality Incentives Program and the Wildlife Habitat Incentive Program.

- The Iowa Department of Agriculture and Land Stewardship, Division of soil Conservation, awarded almost \$3.4 million in I-Jobs funding provided by the 2009 Iowa Legislature to 15 of 25 watershed projects for the purpose of improving water quality and reducing future flood events. This state funding is matched with individual farmer and local Soil and Water Conservation District funds to plan and implement floodwater control and water improvement practices. Six of the 15 applicants received funding only for hydrologic studies that are to be completed prior to implementation of the practices in order to determine the most effective locations for siting of structures to control surface water runoff.
- DNR has placed additional emphasis on monitoring in EPA Clean Water Act Section 319-funded projects. The projects have monitoring protocol that is designed by the monitoring section and is funded at up to \$300,000 annually. Monitoring is designed to begin two years prior to any project implementation and will continue for five years beyond the life of the project. These results are used by local watershed planners and decision makers to establish priorities, baselines and enabling performance measurements.

Current & Future WPAC Activities

The WPAC met September 22 and November 17, 2010. The WPAC plans to meet at least quarterly beginning January 12, 2011. The subcommittees that were utilized in the WQPTF will continue their work through the WPAC. Those committee and their charges are:

- Subcommittee No. 1 - Improving and sustaining water quality; Facilitating implementation of existing programs.
- Subcommittee No. 2 - Creating economic incentives for compliance; Providing incentives for the development of pollution control quantification protocols and procedures.
- Subcommittee No. 3 - Providing greater flexibility through community-based, non-regulatory and performance-driven watershed management.

Subcommittees have so far identified the following topics for further discussion and development into possible recommendations in the coming year:

- Inventory of Existing Programs and Impediments.
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- Improving Watershed Prioritization.
- Strategic Planning & Review for Watersheds in the Next 20 Years.
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- Reporting and Accountability - Define key indicators of watershed performance, status and trends.
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Appendix

Legislative Watershed Policy History (2006-2010)

The [Watershed Quality Planning Task Force](#) was created by the 2006 Iowa Legislature in [Senate File 2363](#). This legislation called for creation of a committee to discuss a voluntary statewide water quality program. Specifically, the legislature asked the Watershed Quality Planning Task Force to develop a report containing recommendations on the following issues:

- Improving water quality
- Creating economic incentives for environmental compliance
- Facilitating implementation efforts
- Developing quantifiable protocols and procedures
- Providing greater flexibility through community-based, non-regulatory, performance-driven watershed management planning.

Watershed Quality Planning Task Force Recommendations

In their [final report](#) in November 2007, the Watershed Quality Planning Task Force (WQPTF) made the following recommendations:

Creation of a Water Resource Coordinating Council. The Water Resource Coordinating Council (WRCC) under the direction of the Governor is recommended with a common goal to develop an integrated approach to water resource management, and which recognizes the insufficiency of current approaches, programs, practices, funding and utilization of current funding programs. This approach seeks to overcome old polarities such as quantity versus quality, land versus water, the chemical versus the physical and biological, supply versus demand, political boundaries versus hydrological boundaries, and point versus non-point. This approach seeks to manage water comprehensively rather than compartmentally. The purpose of this recommendation is to coordinate programs, not to duplicate or supersede agency authorities and responsibilities. Funding Recommendation: None.

Conduct a Water Quality Research & Marketing Campaign. The task force recommends a marketing campaign be undertaken by public agencies and other organizations to rekindle the conservation ethic in all Iowans. Surveys indicate citizens' desire for improvement in water quality. Other surveys show that citizens don't understand the problems with local water quality. Funding Recommendation: \$1 million for year one development.

Larger (Regional) Watershed Assessment, Planning & Prioritization. The state should support creating, publishing and updating periodically a Regional Watershed Assessment (RWA) program at a larger watershed scale, such as the Hydrologic Unit Code (HUC – a federal term that delineates watersheds) 8 scale. There are approximately 56 HUC 8 size watershed units delineated in Iowa. A goal is to assess 11 HUC 8 size watersheds per year for five years to eventually cover the entire state. The Rapid

Watershed Assessment tool used by Iowa NRCS, for example, is one assessment process that may be used. A regular review and update of these assessments should also be planned. Funding Recommendation: \$5 million annually.

Smaller (Community-Based) Watershed Assessment, Planning, Prioritization & Implementation. Once a regional watershed assessment is completed at the HUC 8 scale, planned projects of a manageable scope can be implemented. Priority sub-watersheds at a HUC 12 or smaller scale can reasonably be recruited and provided more resources for planning. A sub-watershed plan should include objectives, a thorough local assessment of the physical, social, and financial resources of the watershed, an analysis of the alternatives, and an implementation plan that includes an evaluation process to measure results. Funding Recommendation: \$5 million annually.

Support for Smaller (Community-Based) Watershed Monitoring and Measurement. In addition to current support for water monitoring, the state should provide technical and financial support for locally-based watershed monitoring and measurement. This monitoring would be custom designed to provide information on essential water resource questions facing the local community. Local communities would first be able to use this information to support enhanced planning, local data collection, and thus helping them identify priority areas to target limited resources. Funding Recommendation: \$ 2.5 million annually.

Wastewater and Stormwater Treatment Infrastructure. We all live in a watershed. Impacts to water quality come from a variety of sources, including both rural and urban, nonpoint and point sources. Challenges for point sources and communities can have a significant impact on watershed conditions from stormwater and wastewater. Aging wastewater and combined sewer/stormwater infrastructure issues are having negative impacts on water quality. Also, compliance with current and future water quality standards may be cost-prohibitive for many communities. Additional funding mechanisms should be identified and funding should be prioritized for communities that present the greatest water quality and health risks within the watershed. This will include sewered and unsewered communities.

The task force also said there were eight additional considerations for which there were no final recommendations. It is recommended, however, that the WQPTF continue to work on these issues into the future, the task force said.

Watershed Resource Coordinating Council

In 2008, the Iowa Legislature received this report and passed [House File 2400](#), which sought to continue this work, as recommended, through the creation of the [Water Resources Coordinating Council](#) (WRCC). The purpose of the council is to preserve and protect Iowa's water resources, and to coordinate the management of those resources in a sustainable and fiscally responsible manner. In the pursuit of this purpose, the council shall use an integrated approach to water resource management, recognizing that insufficiencies exist in current approaches and practices, as well as in funding sources

and the utilization of funds. The integrated approach used by the council shall attempt to overcome old categories, labels, and obstacles with the primary goal of managing the state's water resources comprehensively rather than compartmentally.

Floods of 2008 Recovery Efforts

The state and federal agencies outlined in HF 2400 began to meet and discuss common watershed issues and needs under the umbrella of the WRCC in the summer of 2008, under the chairmanship of Governor Chet Culver's office and staff. The "floods of 2008" resulted in a refocusing of much of the WRCC's efforts, primarily to flood recovery issues.

As a result of the floods of 2008, the Iowa Legislature approved [HF756](#), which required the WRCC to submit policy and funding recommendations that promote "a watershed management approach to reduce the adverse impact of future flooding on this state's residents, businesses, communities, and soil and water quality." The original WRCC floodplain recommendations were filed in November 2009.

Two bills passed in the 2010 legislative session address five of the recommendations. [HF2531](#) (Standing Appropriations Bill) requires the WRCC and others to extent feasible to: 1) work on establishing an Iowa chapter of State Floodplain Managers Association, 2) education and 3) marketing for flood risks and floodplain awareness (signed into law 4/29/10). [HF2459](#) (Watershed Bill) 4) authorizes that funding be sought for pilot watershed projects involving IDALS, DNR and the Iowa Flood Center, and 5) outlines potential watershed governance via Watershed Management Authorities (Signed 4/7/10) [HF2459](#) also formally establishes a Watershed Planning Advisory Council (WPAC), comprised primarily of stakeholders that encouraged establishment of the Water Resources Coordinating Council in 2008.

In addition, the 2010 General Assembly passed and the Governor signed into law [Senate File 2389](#), which provided guidance for Smart Planning in Iowa and established the Iowa Smart Planning Task Force, building on the watershed planning principles of the WQPTF and the WRCC. This Task Force was charged with recommending policies and strategies for creating a stronger planning culture in Iowa, producing more resilient and sustainable communities. In particular, the Task Force was asked to consider how best to:

- Integrate the Iowa Smart Planning Principles into appropriate state policies and programs.
- Determine an effective and efficient coordination and information sharing system to support local and regional planning.
- Suggest appropriate technical and financial incentives to support local and regional planning.
- Develop a framework for regional planning.

The group addressed each of those directives by November 15, 2010. The Smart Planning Task Force Report can be found at this link: http://www.rio.iowa.gov/resources/reports/2010-11_Smart_Planning_Task_Force_Report.pdf

